



TEZPUR UNIVERSITY

A Central University

**ANNUAL
REPORT**
2020-2021

VISION

To develop human excellence and inculcate leadership through hard work and creativity.

MISSION

To render Tezpur University one of the most preferred destinations of students, faculty and scholars and employees.

To be in the Top 50 Universities of the world...

ANNUAL REPORT

2020-21

(Approved by the Board of Management vide Resolution No.
B.103/2021/4/2.6. dated 16.11.2021)



Specialized Knowledge Promotes Creativity

Tezpur University
Napam, Tezpur 784028, Assam

CONTENTS

❖ VC's Desk	1
❖ Annual Report 2020-21: A Gist	4
❖ Tezpur University: An Overview	5
❖ Financial Profile	7
❖ Academic Profile	8
❖ Research and Development Profile	11
❖ Students' Activity Profile	13
❖ Training and Placement activities	17
❖ Statutory Bodies	26
❖ Academic Departments and Centres	
Dean, School of Engineering	35
Department of Applied Sciences	37
Department of Civil Engineering	45
Department of Computer Science and Engineering	49
Department of Design	62
Department of Electrical Engineering	64
Department of Electronics and Communication Engineering	69
Department of Energy	82
Department of Food Engineering and Technology	95
Department of Mechanical Engineering	107
❖ School of Humanities and Social Sciences	
Dean, School of Humanities and Social Sciences	119
Department of Assamese	120
Department of Cultural Studies	125
Department of Education	135
Department of English	147
Department of Foreign Languages	157
Department of Hindi	161
Department of Law	163
Department of Mass Communication and Journalism	169
Department of Social Work	179
Department of Sociology	184
Centre for Assamese Studies	191
Centre for Endangered Languages	193
Chandraprabha Saikiani Centre for Women Studies	208
Dr. Ambedkar Chair	213

❖ School of Management Sciences	
Dean, School of Management Sciences	217
Department of Business Administration	218
Department of Commerce	227
Centre for Disaster Management	234
Intellectual Property Rights Cell	235
❖ School of Sciences	
Dean, School of Sciences	239
Department of Chemical Sciences	241
Department of Environmental Science	263
Department of Mathematical Sciences	281
Department of Molecular Biology and Biotechnology	291
Department of Physics	310
❖ Centre for Distance and online Education	321
❖ Teaching Learning Centre	324
❖ Central Facilities	
The Central Library	327
Centre for Inclusive Development	331
Centre for Innovation, Incubation and Entrepreneurship	334
Computer Centre	335
Engineering Cell	339
Health Centre	341
Horticulture Section	343
Internal Quality Assurance Cell	346
International Office	347
Sophisticated Analytical Instrumentation Centre	348
❖ Programmes Organized by the University	351
❖ The Year in Figures	353



Prof. V. K. Jain
Vice-Chancellor



Tezpur University

(A Central University)

Tezpur - 784028

Assam, India

- Visitor's Best University Award - 2016
- NIRF India Rankings 2016 : 05
- Accredited with 'A' Grade by NAAC
- THE Asia Rankings 2018 : 100
- THE World Best Small Univ. 2018 - 20th
- QS Ranking 2019 : IND - 36, BRICS - 146

Phone : 03712-267003 (o)

Fax : 03712-267006 (o)

E-mail : vc@tezu.ernet.in

Professor V. K. Jain

Vice-Chancellor

As Tezpur University enters the second quarter century of its existence, it is bolstered with a number of positive factors to catalyze further growth. In the year under report, i.e., 2020-21, in spite of the adverse effects of the Covid19 pandemic, the University could keep the academic trend on track by adopting alternative and innovative means of teaching-learning, holding examinations, evaluation and declaration of results. The University followed Choice Based Credit System with Continuous Evaluation system in the online mode itself as the hostels were vacated due to the pandemic. Amidst the disadvantageous conditions, the students and faculty members of the University smoothly completed the final semester examinations where 1110 students appeared and 96.49% were successful.

The 18th Convocation of the University was held in the blended mode on January 22, 2021, where PhD degrees and Gold Medals were awarded in the Physical mode while other degrees and diplomas were awarded in the virtual mode. As many as 90 research scholars received their Ph.D. degrees and 46 toppers of various programmes received their degrees and Gold Medals in the Convocation. The Hon'ble Governor of Assam and Chancellor of Tezpur University Prof. Jagdish Mukhi presented the degrees and Diplomas to 1222 awardees in the virtual mode. The University was privileged to have the Hon'ble Prime Minister of India Shri Narendra Modi-ji as the Chief Guest in the Convocation who also delivered the Convocation Lecture. It was also a matter of great satisfaction that the Hon'ble Education Minister of India Shri Ramesh Pokhriyal 'Nishank' and the Hon'ble Chief Minister of Assam Shri Sarbananda Sonowal too participated in the Convocation with their encouraging speeches.

Although the Tezpur University Entrance Examination (TUEE) could not be conducted in the year under report, the selection and admission of candidates were completed by the best possible alternative means except for the B.Tech, MBA, and M.Sc. in Molecular Biology and Biotechnology programmes. Out of the 24,719 applications received for various academic programmes, 1,691 were admitted following the government of India guidelines for reservation of seats for various categories. It is heartening to note that 51.74% of the admitted students were female.


After the admission process was completed, the total strength of students in the University stood at 4447 (as in September 2020) and the percentages of reserved category students were 24.74 for OBC-NCL, 11.99 for SC, 7.87 for ST, 4.50 for EWS and 0.76 for PWD. The number of international students in the University increased to 27. Overall, 82.15% of the admitted students were from the state of Assam while 17.25% were from the rest of the country and abroad.

As in the previous years, the University gave a special emphasis on the research and development activities. During the year under report, 24 new projects were sanctioned making the number of externally funded ongoing projects 264 with a financial outlay of Rs. 10554.50 lakhs plus €105428.75 and £31,500 (this can be converted to INR and added to the total outlay). The ongoing research projects included 17 international collaborative projects. The University also earned approximately INR 2,08,13,120.00 through consultancy projects during the year 2020-21.

As Tezpur University is known for its stat-of-the-art infrastructure for pursuing high quality education and research, the year 2020-21 also saw a number of facilities created on the campus. While a three-story 180-seater women's hostel was completed during the year, nine building projects including academic buildings, hostels, etc. were taken up. The Academic Building I and II were renovated to suit the modern academic and research requirements. Further, the Basket Ball courts and Lawn Tennis court of the campus were converted to modern courts.

One of the unique features of Tezpur University is the heavy use of solar power in the campus. The University has 1MW capacity Roof top Solar panels installed at different locations in the campus. The electricity generated from the solar plates is directly feeded to the APDCL grid resulting in a considerable reduction in the electricity bill paid by the University. The net saving in electricity bill during the year under report was Rs. 39.86 lakh.

As the world is going on a gradual paradigm shift in the education sector, Tezpur University is taking necessary measures to modernize all aspects of higher education and research that it is into. In spite of the uncondusive conditions triggered by the Covid19 pandemic, the University is marching ahead keeping its fingers in the pulse of the changing scenarios.


(V. K. Jain)
Vice-Chancellor

TEZPUR UNIVERSITY

ANNUAL REPORT 2020-21

A Gist

UNIVERSITY PROFILE

Name of the University	:	Tezpur University
State	:	Assam
Address	:	Napam, Tezpur District-Sonitpur, Assam-784028, INDIA
Year of Establishment	:	1994
Type of University	:	Central and Unitary

Vice-Chancellor	:	Professor Vinod Kumar Jain
Pro Vice-Chancellor	:	Professor Dilip Kumar Saikia
Registrar	:	Dr. Biren Das

HIGHLIGHTS OF THE YEAR 2019-20

Academic Departments	:	26
Academic Centres	:	06
Academic programmes	:	71
Students	:	4447
Female students	:	1988
Male students	:	2459
International students	:	27
Teachers	:	261
Female teachers	:	71
Male teachers	:	190
Teachers (General)	:	140
Teachers (SC/ST/OBC)	:	121 (SC-34, ST-22, OBC-65)
Non-teaching employees	:	270
Female employees	:	31
Male employees	:	239
Non-teaching employees (General)	:	105
Non-teaching employees (SC/ST/OBC)	:	165 (SC-45, ST-24, OBC-96)
Total Departments under UGC-SAP DRS I	:	03
Total Departments under UGC-SAP DRS II	:	04
Total Departments under DST-FIST	:	05
Departments under Centre of Excellence	:	02
Sponsored ongoing projects	:	264
New projects sanctioned	:	24
International collaborative research projects (Ongoing)	:	17
Total amount earned through consultancy projects	:	Rs 2.08 crore
Journal paper published	:	491
h-index	:	88 (Web of Science)
Books/Book chapters authored	:	123
Book Authored	:	23

TEZPUR UNIVERSITY: AN OVERVIEW

The year 2020-21 was unprecedented for human civilization as the global outbreak of COVID-19 pandemic had thrown a different kind of challenge for human race. Like many other profession, Teaching Learning process too was impacted. The pandemic forced the University to switch teaching-learning and evaluation process to online mode for most part of the 2020-2021. Despite the extraordinary situation due to the pandemic for the large part of the year, the faculty and staff of the University quickly adapted to the new normal and to the credit of the University community, the course completion and evaluation process was carried out well within the time frame stipulated by the UGC.

During the year 2020-21, students were admitted in 71 different programmes of study in 26 Departments. 03 new departments, viz, Department of Foreign Languages, Department of Assamese and Department of Design offered Academic Programmes from the year reported. Department of Applied Sciences came up as a support department for School of Engineering as per curricular requirement. The University could not conduct entrance Examinations in offline mode as done in previous years due to unprecedented Covid-19 pandemic. Except in B.Tech, MBA, M.Sc. in Molecular Biology and Biotechnology programme, the students in other UG/PG programmes were admitted provisionally considering the marks of prefinal semester of qualifying examinations as a special mode of selection subject to condition that they would submit the final marksheets within three months from the date of admission to the programme.

For B. Tech., selection for admissions was done based on All India Rank (CRL) of the JEE (Main) conducted by the NTA. Candidates for PhD programmes were selected based on online test and Personal Interview conducted by the concerned Departments in online mode.

A total of 24719 applications were received through online mode for various programmes of studies. The number of candidates admitted to various programmes was 1691, of which 51.74% were female students. In overall, 82.15% of the students were from the state of Assam, while 17.25% students were from the rest of the country. Total number of foreign students on the campus during the report period was 27.

Despite the fear of the pandemic, the University successfully organised the 18th Convocation, held in blended mode on 22.01.2021 and PhD degrees and Gold Medals were awarded in the Physical mode. The PhD degrees were presented to 90 scholars and Gold medals were awarded to 46 toppers, Best graduate and Best Postgraduate. Other degrees and Diplomas were presented in virtual mode. Hon'ble Prime Minister of India, Shri Narendra Modi was the Chief Guest for this Convocation.

During the year 2020-2021, the University forwarded several research proposals for consideration of approval to the funding agencies. Currently, a total of 264 externally funded research projects are going on with a financial outlay of Rs. 10554.50 lakhs with two international funding of €105428.75 and £31,500. During the fiscal year, 24 new projects were sanctioned. The ongoing research projects include seventeen international collaborative projects of which two projects are under Indo-UK, one with Indo-Finland, two with Indo-Russian, one with Indo-Brazil, two with Nottingham University, one with Indo-Japan, one with CEFIPRA (Indo-French), one with Indo-German, one with Indo-Hungary, two with Indo-ASEAN, one with Indo-Sweden, one with ERASMUS (Indo-Greece-Italy) and one with Indo-Bulgaria. During this period, seven departments were funded under UGC-SAP of which 3 departments are supported by DRS-I and 4 departments are supported by DRS-II. The University during the financial year earned ~INR 2,08,13,120/- through consultancy projects.

This amount was earned as consultancy fee by individual faculty as well as by the departments of various Schools.

The faculty members have published 491 research papers in peer-reviewed national and international journals during the period. During the year, The IPR Cell filed 3 patents, published 7 patents, and 7 patents were granted. The faculty members continued their significant contributions to academics, research and their respective areas. In recognition to their significant efforts, many faculty members brought laurels to the institution. Prof. Niranjana Karak of Dept. of Chemical Sciences bagged the Professor M. Santappa Award in Polymer Science of the year 2020 instituted by Polymer Society of India. Prof. Partha Pratim Dutta of Dept. of Mechanical Engineering was admitted as fellow by Institution of Engineers (India). Prof. Sankar Chandra Deka, Dept. of Food Engineering & Technology was admitted to prestigious Fellow of the Royal Society of Biology etc. Amongst the students, Ms. Barsha Ritu Goswami, Research Scholar from Dept. of Chemical Sciences bagged the INSA Young Historian of Science Award. Mr. Mokhalles Mehdi, another Research Scholar from Dept. of Business Administration received the 2020-2021 New Best Seller Award by Ivey Publishing, Ivey Business School.

As on 31.03.2021, the University has 312 teaching positions sanctioned by UGC. 261 teaching positions are already filled. In regard to non-teaching positions, out of 287 sanctioned posts, the University, as on 31.03.2020, had filled 270 positions. The University is conducting recruitment for both teaching and non-teaching positions.

Despite COVID-19 pandemic, the University had completed the construction of RCC 3 storied 180 capacity Girls Hostel. Besides the hostel, the University has started 09 nos of building projects which includes Academic Buildings & Hostels under HEFA funding for Rs. 153.71 Cr. The University has 1MW capacity Roof top Solar panels installed at different locations within the campus. The electricity generated from solar is directly feeded to the APDCL grid. This system resulted in reduction of electricity bill served by APDCL. The net saving in amount of electricity bill plus payment made to the Solar Company is about Rs. 39.86 lakh for the said year.

In view of the COVID-19 outbreak, Teaching Learning Centre (TLC) of the University rose to the occasion and organized several online training programs. Keeping in mind the need of the teaching community, TLC conducted several ICT training programs for teaching community. Two such programs focusing on ICT were conducted for capacity building of Tezpur University teaching fraternity only. Altogether the Centre had conducted 16 online training programmes in this financial year and trained more than 1300 teachers and prospective teachers from across the country. Two interdisciplinary Refresher Course were also conducted during this period in online mode.

In terms of other activities like extension and outreach, skill development efforts, placement report, achievements, etc. carried out by the University and its brief accounts have been reported in different sections of this annual report.

FINANCE AND ACCOUNTS

The Annual Accounts of the University are maintained in five parts: **Part-I** deals with **Recurring and Salary Funds**, **Part-II** for transactions related to Funds under Non-Recurring and Other Schemes, **Part-III** for **Earmarked Funds and Extramural Research Projects**, **Part-IV** for transactions related to **Debts and Deposits Account** and **Part-V** for maintenance of **Provident Funds**. The accounts for the year 2020-21 have been prepared in such formats as prescribed by the Ministry of Education, Govt. of India, on double entry book-keeping system of accounting on accrual basis with relevant Indian Accounting Standards.

Opening balance at the beginning of the year **2020-21** was **Rs. 4466.26 lakh**. During the year 2020-21, the University received a total amount of **Rs. 14089.28 lakh** under all the schemes, viz., Recurring, Salary, Creation of Capital Assets and Research Projects. The University also generated an amount of **Rs. 1488.69 lakh** as Internal Receipts/Revenue forming part of Grants-in-Aid: Recurring. Thus, the total fund available during the year was **Rs. 20044.23 lakh**. Against the same, an amount of **Rs. 15400.70 lakh** was sent during the year 2020-21, leaving an unspent balance of **Rs. 4643.53 lakh** as on 01.04.2021.

The following statement represents the Receipts and Expenditure for the year 2020-21 at a glance.

(Rupees in Lakh)

RECEIPTS			EXPENDITURE		
Particulars	Amount	Total Amount	Particulars	Amount	Total Amount
A) Opening Balance	4466.26	4466.26	A) Expenditure		
B) Grants Received			I. Recurring Expenditure	3609.87	
I. Grants-in-Aid (Recurring)	3260.78		II. Salary Expenditure	7891.24	
II. Grants-in-Aid (Salary)	8146.50		III. Expenditure for Creation of Capital Assets	2128.27	
II. Grants-in-Aid (Creation of Capital Assets)	900.00		IV. Expenditure on Research Projects	1771.32	15400.70
IV. Grants for Research Projects	1782.00	14089.28			
C) Internal Receipts	1488.69	1488.69	Closing Balance	4643.53	4643.53
Grand Total:		20044.23	Grand Total:		20044.23

ACADEMIC PROFILE

The office of the Controller of Examinations dealt with all academic matters related to admission of students, examinations, declaration and publication of results, and issued grade cards, transcripts, and certificates. All academic activities were adhered to Academic calendar. This office also dealt with some welfare matters of the students such as, verification and forwarding of applications for scholarships to various funding agencies, verification and forwarding of Non-Net fellowship bills for payment and issued required documents such as bonafide certificate, fee structures etc to the students for the bank loan.

During the year 2020-21, students were admitted in 71 different programmes of study in 26 Departments. The programs were:

1. **Ph.D Programmes** (Chemical Sciences, Environmental Science, Molecular Biology & Biotechnology, Mathematical Sciences, Physics, Computer Science & Engineering, Civil Engineering, Electronics & Communication Engineering, Energy, Food Engineering & Technology, Mechanical Engineering, Electrical Engineering, Applied Sciences, Business Administration, Commerce, English, Cultural Studies, Hindi, Mass Communication and Journalism, Education, and Sociology, Social Work, and Women Studies).
2. **M. Tech. Programmes** (Information Technology, Electronics Design & Technology, Bioelectronics, Food Engineering & Technology, Mechanical Engineering, Civil Engineering, Energy Technology, Computer Science & Engineering)
3. **M.Sc. Programmes** (Physics, Chemistry, Mathematics, Molecular Biology & Biotechnology, Environmental Science).
4. **M.A. Programmes** (English, Linguistics & Language Technology, Cultural Studies, Mass Communication & Journalism, Sociology, Hindi, Social Work, Education, Communication for Development). A new programme on MA in Assamese was introduced.
5. **5-years Integrated M. Sc. programmes** (Physics, Chemistry, Mathematics and Life Science).
6. **5-years Integrated M. Com. programme** (Commerce).
7. **5-year Integrated M.A. programme** (English).
8. **4-year Integrated B.Sc. B.Ed. programmes** (Physics, Chemistry and Mathematics).
9. **B.Tech. Programmes** (CSE, ECE, EE, ME, Civil, Food Engineering and Technology (FET), and Lateral entry in EE and FET).
10. **Other Professional programmes** (MBA, MCA, LLM, M. Com, Master of Tourism and Travel Management (MTTM)) and B.Ed.).
11. **PG Diploma Programmes** (P.G. Diploma in Translation (Hindi), P.G. Diploma in Women's Studies, P.G. Diploma in Child Rights and Governance).
12. **Certificate Programmes** (1-year certificate in Chinese and one semester certificate in NSE Certified Capital Market Professional). The NSE Certified Capital Market Professional (NCCMP) programme was offered as self-financing Part Time course.

Admission procedure:

The University could not conduct entrance Examinations in offline mode as done in previous years due to unprecedented Covid-19 pandemic. Except in B.Tech, MBA, M.Sc. in Molecular Biology and Biotechnology programme, the students in other UG/PG programmes were admitted provisionally considering the marks of prefinal semester of qualifying examinations subject to condition that they would submit the final marksheets within three months from the date of admission to the programme.

For B. Tech., selection for admissions was done based on All India Rank (CRL) of the JEE (Main) conducted by the NTA. Sixty percent of the total seats were filled up from the candidates of NE states on production of Permanent Residence Certificate (PRC) issued by the Competent Authority of any NE state. Counselling and admission of the shortlisted candidates were held at Tezpur University. Admission to the remaining seats were made through the Central Counselling conducted by the JoSAA.

GATE qualified candidates were directly admitted to the M.Tech. Programmes. Some Non-GATE candidates were also admitted to the M.Tech programmes based on the performance in the online test. **For admission to MBA program, candidates were selected based on the score of National tests such as MAT/CAT/XAT/ATMA/GMAT/CMAT, and Personal Interview.** Admission to M.Sc in Molecular Biology and Biotechnology was done based on the score of GAT-B conducted by Regional Centre for Biotechnology on behalf of Department of Biotechnology, Govt. of India. Candidates of PhD programmes were selected based online test and PI conducted by the concerned Departments in online mode.

Although 5 nos. of candidates, *who secured up to top 5th Rank in 10+ 2 examinations of NE states*, were selected for Direct admission to B.Tech and Integrated M.Sc programmes, only one such candidate took admission to the B.Tech. and another one 5-year Integrated programme. Thirteen students were admitted under **Defence Quota** as per Govt of India policy and 03 foreign students were admitted through ICCR on supernumerary basis.

A total of 22242 applications were received through online mode for various programmes of studies. The number of candidates admitted to various programmes was 1691 out of intake 2038, of which 51.74% were female students. The University reserved seats for the OBC (NCL), SC, ST, EWS and PWD categories as per the Govt. of India rules.

As on September 2020 the total strength of the students in the university was 4447 and the percentage of reserved category students were 24.74% (OBC-NCL), 11.99% (SC), 7.87% (ST), 4.50% (EWS) and 0.76% (PWD). The total number of foreign students in the University was 27. In overall, 82.15 % of the students were from the state of Assam, while 17.25% students were from the rest of the country.

The University followed Choice Based Credit System with Continuous Evaluation system in online mode as the hostels were vacated due to Covid-19 pandemic. The Even Semester (Spring Semester) End Examinations, 2020 were conducted during the period from 15.06.2020 to 15.07.2020 and the odd semester (Autumn Semester) End Examinations, 2020 (for other than first semester) were conducted during 10.12.2020 to 24.12.2020 and for the first semester it was conducted during 18.02.21 to 3.3.21. The results of the Even Semester End Examinations were declared on 31.07.2020. The results of odd Semester (other than that of 1st semester) were declared on 07.01.2021 (26.03.2021 for the first semester students). The delay in declaring the results of the first semester

students was due to delay in starting the academic session which started from 26th October,2020 due to covid_19 pandemic. As many as 1110 nos. of final semester students appeared in the even semester examinations and 96.49% of the students passed the examinations.

The 18th Convocation was held in blended mode on 22.01.2021 and PhD degrees and Gold Medals were awarded in the Physical mode. The PhD degrees were presented to 90 scholars and Gold medals were awarded to 46 toppers, Best graduate and Best Postgraduate. Other degrees and Diplomas were presented in virtual mode.

His Excellency, Prof. Jagdish Mukhi, Governor of Assam & Chancellor of the University presented the degrees and Diplomas in Virtual mode. A total of 1222 awardees were awarded their degrees/diplomas in the Convocation.

Honourable Prime Minister of India, Shri Narendra Modiji, was the Chief Guest and delivered his Convocation lectures in the Convocation. Prior to the speech of Honourable Prime Minister, Honourable Education Minister of India, Shri Ramesh Pokhriyal 'Nishank' and Honourable Chief Minister of Assam Shri Sarbananda Sonowal also addressed to the dignitaries and awardees.

During the year two meetings of Academic Council were held on 02.09.2020 and 19.01.2021 and action have been taken on the decisions of the meeting.

PERSONNEL OF THE OFFICE

Controller of the Examination

Dr. Lakhi Boral, Ph.D.

Officers

Ms. Anamika Pegu, Assistant Registrar (Snr. Scale)

Mr. Sobhan Mahanta, Assistant Registrar

Mr. Biren Sharma, Section Officer

Staff

Mr. Ajanta Pathak
Assistant

Mr. Dwipendra Ch. Das
Assistant

Mr. Arunjyoti Das
Steno (Gr. II)

Ms. Prohelika Hazarika
LDC

Mr. Jagat Bhuyan
MTS

Mr. Debajyoti Saikia
MTS

Mr. Bholu Sharma
MTS

RESEARCH AND DEVELOPMENT PROFILE

The office of the Dean, R&D facilitates the implementation and smooth creation of extramural research projects funded by the various Government and non-Government funding agencies like UGC, MHRD, DST, DBT, DeitY, AICTE, DAE, DRDO, DRL, ISRO, ICMR, ICAR, CSIR, INSA, UNICEF, Ministry of Earth Science, Ministry of Food Processing Industries, MNRE, ONGC and others. This office takes the responsibility of advertisement and appointment of project staff; permits conduct of field trips/visits as required by the project staff and PIs and/or Co-PIs; grants permission to attend workshops/seminars/symposiums/ conferences as well as to visit different research laboratories by using the project grant. In addition to management of extramural research projects sanction to individual PI, this office also manages the Departmental and institutional research projects such as UGC-SAP, UGC-BSR start up grants, DST-FIST and DBT funded schemes such as Establishment of Institutional Level Biotech Hub. Dean R&D also conducts the Tezpur University Ethical Committee, Tezpur University Animal Ethical Committee, Tezpur University Biosafety Committee, and Bioinformatics Infrastructure Facility meetings. This office has also been involved in implementation of projects approved by ONGC-CPBT, an example of Academy-Industry collaboration at Tezpur University.

It may be mentioned that the Dean R&D keeps the account of R&D activities of the University, liaisons between the researchers of the University and the funding agencies, facilitates R&D activities and also contributes towards creating a conducive atmosphere for research activities. During the year 2020-2021 this office has forwarded several research proposals for consideration of approval to the funding agencies. At present a total of 264 externally funded research projects are ongoing with a financial outlay of Rs. 10554.50 lakhs plus €105428.75 and £31,500. During the year 2020-2021, 24 new projects were sanctioned. The ongoing research projects include 17 international collaborative projects of which 2 projects are under Indo-UK, 1 with Indo-Finland, 2 with Indo-Russian, 1 with Indo-Brazil, 2 with Nottingham University, 1 with Indo-Japan, 1 with CEFIPRA (Indo-French), 1 with Indo-German, 1 with Indo-Hungary, 2 with Indo-ASEAN, 1 with Indo-Sweden, 1 with ERASMUS (Indo-Greece-Italy) and 1 with Indo-Bulgaria. During this period, seven departments were funded under UGC-SAP of which 3 departments are supported by DRS-I and 4 departments are supported by DRS-II. The faculty members have published several research papers in peer-reviewed national and international journals. Further, these projects have augmented the research skills of the project staff and have created trained manpower to cater to the need of the society.

The office also facilitates consultancy projects of faculty as per the TU guidelines. Total amount earned through consultancy projects during 20-21 was approximately INR 2,08,13,120/-. This amount was earned as consultancy fee by individual faculty as well as by the departments of various Schools.

In addition, the office also deals with various fellowship matters such as UGC-NET JRF, NFOBC, NFST, RGNFST, MANF, DS Kothari, SVSGC, CSIR-JRF/SRF, DST-INSPIRE, DBT-JRF etc. Different fellowships received during 2020-21 are as under.

(1) NFOBC	:	03
(2) UGC-NET (JRF)	:	07
(3) NFST	:	05
(4) CSIR-JRF	:	05
(5) CSIR-SRF	:	06
(6) NFSC	:	01
(7) MANF	:	06

PERSONNEL OF THE OFFICE OF THE DEAN

Dean, Research & Development

N. Karak, PhD (IIT Kharagpur)
Professor, Dept. of Chemical Sciences
E-mail: nkarak@tezu.ernet.in

Office Staff

H Das
Section Officer
E-mail: himdas@tezu.ernet.in

Raj Kumar Das
Assistant
E-mail: raj@tezu.ernet.in

D. Bania
MTS
E-mail: baniad2@tezu.ernet.in

STUDENTS' ACTIVITY PROFILE

The duty of the office of the Dean Students' Welfare is to make all possible efforts for providing necessary opportunities and facilities to the students for the development of their personalities and leadership qualities as well as sports/games and this office has been leaving no stone unturned in this regard. The University can boast of such a student community which are multi-talented in different fields and are actively pursuing sports, cultural, literary and other extra-curricular activities. Highlights of some major events (Online) during April 2020 - March 2021 are as follows:

Students Discipline:

The office of the Dean, Students' Welfare looks after the matters of students' discipline. The Anti-Ragging committees, Anti Ragging squads were constituted as per the rule, and they had put their best efforts to ensure that there is no incidence of Ragging in the University. It is also a matter of joy and pride for us that during the period of this report, the University did not witness any incidence of disruption of academic activities due to protest by the students. All of these were made possible because of active and highly dedicated grievance redressal mechanism which is put in place and available both online as well as offline.

Students' Activities:

Student community of the University is in the forefront in pursuing sports, cultural, literary and other extra-curricular activities during their leisure time. Sports and cultural events have been organized frequently in the campus and the students participate in these events wholeheartedly in large numbers. Cultural and sports activities in nutshell are as follows:

Cultural section of the University takes a quite proactive role to help of the students in achieving their cultural goals by providing the best possible facilities. Music Practice Rooms available at the Students' Activity Centre. Kalaguru Bishnu Prasad Rabha Auditorium, Community Hall, Chandra Prabha Saikiani Bhawan are some of the facilities for practice and performance. There are different instruments like Guitar, Drum Set, Synthesizer, Dhol, Bor Dhol, Kobi Dhol, Madol, Doba, Pepa, Bahi, Gogona, Kham, Khol etc. are available for the use of the interested students.

Sports Activity

E -Chess Blitz Arena 2020 (Online chess tournament) was held from 8 to 10 June 2020.

Total 43 students' registered for the tournament and out of this 37 of students turn out. 15 students were selected for the final round as per the points. All the matches were played on online chess platform and Mr. Bidyut Bikash Handique (State level Judge) was the Judge of this tournament.

Result of the tournament:

1.	Abdul Suleman	Chemical Sciences	1st
2.	Akhil Mishra	CSE	2nd
3.	Kapil Hazarika	Mechanical Engineering	3rd

And Prize money was given to the winners as Rs.3000/, Rs.2000/ and 1000/-

TU Online Quiz on the topic of Sports, Fitness and Nutrition.

An online quiz competition for the current students of Tezpur University was organized to create more awareness about the topic of Sports, Fitness and Nutrition. This was done under the aegis of Tezpur University Mental Task Force and Sports Office. As everyone is safely staying at home, the platform for the quiz was decided to be Google Forms. The quiz was held on 14 June, 2020 and the participants could attempt the quiz during 5pm - 9pm. The quiz had 35 questions, with questions from various fields encompassing Sports, Nutrition & Fitness. The Quiz Master of the quiz was Mr. Ashutosh Das (national level quiz champion and a quiz master). A total of 58 students took part in the quiz and after the evaluation, the top 10 winners were awarded the respective cash awards along with certificates 1st: ₹1200, 2nd: ₹900, 3rd: ₹700, next 7 winners: ₹100 each.

Position	Name	Department
1st	Abhinav Das	Commerce
2nd	Munindra Nath Hazarika	CSE
3rd	Abhinab Boruah	FET
4th	Rajibul Awal	Civil Engg.
5th	Mridul Sarmah	Mathematical Sciences
6th	Debayan Chakravorty	CSE
7th	Pritom Kumar Nath	Physics
8th	Surajit Chakraborty	CSE
9th	Hirakjyoti Borah	CSE
10th	Dipjyoti Dutta	Civil Engg

6th International Yoga Day : Tezpur University observed 6th International Day of Yoga 2020 by organizing activities such as video blogging contest on the topic “My Life My Yoga” (Jeevan Yoga) from 12 to 20 June 2020. Due to COVID-19 outbreak, the focus was on people performing Yoga at their respective homes with participation of the entire family. Prof. V.K Jain, Hon’ble Vice Chancellor through his video address appealed all to observe the day by practicing Yoga at home with family members. The University uploaded Common Yoga Protocol video and Yoga Day pledge in the YouTube channel of the University as well in the website for the benefit of university members. Social Media Platforms of the University updated/tweeted Ministry of Ayush. PM’s schedule was also shared with the TU employees. The entire University community observed the day practicing at home.

Online Fitness Challenge 2020

This is notified to all the students of Tezpur University that as university is close for students due to Covid-19 pandemic so to promote physical fitness and awareness for personal health Tezpur University Mental Task force and Sports Office will organize online Fitness Challenge. Students can participate through registration on google classroom attached along with this notice and upload the physical challenge video in classroom page.

Fit India Movement Freedom Run and Celebration program on 151st Birth anniversary of the Father of the nation, Mahatma Gandhi and 116th Birth Anniversary of Lal Bahadur Shastri

In line with the Ministry of Education and Ministry of Youth Affairs and Sports Government of India. Tezpur University also observes Fit India Movement Freedom Run and Celebration program on the 151st Birth anniversary of the Father of the nation, Mahatma Gandhi and 116th Birth Anniversary of Lal Bahadur Shastri, Former Prime Minister of India on 2nd October 2020. For students, an online video blogging contest was organized on the topic of “Fit Body” from 14 to 28 August 2020, which will provides hard evidence of physical practice and its impact on oneself. Good member of student participated in the event.

The **closing** ceremony for the FIT INDIA FREEDOM RUN program was held on **02 10-2020 at 7:30 am** on the premises of KBR Auditorium along with the celebration of 151st Birth anniversary of the Father of the nation, Mahatma Gandhi and 116th Birth Anniversary of Lal Bahadur Shastri. The event was graced by our Hon’ble Vice-Chancellor.

Interactive session with star of India. Episode 01 was organized with Laishram Bombayla Devi Padma Shri, Arjun awardee & Olympian. A large number of students have participated.

“Interactive Session with a Sports Star of India”Episode #01



Guest: Laishram Bombayla Devi Padma shri, Arjun awardee & Olympian

Dean and Associates Deans

Professor D. Deka
Dean, Students' Welfare

Professor M. Mandal
Associate Dean, Students' Welfare (Sports)

Dr. (Mrs) Juri Gogoi Konwar
Associate Dean, Students' Welfare (Culture)

Officers

Mr. R.R Singh
Assistant Director of Physical Education

Mr. Partha S. Baruah
Assistant Registrar

Dr. Bhupali Kashyap
Cultural Officer

Mr. Bahniman Sharma
Sports Officer

Staffs

Mr. Saurav Jyoti Borah
Office Assistant (Outsourced)

Mr. Biren Bora
Multi-Tasking Staff (MTS)

Mr. Jiban Damai
Multi-Tasking Staff (MTS)

Mr. Dudu Tamuli
Multi-Tasking Staff (MTS)

Mr. Sahed Ali
Multi-Tasking Staff (MTS) (Outsourced)

TRAINING AND PLACEMENT CELL (ENGINEERING)

The Training and Placement Cell acts as an effective institutional arrangement primarily aimed at training and placement of students in the best-known corporate entities in the country. It establishes linkages with various corporate and facilitates placement events on campus as well as off campus. One of the major activities of the Cell is to groom the students to make them industry ready and enhance their chances of employability. The Cell is also playing an active role in placing many students through Internship, initially with a stipend and later regularized in the payroll of the company. During the reporting period 07 technical training sessions with durations ranging from a week to fortnight, and 05 career counselling sessions by industry experts were organized by the Training & Placement Cell of SoE. The Placement Cell of the School of Engineering had another successful year of placement for the batch of 2021, wherein 19 organizations participated, and the highest salary package offered was 10.56 Lakhs P.A by Oil India Ltd. The other organizations where our students got placed are Innovaccer Analytics Pvt. Ltd., Antares Technologies, Techvariable, Maventic, BIAS Info Tech Pvt. Ltd., LG Soft India, KEC International, Modak, Cognizant Technologies Solution, Wipro Ltd, Zaloni Technologies, TCS, Betsol Software Pvt. Ltd., Capgemini Technology Services India Ltd, Federal Bank, Jubilant Food Works and IQVIA etc.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title (webinar)	Date/Period, year
(i) <i>A career Counselling talk by Captain S Ravindra, Command Recruitment Officer (Eastern Naval Command, Visakhapatnam-530014) on " Indian Navy as a Career Option" was held on 8th Feb 2021 for the students of the School of Engineering</i>	<i>Feb 8, 2021</i>
(ii) <i>"Get into the world of analytics and data science" by our TU alumnus Mr. Prakash Gupta, Data Scientist, TESCO</i>	<i>Sept. 12, 2020</i>
(iii) <i>"Career in Data Science" by our TU alumnus Mr. Bikram Kachari, Data Scientist</i>	<i>Oct. 01, 2020</i>
(iv) <i>"Strategies and tips- How to face Technical Interview & HR Round in a manufacturing Industry." by our alumnus Mr. Dharma Saikia, Unit Head, Tata Consumers</i>	<i>Nov. 01, 2020</i>
(v) <i>"How to groom oneself for facing IT technical interviews." By our TU alumnus Mr. Dharmendra Kalita, Founder & CEO, The Rook India, COO, Ruralnomics Technologies.</i>	<i>Nov. 07, 2020</i>

DISTINGUISHED VISITORS

Mr. Dharma Saikia, Unit Head, Tata Consumers.

NOTABLE PLACEMENTS [2020-21, Report period

Name	Designation	Organization
Ashutosh Tiwari	Intern	Innovaccer Analytics Pvt. Ltd.
Bidon Saha	Associate Software Engineer	Betsol
Rishabh Trivedi	Associate Software Engineer	Betsol
S Shahhnawaj Sahil Imani	Software Engineer	Zaloni Technologies
Raju Kumar Singh	Software Engineer	Zaloni Technologies
Md. Moin Almin	Software Engineer	Zaloni Technologies
Abhishek Sengupta	Software Engineer	Zaloni Technologies
Monika Sharma Giri	Analyst	Capgemini
Moin Almin	Analyst	Capgemini
Jitul Rajbonshi	Analyst	Capgemini
Prajwal Singh	Analyst	Capgemini
Mandeep Kumar Singh	Analyst	Capgemini
Pushpak Jalan	Analyst	Capgemini
Bijoy Dutta	Analyst	Capgemini
Jay Debnath	Analyst	Capgemini
Nabajjal Nath	Analyst	Capgemini
Ratnadeep Malakar	Senior Officer/Engineer	Oil India Ltd.
Snigdha Shourya	Intern	Antares Technologies
Prajwal Singh	Intern	Antares Technologies
Anuj Nath	Intern	Antares Technologies
Binoy Kumar Singh	Intern	Antares Technologies
Angkit Sarma	Intern	Antares Technologies
Ashutosh Tiwari	Intern	Antares Technologies
Mohamad Adil	Assistant System Engineer- Trainee	TCS
Tufawal Ahmed Borbhuyan	Assistant System Engineer- Trainee	TCS
Saurabh Kannaujia	Assistant System Engineer- Trainee	TCS
Anuj Kumar Nath	Assistant System Engineer- Trainee	TCS
Rajneesh Kumar	Assistant System Engineer- Trainee	TCS
Sneha Deb Roy	Assistant System Engineer- Trainee	TCS
Nishiraj Nath	Assistant System Engineer- Trainee	TCS
Susmita Mishra	Assistant System Engineer- Trainee	TCS
Sahitya Sikhar Ghosh	Assistant System Engineer- Trainee	TCS
Bhargav Jyoti Mahanta	Assistant System Engineer- Trainee	TCS
Akashdeep Bora	Assistant System Engineer- Trainee	TCS
Deepankar Acharyya	Assistant System Engineer- Trainee	TCS
Bishal Deb	Assistant System Engineer- Trainee	TCS
Prajwal Singh	Assistant System Engineer- Trainee	TCS
Raju Kumar Singh	Intern	Techvariable
Sahitya Sikhar Ghosh	Programmer analyst Trainee	Cognizant Technologies
Abhisekh Barah	Programmer analyst Trainee	Cognizant Technologies
Mritunjay Kumar	Programmer analyst Trainee	Cognizant Technologies
Abhilash Kumar	Programmer analyst Trainee	Cognizant Technologies

Prajwal Singh	Programmer analyst Trainee	Cognizant Technologies
Sumit Kumar Thakur	Programmer analyst Trainee	Cognizant Technologies
Pankaj Upadhaya	Programmer analyst Trainee	Cognizant Technologies
Himsikhar Deka	Programmer analyst Trainee	Cognizant Technologies
Raju Kumar Singh	Programmer analyst Trainee	Cognizant Technologies
Susmita Mishra	Programmer analyst Trainee	Cognizant Technologies
Piyush Thakur	Programmer analyst Trainee	Cognizant Technologies
Rajneesh Kumar	Programmer analyst Trainee	Cognizant Technologies
Jugmita Patgiri	Programmer analyst Trainee	Cognizant Technologies
Partha Pratim Bora	Programmer analyst Trainee	Cognizant Technologies
Adarsh Kumar	Programmer analyst Trainee	Cognizant Technologies
Chiranjib Kashyap	Programmer analyst Trainee	Cognizant Technologies
Priyotush Paul	Territorial Sales in Charge	Amul
Naba Jyoti Gogoi	Trainee Developer	Marventic Innovative Solutions Pvt. Ltd.
Prakash Bhusal	Trainee Developer	Marventic Innovative Solutions Pvt. Ltd.
Punam Sarmah	Faculty	Vivekananda Kendra Vidyalayas
Bigrai Basumatary	Faculty	Vivekananda Kendra Vidyalayas
Tapasi Misra	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Pooja Nath	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Sangeeta Singha	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Lakhyajit Gohain	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Sneha Deb Roy	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Mitali Das	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Ananya Deka	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Jay Debnath	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Prakash Bhusal	Programmer	LG Soft India
Adarsh Kumar	Programmer	LG Soft India
Debasish Bhuyan	Engineer Leadership Trainee	KEC International
Deepankar Acharyya	Software Development Engineer	Modak
Mandeep Kumar Singh	Software Development Engineer	Modak

PERSONNEL OF THE CELL

Prof-in-Charge, T&P Cell, SOE

Prof. Sankar Ch Deka
sankar@tezu.ernet.in

Dy. Director, T&P Cell

Dr. Pijush Ch Das
pijush@tezu.ernet.in

MTS, T&P Cell

Mr. Nayan Jyoti Kalita
nayank@tezu.ernet.in

TRAINING AND PLACEMENT CELL (NON ENGINEERING)

Training & Placement Cell (Non Engineering) is established with the aim of guiding and helping the students to get deserving placements in the required field. T&P Cell provides placement assistance to the students of all the programmes offered by the University. Our cell operates round the year to provide not only campus placements but also organise workshops, talks, and Corporate competitions to equip students with life skills and to provide career guidance about the avenues open after graduation.

The covid pandemic has impacted campus placement adversely this year. Even though the Placement Cell organized recruitment events and internships, we are profoundly grateful to all the people whose contributions made this year placements and internships successful. Several regular as well as new organisations conducted virtual campus recruitment process this year. 21 organizations have participated and offered roles in the areas of media relations, digital marketing, content development, teaching, client servicing, marketing, branding, relationship management, business development, consultancy, retail operations, human resources etc.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Webinar on: Job opportunities for MBA in development/public service sector at a time of crisis created by Global Pandemic.	2 May 2020
Webinar on: How to crack APSC/UPSC	27 May 2020
Webinar on How to create an impressive LinkedIn profile?	6 June 2020
Webinar Title: The Prospects of Career in Public Policy and Leadership Structure	22 June 2020
Webinar Title: "Post-Graduate Studies in the United States - all you need to know"	3 August 2020
How to lead yourself powerfully during this Covid?	29 August 2020
Online Training Programme on Resume Writing, Case Studies based Group Discussion, Presentation Skills and Interviewing Skills	19 - 27 September 2020
Webinar on *Suit Yourself: Personality and Career Choice*	27 September 2020
Online Pre-placement grooming programme on Resume writing, Group Discussion & Interviewing Skills	10 - 18 October 2020
Webinar on Career Opportunities in the area of Child care and protection	8 November 2020
Crafting Career in Life Sciences	11 January 2021

DISTINGUISHED VISITORS

Dr. Nitin More, Founder, Brainayan

Ullas P Scaria, State Coordinator, Bachpan Bachao Andolan

Dr. Yugandhar Reddy, Senior Research Scientist, Hindustan Unilever Ltd

NOTABLE PLACEMENTS

Name	Designation	Organization
Abhijit Saikia	Subject matter expert	Chegg India
Ankita Saha	Subject matter expert	Chegg India
Anuja Kar	Subject matter expert	Chegg India
Arpita Das	Subject matter expert	Chegg India
Arunjyoti Das	Subject matter expert	Chegg India
Charmi Haque	Subject matter expert	Chegg India
Dipom Kumar Nath	Subject matter expert	Chegg India
Jigyashree Lahon	Subject matter expert	Chegg India
Kangkana Barman	Subject matter expert	Chegg India
Kriti Yadav	Subject matter expert	Chegg India
Kritina Boro	Subject matter expert	Chegg India
Limi Konwar	Subject matter expert	Chegg India
Niharika Das	Subject matter expert	Chegg India
Prachurjya Protim Sabhapandit	Subject matter expert	Chegg India
Rituparna Dey	Subject matter expert	Chegg India
Shilpa Sutradhar	Subject matter expert	Chegg India
Shubhi Gupta	Subject matter expert	Chegg India
Shyamalima Gogoi	Subject matter expert	Chegg India
Kalyani Devi	Management Trainee	SBI Life
Hirakranjan Choudhury	Management Trainee	SBI Life
Krishnika Kashyap	Management Trainee	SBI Life
Partha Kishor Bora	Management Trainee	SBI Life
Tania Choudhury	Executive Trainee - CD Sales	Hindustan Unilever Limited
Pritom Kumar Rajkhowa	Executive Trainee - CD Sales	Hindustan Unilever Limited
Merupranta Saikia	Executive Trainee - CD Sales	Hindustan Unilever Limited
Hrishikesh Nath	Management Trainee	TCS
Bandhan Bishnu Saikia	Management Trainee	TCS
Tapash Jyoti Deka	Trainee - sales	ITC
Bandhan Bishnu Saikia	Trainee - sales	ITC
Shreyasee Deb	Assistant Manager	SRVA Education
Partha Pratim Borah	Territory Sales in Charge	Amul
Shabana Azmi Hussain	Business Development Trainee	Byjus
Jyoti Ranjan Haloi	Business Development Trainee	Byjus
Nabajit Malakar	Business Development Trainee	Byjus
Supriya Das	Junior Research Trainee	Fin Advisors Consulting Pvt. Ltd
Imran Choudhury	Junior Research Trainee	Fin Advisors Consulting Pvt. Ltd
Ria Lodh	Technical Trainee	Dr. Reddy's
Minu Thapa	Technical Trainee	Dr. Reddy's
Sonali Singh	Technical Trainee	Dr. Reddy's
Sudem Boro	Technical Trainee	Dr. Reddy's
Usashi Guha Roy	Technical Trainee	Dr. Reddy's
Priya Joshi	Technical Trainee	Dr. Reddy's
Ujjayita Chowdhury	Technical Trainee	Dr. Reddy's

Angshuman Das	Technical Trainee	Dr. Reddy's
Neha Khetawat	Subject Matter Expert	Chegg India
Karabi Choudhury	Teacher - Sceince Secondary	VKVAPT
Pallabi Chetry	Teacher - English Secondary	VKVAPT
Barasa Sarma	Teacher - English Secondary	VKVAPT
Arunabh Das	Teacher - Mathematics Secondary	VKVAPT
Tarpita Saikia	Teacher - Mathematics Secondary	VKVAPT
Priya Joshi	Associate Editor(Telecommute)	Cactus Communications
Madhusmita Bordoloi	Trainee Account Executive	AdfactorPR
Simanta Barman	Trainee Account Executive	AdfactorPR
Abhishek Kabra	Trainee Account Executive	AdfactorPR
Supriya Das	Trainee Account Executive	AdfactorPR
Jitakhshi D Hazarika	Trainee Account Executive	AdfactorPR
Babita Chetry	Lecturer	Apex Professional University School of Law and Juridical Studies
Biswanath Jana	Trainee	Bharat Biotech
Deepjyoti Choudhury	Trainee	Bharat Biotech
Himanshu Ballav Goswami	Trainee	Bharat Biotech
Kangkana Barman	Trainee	Bharat Biotech
Pawan Kumar	Trainee	Bharat Biotech
SOURAV GANGULY	Trainee	Bharat Biotech
Subhadeep Paul	Trainee	Bharat Biotech
Sujata Gogoi	Management Trainee	Buyer foresight
Upasana Handique	Trainee / Education Warrior	Earthkids Humanity Foundation
Himakshi Thakuriya	Programme Executive- Trainee	ETV Bharat
Ananya Bora	Management Trainee	Max_Bupa Life Insurance
Prakhyat Sarmah	Management Trainee	Max_Bupa Life Insurance
Shri Santosh Rawat	Senior Officers/Engineers	Oil India Ltd
Anushthatri Sharma	Content Writer	Zakti Digital Pvt Ltd.

PERSONNEL OF THE CELL

Professor-in-Charge-T&P (Non-Engineering)

Prof. Papori Baruah, Ph.D-TU

Email: papori@tezu.ernet.in

Training & Placement Officer

Ms. Deena Davy, MA-CU, PGCHRM-XLRI

Email: deena@tezu.ernet.in

THE BOARD OF MANAGEMENT

Vice-Chancellor	Chairman
Pro Vice Chancellor	Member
Dr. A Nath, Assistant Professor Dept. of Chemistry, GC College, Silchar, Assam	Member
Dr. T David Singh, Assistant Professor Dept. of Chemistry Dept. of Basic Science and Humanities, NIT Manipur, Imphal	Member
Shri O R Shallam, Professor & Head (Retd.), Dept. of History, KNG College, Jowai, Meghalaya	Member
Shri B S Nanda, Associate Professor Dept. of Political Science Charuchandra College, Kolkata, West Bengal	Member
Ms. Geeta Upadhyay Chandmari, Tezpur-784001	Member (till 28.07.2020)
Dr. Joyanti Chutia Former Director, IASST, Guwahati	Member (w.e.f. 29.07.2020)
Prof. P. K. Das Dean, School of Humanities & Social Sciences	Member
Prof. M. K. Sarma Department of Business Administration	Member
Dr. Madhurima Goswami Department of Cultural Studies	Member
Dr. Heera Barpujary Department of Business Administration	Member
Finance Officer Controller of Examinations	Permanent Invitee Permanent Invitee
Alumni representatives	
Dr. Barnali Das Deka, Tezpur, Assam	Special Invitee
Dr. Dharma Saikia, Guwahati, Assam	Special Invitee
Student Representatives	
Mr. Raktim Aabha Saikia, Research Scholar	Special Invitee
Mr. Jyotishpal Deka, President, TUSC	Special Invitee
Registrar	Ex-officio Secretary

THE PLANNING BOARD

Vice-Chancellor	Ex-Officio Chairman
Pro Vice Chancellor	Ex-Officio Member
Dean, School of Humanities and Social Sciences	Ex-Officio Member
Dean, School of Sciences	Ex-Officio Member
Dean, School of Management Sciences	Ex-Officio Member
Dean, School of Engineering	Ex-Officio Member
Dean, Students' welfare	Ex-Officio Member
Dean, Research and Development	Ex-Officio Member
Dean, Planning & Development	Ex-Officio Member
Dean, Academic Affairs	Special Invitee
Six teachers nominated by the Academic Council	
Prof Chandan Kumar Sarma Department of Sociology	Member
Prof Manabendra Bhuyan Department of Electronics & Communication Engineering	Member
Prof. M. K. Sarma Department of Business Administration	Member
Dr. P. Anbarasan Department of Mass Communication & Journalism	Member
Dr. T. R. Sarma Department of Business Administration	Member
Dr. Heera Borpujari Department of Business Administration	Member (till 12.07.2020)
Dr. S. I. Singh Department of Computer Science & Engineering	Member (w.e.f. 13.07.2020)
One Representative of MHRD	
Joint Secretary (Central University) Ministry of Human Resource Development Department of Higher Education, New Delhi	Member
One Representative of UGC	
Prof. S. P. Singh Head, School of Energy & Environmental Sciences Devi Ahilya Vishwavidyalaya, Indore, Madhya Pradesh	Member
One Representative of NEC	
Director (HRD & E) NEC, Nongrim Hill, Shillong- 793003	Member

One Representative of State Govt. of Assam

Commissioner and Secretary
Department of Higher Education, Govt. of Assam
Dispur, Guwahati-781006

Member

Two Nominees by the Board of Management

Prof. Sashindra K. Kakoti
Department of Mechanical Engineering
IIT Guwahati, Guwahati – 781 039

Member

Prof. Mohan Ch. Kalita
Department of Biotechnology
Gauhati University
Guwahati – 781 014

Member

Controller of Examinations

Permanent Invitee

Finance Officer

Permanent Invitee

Librarian

Permanent Invitee

Registrar

Ex-officio Secretary

THE ACADEMIC COUNCIL

Vice Chancellor	Ex-officio Chairman
Pro Vice Chancellor	Ex-officio Member
Deans of Schools	
Dean, School of Management Sciences	Ex-officio Member
Dean, School of Humanities and Social Sciences	Ex-officio Member
Dean, School of Engineering	Ex-officio Member
Dean, School of Sciences	Ex-officio Member
Dean, Students' Welfare	Ex-officio Member
Dean, Research and Development	Special Invitee
Dean, Academic Affairs	Special Invitee
Two Professors nominated by the Vice Chancellor	
Prof. Tarun K Maji	Member
Department of Chemical Sciences	
Prof. B. Konwar	Member
Department of Molecular Biology and Biotechnology	
All Heads of Departments / Centres	
Head, Department of English	Ex-officio Member
Head, Department of Foreign Languages	Ex-officio Member
Head, Department of Cultural Studies	Ex-officio Member
Head, Department of Sociology	Ex-officio Member
Head, Department of Mass Communication and Journalism	Ex-officio Member
Head, Department of Education	Ex-officio Member
Head, Department of Social Work	Ex-officio Member
Head, Department of Hindi	Ex-officio Member
Head, Department of Business Administration	Ex-officio Member
Head, Department of Mathematical Sciences	Ex-officio Member
Head, Department of Physics	Ex-officio Member
Head, Department of Chemical Sciences	Ex-officio Member
Head, Department of Molecular Biology and Biotechnology	Ex-officio Member
Head, Department of Environmental Science	Ex-officio Member
Head, Department of Computer Science and Engineering	Ex-officio Member
Head, Department of Electronics & Communication Engineering	Ex-officio Member
Head, Department of Food Engineering & Technology	Ex-officio Member
Head, Department of Energy	Ex-officio Member
Head, Department of Civil Engineering	Ex-officio Member
Head, Department of Electrical Engineering	Ex-officio Member
Head, Department of Commerce	Ex-officio Member
Head, Department of Law	Ex-officio Member
Head, Department of Assamese	Ex-officio Member
Head, Computer Centre	Ex-officio Member
Head, Centre for Disaster Management	Ex-officio Member
Head, Women Studies Centre	Ex-officio Member
Head, Centre for Open and Distance Learning	Ex-officio Member
Head, Centre for Inclusive Development	Ex-officio Member

Two Associate Professors Nominated by the Vice Chancellor

Dr. M K Hazarika Department of Food Engineering and Technology	Member (till 18.01.2021)
Dr. Dambarudhar Mohanta Department of physics	Member (w.e.f. 19.01.2021)
Bhim Pd. Sarmah Department of Mathematical Sciences	Member

Two Assistant Professors Nominated by the Vice Chancellor

Dr. Ng K Francis Department of Physics	Member (till 09.07.2020)
Dr. Rathijit Chakraborty Department of English and Foreign Languages	Member (till 09.07.2020)
Dr. Riku Chutia Department of Electronics and Communication Engineering	Member (w.e.f. 10.07.2020)
Dr. Reetamoni Narzary Department of English	Member (w.e.f. 10.07.2020)

Three Nominees of the Board of Management

Prof. D J Saikia TIFR Pune Pune University Campus, Pune 411 007, Maharashtra	Member (till 13.08.2020)
Prof. N. C. Talukdar Former Director, IASST, Guwahati, Assam	Member (w.e.f. 14.08.2020)
Prof. Desmond L Kharmawphlang Department of Culture & Creative Studies North-Eastern Hill University (NEHU) Umshing Mawkynroh Shillong 793022, Meghalaya	Member
Prof. Anup Kumar Gogoi Department of Electronics and Electrical Engineering (EEE) IIT Guwahati Guwahati – 781039, Assam	Member

One Representative of UGC

Prof. S. P Singh Head, School of Energy & Environmental Sciences Devi Ahilya Vishwavidyalaya, Indore Madhya Pradesh	Member
--	--------

One Representative of MHRD

Prof. Harish K Sharma
Director, NIT, Agartala,
Tripura (W), 799 046

Member

One Representative of NEC

Director (HRD & E)
North Eastern Council (NEC)
Shillong-793003

Member

One Representative of State Govt. of Assam

Commissioner & Secretary / Principal Secretary In-charge
Department of Higher Education
Govt. of Assam, Guwahati-781006

Ex-officio member

Controller of Examinations

Ex-officio Member

Librarian

Ex-officio Member

Registrar

Ex-officio Secretary

THE FINANCE COMMITTEE

Vice Chancellor	Chairman
Pro Vice-Chancellor	Member
Joint Secretary and Financial Advisor, MHRD or his/her nominee from Finance Bureau of MHRD Not below the rank of Deputy Secretary	Member
Joint Secretary (CU&L) of MHRD or his/her nominee not below the rank of Joint Secretary to the Govt. of India	Member
Joint Secretary (CU), UGC or any other Joint Secretary level officer nominated by the Chairman, UGC	Member
Mr. S Vasum, IAAS Director (Finance) NEEPCO Ltd., Shillong-793003	Member
Shri B. Paul Muktiah Chairman and Managing Director North Eastern Development Finance Corporation Ltd. NEDFi House, Dispur, Guwahati – 781 006	Member
Prof. M. K. Sarma Department of Business Administration	Member
Finance Officer	Ex-officio Secretary

THE BUILDING COMMITTEE

Vice Chancellor	Ex-officio Chairman
Pro Vice Chancellor	Member
Prof. S. K. Sinha Dean, School of Engineering	Member
A representative of the User Department Prof. D K Bhattacharyya Department of Computer Science & Engineering	Member Member (till 27.07.2020)
Prof Utpal K Sarma Member Department of Computer Science & Engineering	(w.e.f. 28.07.2020)
Prof. R. R. Hoque Department of Environmental Science	Member
Finance Officer Tezpur University	Ex-officio Member
Head, Department of Civil Engineering Tezpur University	Ex-officio Member
Chief Engineer, PWD (Bld), Assam or his/her nominee who is not below the rank of Supdt. Engineer	Ex-officio Member
Sri B K Das Secretary (Retd), PWD (Blds & NHW) Assam	Member (till 27.07.2020)
Er. Alok Ranjan Borah Superintendent Engineer (Retd)	Member (w.e.f. 28.07.2020)
Superintendent Engineer (Electric) PWD (Elect), Guwahati Electric Division Guwahati, Assam	Ex-officio Member
Superintendent Engineer (PHE) Tezpur Circle, Assam	Ex-officio Member
Executive Engineer Tezpur University	Ex-officio Member
Smti Parmita Kakati Head, Dept. of Architecture PCPS Girls Polytechnic College, Guwahati, Assam	Member (till 27.07.2020)
Shri Amal Barman Deputy Director, Office of the Chief Engineer (Bldg) Guwahati, Assam	Member (w.e.f. 28.07.2020)

Mr. D Saikia
Sr. Architect, PWD, Assam

Assistant Horticulturist
Tezpur University

Registrar, Tezpur University

Member

Ex-officio Member

Ex-officio Member Secretary

ACADEMIC DPARTMENT AND CENTRES

Dean, School of Engineering

Department of Applied Sciences

Department Civil Engineering

Department of Computer Sciences and Engineering

Department of Design

Department of Electrical Engineering

Department of Electronics and Communication Engineering

Department of Energy

Department of Food Engineering and Technology

Department of Mechanical Engineering

DEAN, SCHOOL OF ENGINEERING

The School of Engineering (SoE) of Tezpur University was established in the year 2006 with the introduction of B. Tech. programmes in three disciplines. There are now nine departments at the School of Engineering.

1. CE (Civil Engineering)
2. CSE (Computer Science and Engineering)
3. ECE (Electronics and Communication Engineering)
4. EE (Electrical Engineering)
5. Energy
6. FET (Food Engineering and Technology)
7. Design
8. Applied Science
9. ME (Mechanical Engineering)

The six constituents Departments (CE,CSE,ECE, EE, FET and ME) of the School are now offering B. Tech programmes in the same way CSE, ECE, ME,FET, Energy and CE are offering Master of Technology programmes and a MCA programme are also being offered by the CSE department under the School. Except the Department of Electrical Engineering, Design and Applied Science all other departments also offer PhD programmes. The Department of Design, established in 2019, has offered M. Des. program from this academic year, 2021-22. All the departments under the School of Engineering offered MOOCs under SWAYAM-NPTEL for credit transfer. Maximum number of students registering for MOOCs under SWAYAM-NPTEL are from the School of Engineering. Tezpur University is now local chapter of NPTEL.

This school strives to produce skilled professionals at UG, PG as well as Doctoral levels. The Departments are actively pursuing externally funded research projects and both faculty and students are engaged in developing innovative technologies.

The School has been proactive in strengthening the teaching learning experience of the students in order to enhance the knowledge and employability of its graduates. The School has judiciously used the fund received from AICTE-NEQIP grant in developing and augmenting class room and laboratory facilities and enhancing faculty quality so that the overall learning process is able to keep pace with the changing global scenario of technical education.

During the period, due to **COVID-19** situation many significant works and activities had not been performed practically and some important activities were organized in the School as mentioned below:

The AICTE approved existing courses are:

- M. Tech in Bioelectronics
- M. Tech Electronics Design and Technology
- M. Tech Energy Technology,
- M. Tech Food Engineering and Technology
- M. Tech Information Technology,

M. Tech Mechanical Engineering,
M. Tech Computer Science and Engineering and
M. Tech Civil Engineering
B. Tech in Civil Engineering
B. Tech Computer Science and Engineering
B. Tech Electrical Engineering
B. Tech Electronics and Communication Engineering
B. Tech Food Engineering and Technology
B. Tech Mechanical Engineering
Master of Computer Application
Master of Business Administration

Other Important Activities

- Total 10 students have enrolled for National Doctoral Fellowship (NDF) of the academic year 2020-21.
- Total 74 students from the different streams of the School of Engineering 2020-21 batch have been recruited by 16 companies.
- Total 07 technical training session and 05 career counselling sessions were organized by the Training & Placement Cell of SoE.
- Mr. Rajesh Mandal, M.Tech, ELDT of 2021 batch pass out student has taken admission of Higher Studies (Ph.D) in IISc. Bangalore, Centre for Neuroscience.

PERSONNEL OF THE OFFICE OF THE DEAN

Dean, School of Engineering

Prof. Smriti Kumar Sinha, PhD
Professor, Dept. of Computer Science and Engineering
E-mail: deansoe@tezu.ernet.in

Office staff

J. C. Das, Diploma (SCTE, Assam)
Sr Technical Assistant
E-mail: djibon@tezu.ernet.in

Uttam Roy, MA (Tezpur University)
UDC
E-mail: uttamroy@tezu.ernet.in

Durlav Mahanta
MTS

DEPARTMENT OF APPLIED SCIENCES

THE DEPARTMENT

The Department was established in 2019. Presently courses on Physics, Mathematics and Chemistry are being taught to students enrolled in B.Tech. programmes. Through high-quality teaching the faculty members strive to develop a strong foundation among the students to enable them to have a bright academic career. The faculty members are young and highly motivated with research experience from premier institutes of India and abroad. The Department aspires to pursue research in interdisciplinary areas of applied sciences.

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
B. Sarkar	<p>(i) The X-ray timing and spectral variabilities observed in low-mass X-ray binary (LMXB) GX 3+1 was studied from the Soft X-ray focusing Telescope (SXT) and Large Area X-ray Proportional Counter (LAXPC) instruments onboard AstroSat.</p> <p>(ii) During the observation of the source by AstroSat on April 29-30, 2018, one rapid Type-I thermonuclear burst was detected in the LAXPC 20 proportional counter.</p> <p>(iii) Investigation of the hardness-intensity diagram reveals that the source was in the soft banana state during the observation.</p> <p>(iv) We performed a joint fitting of the SXT and LAXPC 20 layer 1 persistent pre-burst spectrum and fitted with a thermally Comptonized component.</p> <p>(v) During the burst fit, we analysed the burst spectrum during two useful time bins (a) the top of the burst and (b) the decay of the burst.</p> <p>(vi) We estimate the average neutron star radius to be ~ 13.5 km, for a considered source distance of 6.1 kpc.</p>

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Investigation of the accretion flow properties of black hole binaries with AstroSat	Indian Space Research Organisation (ISRO)	Rs. 5,21,848/- (Second Year Sanctioned Grant)	3 Years (2019 - 2022)	B. Sarkar	Inter-University Centre for Astronomy and Astrophysics, Pune

Developing Polymers of Intrinsic Microporosity (PIMs) as Solid Matrix for Separations of Hydrocarbons	SERB, India	Rs.26,54,520/-	2 Years (2020 - 2022)	S. Seth	
---	-------------	----------------	-----------------------	---------	--

PUBLICATIONS

Journal Publications

- Alhevaz A., Baghipur M. & Paul S. New Bounds and Extremal Graphs for Distance Signless Laplacian Spectral Radius. *Journal of Algebraic Systems*. 8. 2021.
- Saha A., Majumder P., Dutta D. & Debnath B. K. Multi attribute decision making using q-rung orthopair fuzzy weighted fairly aggregation operators. *Journal of Ambient Intelligence and Humanized Computing*. 12. 2020.
- Seth S. & Jhulki S., Porous Flexible Frameworks: Origin of Flexibility and Applications, *Materials Horizons*. 8(3). 2021

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
B.K. Debnath	National Webinar on Spectrum of mathematics in nature	Department of Basic sciences and Humanities Mathematics, New Horizon college of Engineering, Bengaluru	1 st August 2020	Bengaluru Online
	National Webinar on Machine learning and mathematical modelling	Department of Mathematics and Statistics, Manipal University, Jaipur	7 th August 2020	Jaipur (Online)
	National Webinar on Role of mathematical modelling on COVID-19 pandemic	Department of Mathematics, Mrinalini Datta Mahavidyapith, West Bengal	7 th August 2020	Kolkata (Online)
	National Webinar on (Online)Application of mathematics on epidemiology(Online)	Department of Mathematics, Vivekananda Satavarshiki Mahavidyalaya, Jhargram	21 st August 2020	Jhargram (Online)
	International Webinar on (Online)Trends in core sciences(Online)	Department of Physics, Chemistry and Mathematics, Srimad Andavan Arts and Science College	1 st -3 rd August 2020	Tiruchirappalli (Online)

	International Webinar on (Online)The role of applied mathematics in present global crisis(Online)	Department of Applied Mathematics with Oceanology and Computer programming, Vidyasagar University, West Bengal	5 th -7 th August 2020	Midnapore (Online)
	A two day international webinar on (Online)Algebra, Analysis and Topology(Online)	Department of Mathematics, Bankura University	13 th -14 th August 2020	Bankura (Online)
	International Webinar on (Online)Recent developments in number theory-2020(Online)	Department of Mathematics, KIIT University, Bhubaneswar	17 th -20 th August 2020	Bhubaneswar (Online)
	International Webinar on (Online)Inventory Modelling-2020(Online)	Department of Mathematics, Gujarat University	22 nd -23 rd August 2020	Ahmedabad (Online)
	One week FDP on (Online)DEEKSHARA MBH(Online)	Department of Mechanical Engineering, NIT Patna	10 th -14 th August 2020	Patna (Online)
	UGC-Sponsored 1 month Faculty Induction Program (FIP-02)	UGC Human Resource Development Centre, Gauhati University	21 September-20 October, 2020	Guwahati (Online)
	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	Teaching Learning Centre, Tezpur University, Assam	15 th Feb-1 st March 2021	Tezpur (Online)
B. Sarkar	National Webinar on (Online)Space Astronomy Research(Online)	Albertian Centre for Human Resource Development and Research, St. Albert's College (Autonomous)	22 April 2020	Kochi (Online)
	Webinar on (Online)The Fascinating World of Nanomaterials(Online)	Department of Physics, ICFAI Science School, The ICFAI University Tripura	25 May 2020	Agartala (Online)
	Symposium on Special Theory of Relativity 2020	Physics Department, Assam Don Bosco University	04 June 2020	Guwahati (Online)
	Two day online hands on workshop on	Teaching Learning Centre, Tezpur University in	08-09 June 2020	Tezpur (Online)

B. Sarkar	(Online)Integration Of Basic ICT Tools In Teaching Pedagogy	Association with IQAC, Tezpur University under PMMMNMTT Scheme of Ministry of Human Resource Development.		
	Science Leadership Workshop	Central University of Punjab, Bathinda, India	22-28 June 2020	Bathinda (Online)
	Webinar on (Online) Glimpse Into The Quantum World(Online)	Department of Physics, Debraj Roy College, Golaghat	17 July 2020	Golaghat (Online)
	Online Lecture Series in Physics	Department of Physics, Digboi College, in association with IQAC, Digboi College, Digboi, Assam, under DBT Star College Scheme	20-27 July 2020	Digboi (Online)
	International webinar on (Online)Recent Aspects In Physics(Online)	Department of Physics, Lakhimpur Girls' College	27-29 July 2020	Lakhimpur (Online)
	FDP on (Online)Flipped Classroom(Online)	Anjuman-I-Islam's Kalsekar Technical Campus, New Panvel	15 August 2020	Navi Mumbai (Online)
	One week FDP on (Online)Research Article Writing and Online Academic Presentation (Online)	Organized by Zoology &Biotechnology Department and Internal Quality Assurance Cell (IQAC) of Government Girls' P.G. College Ujjain (M.P.) In Association with The National Academy of Sciences, India, Bhopal Chapter.	17-23 August 2020	Ujjain (Online)
	National Webinar on (Online)Advances In Mathematical Modelling of Infectious Diseases(Online)	Department of Applied Sciences, School of Engineering, Tezpur University	31 August 2020	Tezpur (Online)
	One day National E-Conference on (Online)Recent Progress in Physical Science(Online)	Department of Physical Education and IQAC Tarakeswar Degree College, Tarakeswar, Dist. Hooghly (WB), India	31 August 2020	Hooghly (Online)
	Short Term Training Programme on (Online)MATLAB for Scientific Research(Online)	Research Culture Society, Scientific Research Organization	01-05 September 2020	Vadodara (Online)

	Webinar on (Online)Introductory Seminar on Astrophysics and Cosmology(Online)	IUCAA Centre for Astronomy Research and Development (ICARD), Physics Department, North Bengal University.	16 September 2020	Darjeeling (Online)
	UGC-Sponsored Faculty Induction Program (FIP-02)	UGC Human Resource Development Centre, Gauhati University	21 September-20 October, 2020	Guwahati (Online)
	International Webinar on (Online)Recent Trends in Physical and Mathematical Sciences(Online)	Department of Physics and Mathematics, Late Rajkamalji Bharti Arts, Commerce and Smt. Sushilabai R. Bharti Science College	26 December 2020	Amravati (Online)
	Faculty Enrichment Webinar for Physics Teachers in Higher Education	National Resource Center For Education of National Institute of Educational Planning and Administration (NIEPA), (Deemed to be University)	12 March 2021	New Delhi (Online)
P. K. Gogoi	Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	Teaching Learning Centre, Tezpur University	8 -22 October 2020	Tezpur (Online)
	UGC-Sponsored Faculty Induction Program (FIP-03)	HRDC, Gauhati University	10 February-11 March 2021	Guwahati (Online)
S. Paul	Online Basic Training on Use of ICT in Teaching	Teaching Learning Centre, Tezpur University	20 & 23 April 2020	Tezpur (Online)
	Effective and Efficient Online Teaching in the Age of Corona, A Hands On Workshop	Teaching Learning Centre (ICT), IIT Bombay	17 May 2020	Mumbai (Online)
	National Webinar on Uncertain Science, Uncertain Mathematics: Uncertain World	Department of Mathematics Debraj Roy College, Golaghat, Assam	22 July 2020	Golaghat (Online)
	International Webinar on Recent Trends in Mathematical Sciences	Hansraj Mahavidyalaya, Jalandhar, Punjab, India	28 July 2020	Jalandhar (Online)
	International Webinar on The Role of Applied Mathematics in Present Global	Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, West	5-7 August 2020	Midnapore (Online)

	Crisis	Bengal, India		
	International Webinar Series on Applications of Mathematics	Department of Mathematics, Gurucharan College, Silchar, Assam	20-22 August 2020	Silchar (Online)
	Weeklong Online Workshop On Assessment And Evaluation	Teaching Learning Centre, Tezpur University	24-29 August 2020	Tezpur (Online)
	International FDP on Tools for Technical Writing and Research Data Analysis	Department of Computer Science, NERIM Group of Institutions, Assam	1-5 September 2020	Guwahati (Online)
	National Webinar on Differential Equations: Reality, Appreciation and Applications	Department of Mathematics & IQAC, THB College, Sonitpur, Assam	9 September 2020	Tezpur (Online)
	International Conference on Nature Inspired Dynamical Systems-2020	Department of Mathematics, Gujrat University	12 September 2020	Guwahati (Online)
	Digital International Conference on Advances in Computational Methods-2020	Department of Mathematics, Gujrat University	26-27 September 2020	Ahmedabad (Online)
	International Webinar on Mathematical Modelling in The Context of COVID-19 and The Global Crisis	Department of Mathematics and IEEE student branch, NIT Agartala	12-14 October 2020	Agartala (Online)
	Online FDP on Development of E-Module with Four Quadrant Approach	Teaching Learning Centre, Tezpur University	11-21 December 2020	Tezpur (Online)
	UGC-Sponsored 1 month Faculty Induction Program (FIP-03)	HRDC, Gauhati University	10 February-11 March, 2021	Guwahati (Online)
	Refresher Course in Mathematics	Department of Mathematics & Teaching Learning Centre, Ramanujan College, University of Delhi	16-30 March 2021	New Delhi(Online)
S. Seth	6.5th Crystal Engineering and Emerging Materials Workshop of Ontario and Quebec (CEMWOQ-6.5)	McGill university, Canada	30-31May 2020	Canada (Online)

	2nd International Conference on Crystal Engineering: From Molecule to Crystal	A committee constituted by Faculties from IISC and different IITs and IISERs in India	19-20 June 2020	India (Online)
	UGC-Sponsored Faculty Induction Program (FIP-02)	UGC Human Resource Development Centre, Gauhati University	21 September-20 October, 2020	Guwahati (Online)
	Faculty Development Program on NEP-2020: Role of Faculty Members of HEIs	Teaching Learning Centre, Central University of Rajasthan	4-8 November 2020	Jaipur (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
B.K. Debnath	National webinar on (Online) Application of calculus in mathematical modelling: a journey through inventory modelling	26 September 2020	Department of Mathematics, Pattamundai College, Pattamundai, Odisha (Online)
B. Sarkar	Neem Seminar	14 July 2020	Inter-University Centre for Astronomy and Astrophysics, Pune (Online)
	Online talk	22 August 2020	Department of Physics, Kohima Science College, Jotsoma, Nagaland (Online)
	North East Meet of Astronomers (NEMA-VI)	10-13 November 2020	Department of Physics, Indian Institute of Technology Guwahati (Online)
S. Paul	Webinar on (Online) Linear Algebra: A Geometric Approach (Online)	27 July 2020	Department of Mathematics, Dhemaji College, Assam (Online)
	International Webinar on (Online) The Role of Applied Mathematics in Present Global Crisis (Online)	5-7 August 2020	Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, West Bengal. (Online)
S. Seth	2nd International Conference on Crystal Engineering: From Molecule to Crystal	19-20 June 2020	Organized by a committee constituted by Faculties from IISC and different IITs and IISERs in India (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year	Coordinated By
<i>National webinar on (Online)Advances in mathematical modelling of infectious diseases(Online)</i>	31 August 2020	B. K. Debnath

THE FACULTY MEMBERS AND STAFF**Professors**

Dr. Charu Lata Mahanta, Head (i/c) of the Department
Specialization/ Research area: Rice Science and Technology, Product Development and Product Quality
 Email: charu@tezu.ernet.in

Assistant Professors

Bijoy Krishna Debnath, Ph.D. (NIT Agartala)
Specialization/Research Area: Inventory Control, Optimization, Fuzzy Mathematics
 Email: bijoy91@tezu.ernet.in

Somnath Paul, Ph.D. (Tezpur University)
Specialization/Research Area: Spectral Graph Theory
 Email: som@tezu.ernet.in

Saona Seth, Ph.D (IIT Kanpur)
Specialization/Research Area: Functional organic and metal-organic polymers, Energetic materials, Materials for energy and environmental applications
 Email: saonas@tezu.ernet.in; saonas@tezu.ac.in

Pranjal Kumar Gogoi, Ph.D. (National University of Singapore)
Specialization/Research Area: Low-dimensional material physics, optical spectroscopy, electron energy loss spectroscopy, transmission electron microscopy
 Email: pkgogoi@tezu.ernet.in

Biplob Sarkar, Ph.D. (IIT Guwahati)
Specialization/Research Area: Theoretical modeling of astrophysical flows, study of X-ray binaries, X-ray data analysis and interpretation.
 Email: bplobs@tezu.ernet.in

DEPARTMENT OF CIVIL ENGINEERING

THE DEPARTMENT

The Department of Civil Engineering of Tezpur University was established in the year 2009 under the School of Engineering for offering B. Tech. Degree. Ph.D. Programme was initiated in spring, 2011 and the M. Tech. programme of the department was started from Autumn, 2018. The Department aims to provide quality education, research and professional experiences that enable its graduates to become leaders in their professional careers, to pursue excellence in research and to serve the profession, community and nation, and to be competitive in the international scene.

Academic Programmes and Student intake

Programme	Intake
B. TECH in Civil Engineering	52
M. TECH in Civil Engineering	9
Ph.D. in Civil Engineering	Variable, 2 in 2020-21

Major Facilities and Equipment Available

The Department has the following Laboratory facilities

version 12.1Plaxis 2D, SAP 2000, v-20, CBR Machine, Los Angeles Abrasion Testing Machine, Impact Testing Machine, Total Station, Direct Shear Apparatus, Unconfined Compression Apparatus, Atomic Absorption Spectrophotometer, UV-Visible Spectrophotometer

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
K. U. Ahamad	Lake Eutrophication model
U. K. Das	Response of Geocell Reinforced Soil Foundation under Static and Cyclic Loading

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
A study on the response of Geocell reinforced soil foundation under static and cyclic loading	AICTE	₹20.75 Lakhs	3 Years (2019-2022)	U. K. Das
Development of Eutrophication Model for Rural water Bodies of Assam, India	DST-SERB	₹ 24.26Lakhs	3 Years (2017-2020)	K. U. Ahamad

PUBLICATIONS

Journal Publications

- Goswami M. & Chakraborty A. Study on the Failure Pattern of Layered Soil using Finite Element Method, *Geotechnical Engineering*. 51(4). 2020.
- Hatiboruah D., Talukdar B., Ahamad K. U. & Nath P. Dual Mode Smartphone Based Sensing for Accurate Estimation of Sulphate and Chloride in Water. *IEEE Sensors Journal*. 2021.
- Narzary B. K. & Ahamad K. U. Estimation of Equivalent Modulus of Fine-Grained Subgrade Soil from Numerical Model, *Journal of Transportation Engineering, Part B: Pavements*. 147(1). 2021

Book Chapters

- C. Doley, U. K. Das & S. K. Shukla. Effect of Cell Height and Infill Density on the Performance of Geocell-Reinforced Beds of Brahmaputra River Sand. In V. Kanwar & S. Shukla (Eds.). *Sustainable Civil Engineering Practices. Lecture Notes in Civil Engineering*, vol. 72. Springer, Singapore, https://doi.org/10.1007/978-981-15-3677-9_17, 2020.

CONSULTANCY

Consultants	Title/Nature of the consultancy work	Client	Amount
Civil Engineering group Consultancy	Testing of Materials & Design of Concrete Mixes	Various Industry Clients	₹ 8.08 Lakhs

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
S. Deka	A Report on the History and Development of Soil Reinforcement	International conference on History of Science ISEC Kolkata	27-28 July 2020	Online
	Construction Industry in India - Overcoming Recent Crises including Covid19	International Conference on Impact of Covid19: Global Challenge Gossaigaon College, Gossaigaon	29-31 July 2020	Online
	Improvement of Geotechnical Properties of Fine-grained Soil by Using Guwahati Municipal Solid Waste Ash	Online National Conference on Geo Sciences and Geo Structures (Springer), NIT Jamshedpur	3-4 September 2020	Online

S. Deka	Deterministic and Probabilistic Analysis of Effects of Reinforcement on Strength and Deformation of Soil - A State of the Art Review	Online National Conference on Geo Sciences and Geo Structures (Springer), NIT Jamshedpur	3-4 September 2020	Online
---------	--	--	--------------------	--------

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET**GATE: 11****NOTABLE PLACEMENTS**

Name	Organization
Abhishek Barah	Cognizant
Debasish Bhuyan	KEC International Ltd.

FACULTY MEMBERS AND STAFF**Professor**

Utpal Kumar Das, Ph.D. (Gauhati University)

Specialization/Research area: Geotechnical Engineering/Landslides and Slope Stabilization, Unsaturated Soil Mechanics

Email: ukrdas@tezu.ernet.in

Associate Professors

Kamal Uddin Ahamad, Ph.D. (IIT Guwahati)

Specialization/Research area: Environmental Engineering/Groundwater contamination, Potable water, Low Cost Drinking water treatment technology

Email: kahamad@tezu.ernet.in

Assistant Professors

Ankurjyoti Saikia, Ph.D. (Tezpur Univeristy)

Specialization/Research area: Geotechnical Engineering/Soil Dynamics, Ground Improvement

Email: asaikia@tezu.ernet.in

Binanda Khungur Narzary, M.Tech. (IIT, Guwahati)

Specialization/Research area: Transportation Engineering/ Pavement Design, Concrete Technology, Remote Sensing and GIS

Email: binanda@tezu.ernet.in

Shailen Deka, Ph.D. (IIT Guwahati)

Specialization/Research area: Geotechnical Engineering/ Soil Improvement with Admixtures, Soil Index Properties

Email: deka.s@tezu.ernet.in

Debaraj Bailung Sonowal, M.Tech. (IIT Roorkee)

Specialization/Research area: Structural Engineering/ Design and analysis of Multi Storey Building, Bridge Engineering

Email: bailung@tezu.ernet.in

Jayanta Deori Bharali, M.Tech. (IIT, Guwahati)

Specialization/Research area: Transportation Engineering/ Pavement Design & Evaluation, Sustainable Transportation, Climate Impact on Transportation

Email: jdb@tezu.ernet.in

Rituraj Buragohain, M.Tech. (IIT, Guwahati)

Specialization/Research area: Water Resources Engineering/ Ground Water Hydrology, Urban Flood Management, Sustainable Hydropower

Email: rbgn@tezu.ernet.in

Karabi Bharadwaj, M.Tech. (NIT Silchar)

Specialization/Research area: Structural Engineering/ Design and analysis of Multi Storey Building, Dynamics of Structures, Vibration Control

Email: karabi@tezu.ernet.in

Arunav Chakraborty, Ph.D. (Gauhati University)

Specialization/Research area: Geotechnical Engineering Landslides Mitigation, Soil Improvement Techniques

Email: aru243@tezu.ernet.in

Technical staff

Chirajyoti Doley, M.Tech. (IIT Guwahati)

Email: chirajd@tezu.ernet.in

Iseng Thawmung, Diploma in Civil Engineering

Email: iseng@tezu.ernet.in

Puspajyoti Kalita, Diploma in Civil Engineering

Email: pjkk@tezu.ernet.in

Jahnu Baruah, Diploma in Civil Engineering

Email: jahnu@tezu.ernet.in

Office staff

Parama Nanda Chauhan

Email: chauhan@tezu.ernet.in

Dipak Deka

Email: dipak2@tezu.ernet.in

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

THE DEPARTMENT

The vision of the Department is to be a dedicated centre of learning and research in computer science and engineering. It is committed to create competent professionals capable of taking leading roles in industry, academia and application areas of the field. A High Performance Computing Centre was established in the Department in June 2015 in order to provide high end computing facilities to the scientific researchers from the North-East region. The Department has been recently recognized as a Centre of Excellence in Machine Learning and Big Data Analytics by MHRD, Government of India under FAST. The Department is also recognized by UGC under Special Assistance Programme (SAP DRS Phase II). During 2005-2009 and 2018-2023 the Department received support from the Department of Science and Technology (DST), Govt. of India under its FIST- programme. The Department has also been recognized as ISEA member, MeitY, GoI and BRICS-NU Member. The B. Tech programme of the Department in Computer Science & Engineering is accredited by National Board of Accreditation.

The thrust areas of research for the Department have been the following:

- Computer and Network Security,
- Biomimetic & Cognitive Robotics,
- Bioinformatics,
- Machine learning and Soft computing,
- Big Data Analytics,
- Mobile and Wireless Networking,
- Image Processing & Pattern Recognition,
- Information Retrieval Systems,
- Natural Language Processing,
- Speech Processing,
- Workflow analysis,
- Computer Vision,
- Algorithms and Optimization Techniques,
- Software Defined Networking and Cloud Computing

Academic Programmes and Student intake

Programme	Intake
M. Tech. (IT)	28
M. Tech. (CSE)	18
MCA	56
B. Tech.	68
Ph.D.	Variable, 17 in the 2020-21

Major Facilities and Equipment Available

- High Performance Computing Center (Super Computer "Param Shavak")
- Cluster Computing Facility With Storage

- Interactive Smart classroom
- Embedded System Trainer Lab (8085 & Arm) Processor Based (2 Nos)
- Bench Mark Lan Trainer/I-Security
- Ibm X3550 M3 Server

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
D. K. Bhattacharyya	<ol style="list-style-type: none"> 1. We have analysed Bipolar and Schizophrenia RNA-seq data using computational biology approaches and have found differential activation of the immune system components and pathways may drive the common and unique pathogenesis of both the diseases. 2. We have analysed Parkinson's disease RNA-seq data using computational biology approaches and have identified a few potential biomarkers such as FKBP5, FZD8, GLI1, IL17RB, INHBB, LRP4, PLTP, PRODH, RFX2, TFAP2C, TPD52L1 for the disease. 3. We have developed three user-input-free clustering methods such as UIFDBC, UICPC and UIPBC to identify cell groups from scRNA-seq datasets. The performance of these methods are consistently high, and they outperformed most recent state-of-the-art clustering methods. They are available as R package. 4. A robust detection method has been developed for handling multiple attacks in Cyber Physical Systems. 5. A novel integrated malware detection approach has been developed for detection for both known and unknown malware. 6. Two benchmark datasets namely TUMALWD and TUANDROD has been developed for evaluation and assessment of malware detection systems. 7. We have analysed the radiological images of COVID -19 and classify them using deep learning based approaches. A total of 9 deep learning model is used based on transfer learning approach for classification of COVID 19. 8. We have determined the crucial genes associated with COVID-19 based on COPD Findings. We analyzed modules extracted from COPD samples and identified crucial genes associated with the disease COVID-19. 9. We have analysed Esophageal Squamous Cell Carcinoma (ESCC) RNA-seq data using differential expression analysis technique supported by gene enrichment analysis and identified three genes, namely TNC, COL1A1, and FN1 which are found most closely relevant to ESCC. 10. We have developed a biclustering approach to identify several potential biomarkers for esophageal squamous cell carcinoma (ESCC) microarray data and identified a few potential biomarkers such as IFNGR1, CLIC1, CDK4, and COPS5.

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
Randiomics with Machine Learning Methods towards Prediction of Gall Bladder Cancer.	Indian Council of Medical Research (ICMR)	₹16.6 Lakhs	2 Years (2020-2022)	R. Sarmah & D. Boro
Methods for the automatic generation of attribute profiles from hyperspectral data.	AICTE	₹17.1 Lakhs	3 Years (2019-2022)	S. Patra
DST-FIST	DST, Govt of India	₹ 44Llakhs	5 Years (2018-2023)	N. Sarma, S. Saharia, S. K. Deka, S. S. Satapathy & U. Sharma
Ensuring QoS in Internet of Medical Things (IoMT) using Software-Defined Networking (SDN)	Tezpur University & MEITY	₹ 36.39 Lakhs	2 Years (2020-2022)	N. Medhi, D. K. Saikia & S. K. Deka

PUBLICATIONS**Journal Publications**

- Ahmed S. A. & Nath B. Is Single Scan based restructuring Always a Suitable Approach to Handle Incremental Frequent Pattern Mining? *Journal of Computer Science*. 17(3). 2021.
- Barman B. & Patra S. A novel dependency definition exploiting boundary samples in rough set theory for hyperspectral band selection. *Applied Soft Computing*. 99(1). 2021.
- Barman B. & Patra S. Variable precision rough set based unsupervised band selection technique for hyperspectral image classification. *Knowledge-Based Systems*. 193(1). 2020.
- Bhattacharyya D. K., Raju P. L. N., Sarma K. K., Chutia D., Borah N. & Baruah D. An effective approach for improving the accuracy of a random forest classifier in the classification of Hyperion data. *Applied Genomics*. 12(1). 2020.
- Bhowmick A., Saharia S. & Hazarika S. M. FhVLAD: Fine-grained quantization and encoding high-order descriptor statistics for scalable image retrieval. *Multimedia Tools and Applications*. 80(14). 2021.
- Borah A. & Nath B. Rare association rule mining from incremental databases. *Pattern Analysis and Applications*. 23(1). 2020.
- Borah S. & Borah B. Prediction Error Expansion (PEE) based Reversible polygon mesh watermarking scheme for regional tamper localization. *Multimedia Tools and Applications*. 79. 2020.
- Boro D., Haloi M. & Bhattacharyya D. K. A fast self-similarity matrix-based method for shrew DDoS attack detection. *Information security Journal: A global perspective*. 29(2). 2020.

- Chauhan P., Deka S. K., Chatterjee B. C. & Sarma N. Cooperative Spectrum Prediction-Driven Sensing for Energy Constrained Cognitive Radio Networks. *IEEE Access*. 9(1). 2021.
- Das A., Bhardwaj K. & Patra S. Deep convolution neural network with automatic attribute profiles for hyperspectral image classification. *Multimedia Tools and Applications*. 80(1). 2021.
- Das A., Bhardwaj K., Patra S. & Bruzzone L. Attribute profiles of different attributes for spectral-spatial classification of hyperspectral imagery. *Remote Sensing in Earth Systems Science*. 3(3). 2020.
- Das A. & Patra S. A rough-GA based optimal feature selection in attribute profiles for classification of hyperspectral imagery. *Soft Computing*. 24(2). 2020.
- Devi M., Sarma N. & Deka S.K. Multi-Winner Spectrum Allocation in Cognitive Radio Networks: A Single-Sided Auction Theoretic Modelling Approach with Sequential Bidding. *Electronics*. 10(5). 2021.
- Hijam D. & Saharia S. On developing complete character set Meitei Mayek handwritten character database. *The Visual Computer*. 37(6). 2021.
- Jyoti P., Shree M., Joshi C., Prakash T., Ray S.K., Satapathy S.S. & Masakapalli S.K. The Entner-Doudoroff and nonoxidative pentose phosphate pathways bypass glycolysis and the oxidative pentose phosphate pathway in *Ralstoniasolanacearum*. *MSystems*. 5(2). 2020.
- Kakati T., Bhattacharyya D. K. & Kalita J. K. X-Module: A novel fusion measure to associate co-expressed gene modules from condition-specific expression profiles. *Journal of Biosciences*. 45(1). 2020.
- Kristi K., Rahul K., Sen P., Satapathy S. S. & Ray S. K. *Ralstoniasolanacearum* preferential colonization in the shoot apical meristem explains its pathogenicity pattern in tomato seedlings. *Plant Pathology*. 69(7). 2020.
- Mandal K., Sarmah R., Bhattacharyya D. K., Kalita J. K. & Borah B. Rank-preserving biclustering algorithm: a case study on miRNA breast cancer. *Medical & Biological Engineering & Computing*. 59(4). 2021.
- Mandal K., Sarmah R. & Bhattacharyya D. K. POPBic: Pathway-based Order Preserving Biclustering algorithm towards the analysis of gene expression data. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*. 17(1). 2020.
- Pathak D. K., Kalita S. K. & Bhattacharya D. K. Hyperspectral image classification using support vector machine: a spectral spatial feature based approach. *Evolutionary Intelligence*. 14(1). 2021.
- Patowary P., Bhattacharyya D. K. & Barah P. Identifying critical genes in esophageal squamous cell carcinoma using an ensemble approach. *Informatics in Medicine Unlocked*. 18. 2020.
- Patowary P., Sarmah R. & Bhattacharyya D. K. Developing an effective bi-clustering technique using an enhanced proximity measure in Network Modeling Analysis. *Network Modeling Analysis in Health Informatics and Bioinformatics*. 9(1). 2020.
- Ray K., Saharia S. & Sarma N. Detection and identification of *Ascaris lumbricoides* and *Necator americanus* eggs in microscopic images of faecal samples of pigs. *International Journal of Automation and Control*. 15(3). 2021.
- Roy A. & Sarma N. Multichannel ordered contention MAC protocol for underwater wireless sensor networks. *The Computer Journal*. 64(2). 2021.
- Roy A. & Sarma N. A synchronous duty-cycled reservation based MAC protocol for underwater wireless sensor networks. *Digital Communications and Networks*. 7(2). 2020.
- Roy A. & Sarma N. RPCP-MAC: Receiver preamble with channel polling MAC protocol for underwater wireless sensor networks. *International Journal of Communication Systems*. 33(9). 2020.

- Sahu A., Chowdhury H. A., Gaikwad M., Chongtham C., Talukdar U., Phukan J. K., Bhattacharyya D. K. & Barah P. Integrative network analysis identifies differential regulation of neuroimmune system in Schizophrenia and Bipolar disorder. *Brain, Behavior, & Immunity-Health*. 2(1). 2020.
- Sharma P., Pandey A. K. & Bhattacharyya D. K. Determining crucial genes associated with COVID-19 based on COPD Findings. *Computers in biology and medicine*. 128(1). 2021.
- Thokchom S. & Saikia D. K. Privacy preserving integrity checking of shared dynamic cloud data with user revocation. *Journal of Information Security and Applications*. 50(1). 2020.

Conference Proceedings

- Baishya R. C. & Bhattacharyya D. K. Singleton Flow Traceback (SFT) mechanism. Proceeding of the Third ISEA Conference on Security and Privacy (ISEA-ISAP). Guwahati, 2020.
- Borah P., Bhattacharyya D. K. & Kalita J. K. Cost Effective Method for Ransomware Detection: An Ensemble Approach. Proceeding of the International Conference on Distributed Computing and Internet Technology. Bhubaneswar, 2021.
- Borah P., Bhattacharyya D. K. & Kalita J. K. Malware Dataset Generation and Evaluation. Proceeding of the 2020 IEEE 4th Conference on Information & Communication Technology (CICT). Chennai, 2020.
- Deka S. K., Goswami S. & Anand A. A Blockchain Based Technique for Storing Vaccination Records. 2020 IEEE Bombay Section Signature Conference (IBSSC). Mumbai. 2020.
- Devi M., Sarma N. & Deka S. K. DAMW: Double Auction Multi-winner Framework for Spectrum Allocation in Cognitive Radio Networks. International Conference on Innovations for Community Services. Bhubaneswar. 2020.
- Kalita K. P., Boro D. & Bhattacharyya D. K. Implementation of Minimally Shared Blockchains using Big Data Application. Proceeding of the Third ISEA Conference on Security and Privacy (ISEA-ISAP). Guwahati, 2020.
- Pathak D. K., Kalita S. K. & Bhattacharya D. K. Classification of Hyperspectral Image using Ensemble Learning methods: A comparative study. Proceeding of the 2020 IEEE 17th India Council International Conference (INDICON). New Delhi, 2020.
- Patowary P. & Bhattacharyya D. K. Crucial Gene Identification for Esophageal Squamous Cell Carcinoma Using Differential Expression Analysis. Proceeding of the International Conference on Machine Learning, Image Processing, Network Security and Data Sciences. Silchar, 2020.
- Sarma U., Bhattacharyya D. K. & Kalita J. K. XSSD: A Cross-site scripting attack detection and its evaluation. Proceeding of the Third ISEA Conference on Security and Privacy (ISEA-ISAP). Guwahati, 2020.

Book Chapters

- C. Kharkongor & B. Nath. Set Representation of Itemset for Candidate Generation with Binary Search Technique. In S. K. Bhatia, S. Tiwari, S. Ruidan, M. C. Trivedi & K. K. Mishra (Eds.). *Advances in Computer, Communication and Computational Sciences*. Springer, Singapore. 2021.
- K. Bhardwaj, A. Das & S. Patra. Spectral-Spatial Active Learning in Hyperspectral Image Classification Using Threshold-Free Attribute Profile. In D. Bhattacharjee, D. K. Kole, N. Dey, S. Basu & D. Plewczynski (Eds.). *Proceedings of International Conference on Frontiers in Computing and Systems*, Springer, Singapore, 2021.
- K. Das & S. K. Sinha. User Behaviour Analysis from Various Activities Recorded in Social Network Log Data. In J.K. Mandal, S. Mukhopadhyaya & A. Roy (Eds.). *Applications of Internet of Things*, Springer, Singapore, 2021.

- N. Medhi, D. K. Saikia. Open Flow-Based Multi-controller Model for Fault-Tolerant and Reliable Control Plane. In A. Elçi, P. K. SaChirag, N. Modi, G. O. Manmath, N. Sahoo & S. Bakshi (Eds.). Smart Computing Paradigms: New Progresses and Challenges, Springer, Singapore,2020.
- P. Chauhan, S. K. Deka & N. Sarma. An Efficient Decision Fusion Scheme for Cooperative Spectrum Sensing for Cognitive Radio Networks. In J. K. Mandal, S. Mukhopadhyay & A. Roy (Eds.). Applications of Internet of Things, Springer, Singapore, 2021.
- P. Sen, D. Tula, S. K. Ray & S. S. Satapathy. Estimating RNA Secondary Structure by Maximizing Stacking Regions. In J.K. Mandal, S. Mukhopadhyaya & A. Roy (Eds.). Applications of Internet of Things, Springer, Singapore,2021.
- P. Sen, A. Waris, S. K. Ray & S. S. Satapathy. A Web Portal to Calculate Codon Adaptation Index (CAI) with Organism Specific Reference Set of High Expression Genes for Diverse Bacteria Species. In G. S. Tomar, N. S. Chaudhari, J. Luis, V. Barbosa & M. K. Aghwariya (Eds.). International Conference on Intelligent Computing and Smart Communication. Springer, Singapore,2020.
- P. Sharma, A. K. Pandey, D. K. Bhattacharyya, J. K. Kalita& S. C. Dutta. Discovering Biomarkers in Parkinson’s Disease Using Module Correspondence and Pathway Information. In D. Giri, R. K. Buyya, S. Ponnusamy, D. De, A. Adamatzky& J. H. Abawajy (Eds.). Proceedings of the Sixth International Conference on Mathematics and Computing, Springer, Singapore,2021.
- R. K. Deka, K. P. Kalita, D. K. Bhattacharyya & D. Boro. A Smart Feature Reduction Approach to Detect Botnet Attack in IoT. In P. K. Bora, S. Nandi & S. Laskar (Eds.). Emerging Technologies for Smart Cities, Springer, Singapore,2021.
- R. Das & N. Medhi. Modular Rook (MR): A Modular Data Center Network Architecture Based on Rook’s Graph. In A. Elçi, P. K. SaChirag, N. Modi, G. O. Manmath, N. Sahoo& S. Bakshi (Eds.). Smart Computing Paradigms: New Progresses and Challenges, Springer, Singapore,2020.
- S. Borah&B. Borah. Three-Dimensional (3D) Polygon Mesh Authentication Using Sequential Bit Substitution Strategy. In H. S. Behera, J. Nayak, B. Naik& D. Pelusi (Eds.). Computational Intelligence in Data Mining, Springer, Singapore, 2020.
- S. Saikia& S. Saharia. The Sattriya Dance Ground Exercise Video Dataset for Dynamic Dance Gesture Recognition. In S. Borah, R. Pradhan, N. Dey& P. Gupta (Eds.). Soft Computing Techniques and Applications, Springer, Singapore,2021.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w’ps/sym.	Organized by	Date/Period, year	Place/institute/venue
A. Karmakar	Two weeks online Faculty Development programme on Emerging Technologies for Education and research in CS and IT	Bharati Vidyapeeth’s Institute of Computer Applications and Management (BVICAM)	13 – 25 June 2020	New Delhi
L. B. Singh	A Five Days Workshop on Data Science	Dept. of Computer Sc. & Engineering, NIT Arunachal Pradesh	4 – 8 August 2020	NIT Arunachal Pradesh(Online)
L. B. Singh	A Five Days Workshop on Digital Image Processing and	Dept. of Computer Sc. & Engineering,	24 – 28 August 2020	NIT Arunachal

	Its Applications	NIT Arunachal Pradesh		Pradesh (Online)
	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	TLC Tezpur University under PMMMNMTT Scheme of Ministry of Education, Govt. of India.	15 February - 1 March 2021	Tezpur University
S. Kalita	One week Online International Faculty Development Program on "Technologies for Societal Needs - Real time Applications of AI, ML, and Research Initiatives"	Karunya Institute of Technology and Sciences, Tamil Nadu and NERIST Arunachal Pradesh	3 – 7 August 2020	Karunya Institute of Technology and Sciences, Tamil Nadu and NERIST Arunachal Pradesh (Online)
S. Nath	AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence"	ATAL Academy at KIIT Deemed to be University.	15-19 October 2020	KIIT Deemed to be University (Online)
	One Week Indo-German SPARC Symposium cum Workshop on Recent Advances in MACHine Translation	NIT, Silchar	15-19 March 2021	NIT, Silchar (Online)
S. Patra	Online Summer School-cum-Faculty Development Program on Advances in Signal Processing and Machine Learning	MHRD Institution Innovation Council, Deen Dayal Upadhyaya College, University of Delhi and NASI Delhi Chapter	20 – 26 July 2020	Deen Dayal Upadhyaya College, University of Delhi (Online)
S. S. Satapathy	Online interdisciplinary refresher course on changing prospective in pedagogy	TLC Tezpur University under PMMMNMTT Scheme of Ministry of Education, Govt. of India.	8-22 October 2020	TLC Tezpur University

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
D.K. Bhattacharyya	National Web-Conference on "Online teaching-Opportunities and Challenges"	Feb 23, 2021	Chembur, Mumbai(Online)
	Refresher course on E-content Development	Feb 15,2021	Gauhati University(Online)
	Faculty Development Program on Deep learning and its application	Feb 25, 2021	GIMT, Guwahati(Online)
N. Sarma	Faculty Development Program on Cyber Security under ATAL Academy Programme	7 - 11 December 2020	NIT Arunachal Pradesh (Online)
	Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	8 - 22 October 2020	Teaching Learning Centre, Tezpur University
	Online Weeklong Workshop on Assessment and Evaluation	24 - 29 August 2020	Teaching Learning Centre, Tezpur University
	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	8 - 9 June 2020	Teaching Learning Centre, Tezpur University
S. K. Deka	STTP on Machine Learning and its applications on Cyber security	7- 12 December, 2020	GIET, Baniatangi, Bhubaneswar(Online)
	Intl Conf. on Communication Cloud and Big Data (CCB 2020), SMIT, Sikkim	18-19, December, 2020	SMIT, Sikkim(Online)

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS**Faculty Member**

Prof. Nityanada Sarma has been recognized as Senior Member of IEEE by the IEEE Communication Society.

Research Scholar/Student

- Piyali Sen, Best Paper award, ICCCIoT 2020, Department of IT, Tripura University.
- N. Hoque, 2nd Best Doctoral Thesis, 3rd ISEA International Conference on Security and Privacy (ISEA-ISAP 2020), IIT Guwahati.
- R. C. Baishya, 2nd Best Paper, 3rd ISEA International Conference on Security and Privacy (ISEA-ISAP 2020), IIT Guwahati.

- T. Kakati, Fulbright-Nehru Doctoral Research Fellowship, Fulbright-Nehru Doctoral Research Fellowship

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- Department of Computer Science and Engineering is selected for DST-FIST-II for the period 2018-2023
- Department of Computer Science and Engineering is selected for setting up MHRD's Center of Excellence based on Machine Learning and Big Data Analysis, for the period 2014-2020.
- Department of Computer Science and Engineering is selected for UGC SAP DRS-II in the area of Big Data Analytics- Bioinformatics, Network Security and Robotics for the period 2015-2020.
- The Department is nominated by UGC as a Participant of BRICS Network University.
- Tezpur University is selected as a Participating Institute under Ministry of IT's Information Security Education and Awareness (ISEA) Project for the period 2015-20.
- The Department have High Performance Computing Center (Super Computer "Param Shevak") to carry out collaborative research.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

GATE : 25

NET : 01

NOTABLE PLACEMENTS

Name	designation	Organization
Saurabh Kannaujia	Assistant System Engineer	TCS
Rajneesh Kumar	Assistant System Engineer	TCS
Deepankar Acharyya	Assistant System Engineer	TCS
Bishal Deb	Assistant System Engineer	TCS
Prajwal Singh	Assistant System Engineer	TCS
Tufawal Ahmed Borbhuyan	Assistant System Engineer	TCS
Anuj Kumar Nath	Assistant System Engineer	TCS
Deepankar Acharyya	Software Development Engineer	Modak
Mandeep Kumar Singh	Software Development Engineer	Modak
Prakash Bhusal	Programmer	LG Soft India
Adarsh Kumar	Programmer	LG Soft India
Mritunjay Kumar	Programmer analyst	Cognizant Technologies
Prajwal Singh	Programmer analyst	Cognizant Technologies
Sumit Kumar Thakur	Programmer analyst	Cognizant Technologies
Raju Kumar Singh	Programmer analyst	Cognizant Technologies
Rajneesh Kumar	Programmer analyst	Cognizant Technologies
Adarsh Kumar	Programmer analyst	Cognizant Technologies
Ananya Deka	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Jay Debnath	Graduate Trainee	BIAS Info Tech Pvt. Ltd.
Moin Almin	Analyst	Capgemini
Jitul Rajbonshi	Analyst	Capgemini
Prajwal Singh	Analyst	Capgemini

Mandeep Kumar Singh	Analyst	Capgemini
PushpakJalan	Analyst	Capgemini
Bijoy Dutta	Analyst	Capgemini
Jay Debnath	Analyst	Capgemini
Nabajjal Nath	Analyst	Capgemini
BidonSaha	Associte Software Engineer	Betsol
Rishabh Trivedi	Associte Software Engineer	Betsol
Raju Kumar Singh	Software Engineer	Zaloni Technologies
Md. MoinAlmin	Software Engineer	Zaloni Technologies
Abhishek Sengupta	Software Engineer	Zaloni Technologies
S Shahnawaj Sahil Imani	Software Engineer	Zaloni Technologies

THE FACULTY MEMBERS AND STAFF

Professors

Dilip Kumar Saikia, Ph.D. (IIT Kharagpur)

Specialization/Research area: Mobile Computing, Computer Networks

E-mail: dks@tezu.ernet.in

Dhruba Kumar Bhattacharyya, Ph.D. (Tezpur University)

Pro Vice-Chancellor

Specialization/Research area: Machine Learning, Network Security and Bioinformatics

E-mail: dkb@tezu.ernet.in

Smriti Kumar Sinha, Ph.D. (Tezpur University)

Dean, School of Engineering

Specialization/Research area: Workflow Automation, Semi-structured Databases, Web Technology

E-mail: smriti@tezu.ernet.in

Utpal Sharma, Ph.D. (Tezpur University)

Specialization/Research area: Natural Language Processing

E-mail: utpal@tezu.ernet.in

Nityananda Sarma, Ph.D. (IIT Guwahati)

Director, Computer Centre

Specialization/Research area: Mobile Networks, Networks Security

E-mail: nitya@tezu.ernet.in

Bhogeswar Borah, Ph.D. (Tezpur University)

Head of the Department

Specialization/Research area: Data Mining, Image Processing

E-mail: bgb@tezu.ernet.in

Sarat Saharia, Ph.D. (Tezpur University)

Specialization/Research area: Image processing, Pattern Recognition

E-mail: sarat@tezu.ernet.in

Associate Professors

Bhabesh Nath, Ph.D. (Tezpur University)
Specialization/Research area: Data Mining, Artificial Neural Network
E-mail: bnath@tezu.ernet.in

Siddhartha Sankar Satapathy, Ph.D. (Tezpur University)
Specialization/Research area: Networking, Bioinformatics
E-mail: ssankar@tezu.ernet.in

Sajib Kumar Deka, Ph.D. (Tezpur University)
Specialization/Research area: Wireless Networks, 5G and B5G, IoT
E-mail: skdeka@tezu.ernet.in

DebojitBoro, Ph.D. (Tezpur University)
Specialization/Research area: Mobile Computing
E-mail: deb0001@tezu.ernet.in.

Assistant Professors

S. Ibotombi Singh, Ph.D. (Tezpur University)
Specialization/Research area: Data Mining
E-mail: sis@tezu.ernet.in

Rosy Sarmah, Ph.D. (Tezpur University)
Specialization/Research area: Data Mining
E-mail: rosy8@tezu.ernet.in

L Basantakumar Singh, M. Tech. (Tezpur University)
Specialization/Research area: Pattern Recognition
E-mail: lbsingh@tezu.ernet.in

Arindam Karmakar, Ph.D. (Indian SI, Kolkata)
Specialization/Research area: Computational geometry
E-mail: arindam@tezu.ernet.in

Sanghamitra Nath, Ph.D. (Tezpur University)
Specialization/Research area: Natural Language Processing, Data Mining
E-mail: snath@tezu.ernet.in

Swarnajyoti Patra, Ph.D. (Jadavpur)
Specialization/Research area: Pattern Recognition, Evolutionary Computing, Neural Networks
E-mail: swpatra@tezu.ernet.in

Shobhanjana Kalita, Ph.D. (Tezpur University)
Specialization/Research area: Knowledge Representation & Reasoning
E-mail: kalitas@tezu.ernet.in

Nabajyoti Medhi, Ph.D. (NIT Meghalaya)
Specialization/Research area: Software-Defined Networking, Wireless Networks, Network, IoT Security, Web Technologies
E-mail: nmedhi@tezu.ernet.in

Monisha Devi, M.Tech (Tezpur University) (Guest faculty)
Specialization/Research area: Cognitive Radio Networks
E-mail: magna@tezu.ernet.in

Ramcharan Baishya, Ph.D. (Tezpur University) (Guest Faculty)
Specialization/Research area: Network Security
E-mail: rambaishyafromhowly@gmail.com

Adjunct Faculty (Professor)

Jugal Kalita, MS & Ph.D. (University of Pennsylvania, Pennsylvania, USA)
Specialization/Research area: Artificial Intelligence, Bioinformatics, Information Retrieval,
Computer Security
E-mail: jkalita@uccs.edu

Bhabani P Sinha, Ph.D. (University of Calcutta)
Specialization/Research area: Microprogramming, Computer Arithmetic, Fault Diagnosis, Graph
Algorithms, Parallel Architectures and Algorithms, Wireless Networks & Mobile Computing
E-mail: bhabani@isical.ac.in

Non-Teaching Staff

Pranabjyoti Dutta, Ph.D. (Tezpur University)
System Analyst
E-mail: pjd@tezu.ernet.in

Rajib Goswami, Ph.D. (Tezpur University)
System Analyst
E-mail: rgos@tezu.ernet.in

Debasish Das, Ph.D. (Tezpur University)
System Analyst
E-mail: ddas@tezu.ernet.in

Gautam Kumar Das, BE (JEC)
Technical Officer
E-mail: gautamd@tezu.ernet.in

Ajay Kumar Sharma, M. Tech. (Tezpur University)
Technical Assistant
E-mail: ajay@tezu.ernet.in

Arun Chetri, MCA (IGNOU)
Laboratory Assistant
E-mail: arunch@tezu.ernet.in

Arup Kumar Sarkar, JE (Silchar)
Laboratory Assistant
E-mail: arupks@tezu.ernet.in

Office Staff

Pranati Boro, BA

Assistant

E-mail: pranati@tezu.ernet.in

Golap Baruah

MTS

E-mail: golapb@tezu.ernet.in

DEPARTMENT OF DESIGN

THE DEPARTMENT

Tezpur University is starting this new department “Department of Design” under the School of Engineering considering the importance of design in the success of any product. India represents a huge market and an “Atmanirbhar Bharat” needs enormous range of well-designed products for its own population as well as the rest of the world. That needs training and preparing future generations of technocrats with the right design perspective.

Initially, the department will be offering elective courses to the B. Tech. and M. Tech. programmes with the objective of providing the students, of the engineering disciplines in particular, with the perspectives of design thinking and the necessary training. Soon these will be extended to students of other programmes. That will be followed by starting of UG/ PG programmes on design in phases. We also envisage the need for catering to students/ project specific requirements. This will add a new perspective to design and innovation of various engineering product design development initiatives by adding a human centric focus.

Academic Programmes and Student intake

Programme	Intake
Master of Design	10

Major Facilities and Equipment Available

- **Digital Prototyping Studio:** The studio have the following equipment
 - 10 numbers of High End Computers (HP Z2 G4 Intel Core i7-9700/ 16GB/ 1TB)
 - 02 numbers of Workstation (Dell Precision 3640)
 - Software Packages (Solidworks, Rhino, Adobe master suit)
 - Cintiq Pro for product styling, illustrations, and visual design
 - ✓ 01 Wacom Cintiq Pro 32 inch
 - ✓ 02 Wacom Cintiq Pro 24 inch
- **Physical Prototyping Studio:** The studio have the following equipment
 - 3D Clay and Plastic Printer
 - 3D Printer with Nylon, PLA, ABS, CPE and PVA Printing
- **Communication Studio:** The studio have the following equipment
 - DSLR Camera
 - Tripods

PUBLICATIONS

Conference Proceedings

- Verma S.K. & Punekar R.M. Design Science Approach to Nature Inspired Product Forms: Studies on Processes and Products. Synergy. Proceeding of the Design Research Society 2020 International Conference. Brisbane, 2020.

Book Chapters

- Verma S.K., Punekar R.M. Decoding Nature-Inspired Form Generation Processes. In A.Chakrabarti, R.Poovaiah, P. Bokil & V. Kant (Eds.). Design for Tomorrow—Volume 3. Smart Innovation, Systems and Technologies, vol 223. Springer, Singapore,2020.

THE FACULTY MEMBERSAND STAFF

Associate Professors

Dr. Nayan Moni Kakoty, Ph. D. (Tezpur University)

Specialization / Research area

Email: nkakoty@tezu.ernet.in

Assistant Professors

Mr. Shiv Kumar Verma, Ph. D. (IIT Guwahati)

Specialization / Research area

Email: ecashiv@gmail.com

Technical staff

Mr. Himanshu Nath, (Diploma in Mechanical Engineering)

Email: himansu@tezu.ernet.in

Office staff

Mr. Debajit Sarmah

Email: debajits@tezu.ernet.in

Mr. Durlov Mahanta

Email: duma@tezu.ernet.in

DEPARTMENT OF ELECTRICAL ENGINEERING

THE DEPARTMENT

The Electrical Engineering department started in 2014 under the School of Engineering with the B.TECH program. The prime motive of the department is to impart quality education, training and research at the undergraduate level in forefront areas of Electrical Engineering and its allied technologies. The Department currently offers B.Tech & Ph.D in Electrical Engineering. This programme aims at producing engineers with sound basic and applied knowledge in electrical engineering.

Department plans to expand its teaching and research infrastructure, enhance its industrial and research collaboration, and implement modern techniques for training to realize the above goal. The key areas of faculty expertise of the department include Power System Engineering, Power Electronics, Nonlinear Analysis-Theory, Methods & Applications, Control Systems, Fractional Order Chaotic Systems, Converter and Inverter Topologies, Sensor Technologies, Smart Grid Technologies and Policy Design, Distributed Generation Based System Optimization, Renewable Energy Management, Bio-electronics and Neuro Engineering.

Academic Programmes and Student intake

Programme	Intake
B.Tech	33
B.Tech Lateral Entry	01
Ph.D	Variable, 04 in 2020-2021

Major Facilities and Equipment Available

- Low Resistance Measurement Kelvin Double Bridge Kit
- Power System & Protection Lab
- Magnetic Levitation System for Control System Design.

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
S. Roy	<p>The lack of medical equipment during the COVID-19 outbreak has caused innumerable deaths creating havoc across the globe.</p> <p>A group of final year EE students Aniket Raj (EEB17031), Manish Kumar (EEB17036), Bihung Muchahary (EEB17015), and Ankita Das (EEB17047) under the guidance of Ms. Firdausa Ahmed and Mr. Chiranjit Adhikary; and supervised by Prof. Soumik Roy developed a “IoT based Low Cost Portable Ventilator”</p> <p>The main motive is to develop a low-cost, non-invasive ventilator system that can function dynamically with the help of an IoT feature inbuilt into the system.</p> <p>A smartphone application is designed to remotely control and</p>

	<p>monitor the basic ventilator parameters from outside the ICU.</p> <p>A non -contact type of system between the doctors and the patients.</p> <p>Two modes are incorporated in the system; assist control and volume control to facilitate the proper functioning of the system in correspondence to the requirements of the patients.</p> <p>This prototype seeks the development of the hardware and the application to monitor the fundamental waveforms of the ventilator and display the important parameters associated with it. Besides, the prototype also needs medical validation.</p> <ul style="list-style-type: none"> • This project is awarded as the ‘Best Innovative Engineering Idea’ on 13th March, 2021 under the banner of Prof. Aparna Kumar Padmapati Annual Scholarship from AEC CLASS 88 FOUNDATION for the year 2020-21. Thus, bagging a sum of Rs.30,000 to the group. • Awarded the 1st position in the Hackathon organized on 12th May, 2021 in Techcracy’21 at Central Institute of Technology, Kokrajhar for the best “Innovative Idea”. • Awarded the 1st position on 30th May by IEEE BBDITM Signal Processing Society for the best project presentation on “Fighting Covid-19”.
--	---

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR Lakh)	Duration	Investigators
Electric Field Based Novel Technologies For Pilot Scale Processing Of Juice And Pulp From Potential Fruits Of Ne Region	NASF ICAR	₹ 168.8445 Lakhs	3Years (2018 - 2021)	B. Srivastava & M. R Mahboob

PUBLICATIONS

Journal Publications

- Ahmad A., Shiluveru K. & Singh R. K. Switched capacitor-based continuous input current high step-up impedance source DC–DC converter. *IET Power Electronics* .13(18). 2020.
- Borah M. & Roy B. K. Systematic construction of high dimensional fractional-order hyperchaotic systems. *Chaos, Solitons and Fractals*. 131. DOI: <https://doi.org/10.1016/j.chaos.2019.109539>. 2020.
- Borah M. & Roy B. K. Hidden multistability in four fractional-order memristive, meminductive and memcapacitive chaotic systems with bursting and boosting phenomena. *European Physical Journal Special Topics*. 230, 1773-1783,2021.

- Mahboob M. R., Khan A. U., Kumar L. and Islam T. Investigation of Chip Temperature on Response Characteristics of the Humidity Sensor From ppm to %RH, *IEEE Transactions on Device and Materials Reliability*. 20(3). 576-583. 2020,
- Siddiqui M. A., Anwar M. N., Laskar S. H. & Mahboob M. R. A unified approach to design controller in cascade control structure for unstable, integrating and stable processes, *ISA Transactions*. 114. 331-346. 2021.
- Siddiqui M. A., Anwar M. N., Laskar S. H., Shamsuzzoha M. & Mahboob M. R. Closed Loop Tuning of Cascade Controllers Based on Setpoint Experiment, *Journal of Engg. Research*.8(4). 117-138. 2020.

Conference Proceedings

- Ahmad A., R., Alsawalhi J. and Jaafari K. A.A Novel High Gain Bidirectional DC-DC Converter. *IEEE Industry Applications Society Annual Meeting*, 1-6. DOI 10.1109/IAS44978.2020.9334792.2020.
- Ahmad A. and Singh R. K., A Novel Extended-Boost Modified Switched-Inductor Quasi-Z-Source Inverter. *International Conference on Electrical and Electronics Engineering (ICE3)*. 517-521. DOI: 10.1109/ICE348803.2020.9122880.2020,

Book Chapters

- A. Ahmad and R. K. Singh. Converter Classification, Analysis and Control issues with EV. In R. Singh, S. Padmanaban, S. Dwivedi & M. Molinas & F. Blaabjerg (Eds.). Cable based and wireless charging systems for Electric Vehicles-Technology, Control, Management & Grid Integration', IET UK, ISBN-13: 978-1-83953-178-1, 2021.

CONSULTANCY

Consultants	Title/Nature of the consultancy work	Client	Amount
M. R. Mahboob & M. Bhuyan	Vetting of the design of PLC & SCADA system of Greater Algapur Hailakandi LMVS under Jal Jeevan Mission at Hailkandi, Assam	Office of the Mission Director, Jal Jeevan Mission, Assam, Govt. of Assam	₹ 5,52,782.00

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
B. J. Saharia	Online FDP on Development of E-Module with Four Quadrant Approach	TLC, Tezpur University	11-21 Dec., 2020	Tezpur University (Online)
A. Ahmad	2020 International Conference on Electrical and Electronics Engineering (ICE3-2020)	MMMUT GORAKHPUR, UP	14-15 February 2020	MMMUT GORAKHPUR (Online)
	Application of Power Electronics and Drives to Industry (APEDI-2021)	National Institute of Technology Sikkim	2-6 March 2021	National Institute of Technology Sikkim (Online)
M. Borah	Integration of Basic ICT tools in teaching pedagogy	Teaching Learning Centre	8-9 June 2020	Tezpur University

M. Borah	National Webinar on Advances in Advances of Mathematical Modelling of infectious diseases	Department of Applied Sciences	31 August 2020	Tezpur University
	FDP on Applied Machine Learning and Deep Learning	Assam science and Technology University	24 February-1 March 2021	Department of Computer Science and Engineering , GIMT
M. R Mahboob	Online Induction Programme	Teaching Learning Centre, Ramanujan College, University of Delhi	01 - 30 Sep 2020	Ramanujan College , University of Delhi

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
M. Borah	One week workshop on Innovative Research Opportunities in Modern Engineering	18 -22May 2020	Department of Electrical Engineering, JIS College of Engineering, Kalyani, West Bengal -741235

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Faculty Member

Dr. Asnish Ahmed has received Outstanding Scientist Awards in the International Scientist Awards in the International Scientist Awards on Engineering, Science and Medicine, held on 06 & 07 Mar-2021, Goa, India

Research Scholar/Student

- 'Best Innovative Engineering Idea' on 13thMarch, 2021, Prof. Aparna Kumar Padmapati Annual Scholarship from AEC CLASS 88 FOUNDATION for the year 2020-21. Aniket Raj, Ankita Das, Bihung Muchahary, Manish Kumar.
- 1st position in the Hackathon organized on 12thMay, 2021 in Techcracy'21 at Central Institute of Technology, Kokrajhar for the best "Innovative Idea" by Aniket Raj, Ankita Das, Bihung Muchahary, Manish Kumar.
- 1st position on 30th May by IEEE BBDITM Signal Processing Society for the best project presentation on "Fighting Covid-19" by Aniket Raj, Ankita Das, Bihung Muchahary, Manish Kumar.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET**GATE: 02****NOTABLE PLACEMENTS**

Name	Designation	Organization
Ashutosh Tiwari	Intern	Innovaccer Analytics Pvt. Ltd.
Ashutosh Tiwari	Intern	Antares Technologies
Abhilash Kumar	Programmer analyst Trainee	Cognizant Technologies
Partha Pratim Bora	Programmer analyst Trainee	Cognizant Technologies

THE FACULTY MEMBERS AND STAFF**Professors**

Soumik Roy, Ph.D. (Tezpur University)

Head

Specialization/Research area: Neuroengineering, Digital System Design, Instrumentation,

Email: hod_ee@tezu.ernet.in

Assistant Professors

Md. Rahat Mahboob, Ph.D. (Jamia Millia Islamia, New Delhi)

Specialization/Research area: Instrumentation & Control; Sensors & Sensor Technology, e-health, wearable devices, food quality & IoT, Green Technology

Email: rahat@tezu.ernet.in

Manashita Borah, Ph.D. (NIT, Silchar)

Specialization/Research area: Smart Energy systems, Control Systems, IoT, Chaos and Fractional-order Systems, waste water management

Email: manabor@tezu.ernet.in

Barnam Jyoti Saharia, M.Tech. (NIT, Agartala)

Specialization/Research area: Power Electronic converters for Renewable Energy Applications, Hybrid PV-Wind Energy System Modeling and Optimization, Fuzzy and Neural Network applications in power point tracking of PV systems, Optimization in power electronic converters design, Artificial Intelligence in Renewable Energy applications

Email: bjsece@tezu.ernet.in

Anish Ahmad, Ph.D. (IIT (BHU))

Specialization/Research area: Power Electronics and Drives; Control techniques in Power Electronics and Drives; Instrumentation and its Control; Electric Vehicle/Hybrid Electric Vehicle; Microgrid / Smartgrid.

Email: aahmad@tezu.ernet.in

Technical staff

Sanku Bordoloi

Email: sankubordoloi1988@gmail.com

Biswajeet Nath

Office staff

Zakir Hussain

Email: zakir07@tezu.ernet.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

THE DEPARTMENT

Established in 1997, the Department of Electronics and Communication Engineering is one of the oldest departments in the University. Starting with an M.Tech. programme in Electronics Design and Technology, the department has subsequently introduced another M.Tech. programme in Bioelectronics under the Teaching and Research in Interdisciplinary and Emerging Areas scheme of the University Grants Commission in the year 2004. The Department expanded its academic activities to undergraduate programmes, first with a B.Tech. programme in Electronics and Communication Engineering in 2006 followed by another B.Tech. programme in Electrical Engineering in 2014 (which, since September 2016, is being offered under the newly formed Department of Electrical Engineering). In addition, the Department offers Ph.D. programme in different areas including Signal & Image Processing, Bioelectronics, Biosensors, Microwave Engineering, Communication Engineering, VLSI and Microelectronics, Vehicular electronics etc. At present, the Department has student strength of about 310.

Academic Programmes and Student intake

Programme	Intake
M.Tech.in Electronics Design and Technology	35
M.Tech. in Bioelectronics	19
B.Tech. in Electronics and Communication Engineering	68
Ph.D. in Electronics and Communication Engineering	Variable, 14 in 2020-21

Major Facilities and Equipment Available

Experimental:

- Optical Lithography unit (Suss Microtech)
- Reactive Ion etching unit (Hind Hivac)
- Plasma Enhanced CVD (Hind Hivac)
- Vacuum coating unit (E-Beam and thermal)
- Physical vapor deposition unit
- Spin coater (Suss Microtech)
- Spectrum analyzer
- Optical Microscope
- Thin film thickness measurement unit (F20 Sinsil International)
- Multichannel Bio-signal acquisition unit
- Quantum Efficiency and IV measurement set up (Under procurement process)
- FPGA board

Computational:

- Cadence UG/PG bundle
- Synopsys TCAD
- Mentor Graphics
- Xilinx

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

B. Deka	<ul style="list-style-type: none"> • Proposed a novel calibrationless wavelet forest sparsity and joint TV regularization-based CS pMRI reconstruction model for multislice multi-coil MRI. Implemented the proposed technique in a heterogeneous parallel computing environment using multi-core CPU and CUDA enabled general-purpose computing on graphics processing units (GP-GPU). (B. Deka and S. Datta, Calibrationless Joint Compressed Sensing Reconstruction for Rapid Parallel MRI, Biomedical Signal Processing and Control, vol. 58, 2020.) • Developed adaptive multiple dictionary learning (AMDL)-based joint compressed sensing (JCS) for MEGG compression and reconstruction. (B. Deka, S. Kumar, and S. Datta, "Dictionary Learning-based Multi-Channel ECG Reconstruction from Highly Compressive Measurements", IEEE Transactions on Instrumentation and Measurement, 2021 (Revisions submitted)) • Developed Joint Adaptive Multispectral Image Super-resolution via Sparse Representations (JAMiSR) for multispectral satellite imagery and shown performances of the super-resolved images on practical remote sensing applications. (B. Deka, H. U. Mullah, T. Barman, A.V.V. Prasad, "JAMiSR- Joint Adaptive Multispectral Image Super-resolution via Sparse Representations and Applications", IEEE Transactions on Computational Imaging, 2021 (Revision submitted)) • Developed a cost-sensitive random under-sampling boost (RUSBoost) algorithm for stratification of high-risk hypertensive patients using dual tree complex wavelet packet transform (DTCWPT) based HRV analysis. (D. Deka, B. Deka, Stratification of High-Risk Hypertensive Patients using Hybrid Heart Rate Variability Features and Boosting Algorithms, IEEE Access, vol. 9, pp. 62665-62675, 2021.)
B. Mondal	<ul style="list-style-type: none"> • We focus on micro/ nano fabrication of novel material for sensing application, plasmonic bio-sensor and Microfluidics. Research group in our lab is actively engaged in the development of surface plasmon resonance biosensor for antigen detection. This research also focuses on the use of microfluidics platform for the analysis of complex biomolecules like proteins. • Improvement of hydrophilicity of plasma treated PDMS sample is demonstrated and fabrication of microfluidic channel is underway. • Gas sensors for near future application demands for extraordinary sensor characteristics like high selectivity, lightweight and flexible for wearable application, amenable to wide variation in environmental condition, self-powered etc. In view of this we are working on the development of uniquely designed hybrid nanomaterials for selective gas sensor.
N. M. Kakoty	<ul style="list-style-type: none"> • Design Registration Application No. 336557-001. Title: Prosthetic Hand. Class: 24-00-Medical and laboratory equipment
P. P. Sahu	<ul style="list-style-type: none"> • Fabrication of rapid onsite measurement of Meat and fish quality detection • Low-cost metal oxide solar cell and photo detector • high efficiency water splitting for production of H₂
P. Kakoty	<ul style="list-style-type: none"> • Gas sensor fabrication and solar cell design

R. Goswami	<ul style="list-style-type: none"> • Regression techniques can be applied to model threshold voltage in TFETs by mapping the tunneling widths to threshold voltage. (Under Revision, Journal of Electronic Materials, Springer) • n-p-n body geometry can be used for TFETs instead of p-i-n geometry using appropriate biasing (Best Paper Award at IEEE DevIC 2021) • Development activities: Scholars' Tabs is an android application which has been developed under the open education initiative, 'Vrixaa Labs'. It is in feedback drive post which it will be launched.
------------	--

RESEARCHPROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Development of quantum optical sensor to identify and categorize arsenic and lead in water even in low concentration	MeitY	₹ 235 Lakhs	3 Years (2021-2024)	P. P. Sahu	CDAC
Fabrication, characterization and modeling of CNT-C-ENFET	AICTE	₹ 25 Lakhs	3Years (2019-2022)	J. C. Dutta	
VISVESVARAYA Ph.D. Scheme	DeitY MCIT	₹ 272.9 Lakhs	5Years (2015-2020)	J. C. Dutta	
Design and realization of light weight shield to reduce electromagnetic interference (EMI) at microwave ranges (C & X band) with different geometries for customized applications like anechoic chamber, as terminations and stealth for strategic device camouflaging",	MeitY	₹ 216.04 Lakhs	4 years (2016-2020)	S. Bhattacharyya & N. S. Bhattacharyya	
Miniaturized flexible planar antennas for body worn applications as health monitoring systems in L and S band using nano magneto-dielectric composite as substrate, ,	DST Nano Mission	₹ 86.962 Lakhs	4 Years (2017-2021)	S. Bhattacharyya & N. S. Bhattacharyya	
Early detection of pests on Tea plantations through Multispectral Imaging from Unmanned Aerial Vehicle	MeitY	₹ 195.12 Lakhs	2 Years (2021-2023)	S. Bhattacharyya & N. S. Bhattacharyya	

Facility for simulation and characterization of advanced electronic devices and circuits	DST under FIST Program	₹ 172 Lakhs	5 years (2019-2024)	S. Sharma	
A behavioral model of Ion Sensitive Field Effect Transistor (ISFET) with spatial dependence on reference electrode and development of a hardware system for model validation	Assam Science Technology & Environment Council,	₹ 4.70 Lakhs	2 years 2019-2021	S. Sharma	
Development of a Real-time Image Super-resolution System using Parallel Processing Hardware for Remote Sensing Applications	ISRO (RESPOND)	₹ 25.79 Lakhs	3 Years (2017-2020)	B. Deka	
Visvesvaraya Young Faculty Research Grant	Visvesvaraya Ph.D. Scheme, MeitY-Gol	₹ 25 Lakhs	5 Years (2018-2023)	B. Deka	
Design and Implementation of Low Cost Hybrid Aquaponics System	AICTER PS	₹ 21.86 Lakhs	3 years (2019-2022)	S. Roy	
Design of A Prosthetic Hand Control Architecture Exploring the Hierarchical Relationship of EEG, EMG and Finger Kinematics	DST-SERB	₹ 15.00 Lakhs	2 Years (2019-2021)	N.M. Kakoty	
Development of A Tactile Sensory based Grasping Controller for Electromyographic Prosthetic Hand	NECBH, DBT, Government of India	₹ 15.99 Lakhs	2 Years (2019 - 2021)	N.M. Kakoty	
Study for label free optical detection of snake venom protein using Surface Plasmon Resonance technique	SERB, DST	₹ 47.52 Lakhs	3 Years (2018-2021)	B. Mandal	
Nanocavity-in-Body Tunnel Field Effect Transistor Architectures for Low Power Sensing Applications,	Start-up Research Grant by DST-SERB	₹ 10.38 Lakhs	2 Years (2019-2021)	R. Goswami	

Multi crop Residue Processing Technology Package for Production of Fuel and Fertiliser	DST, SERB	₹ 2.16 Crore	2 Years (2019-2021)	D. C. Baruah, N. Sarmah, S. Kashyap, E. Kalita & D. Sonowal	
Identification of efficient Semiconductor dopant combinations for selective chemisorption of tea pesticides in metal oxide semiconductor (MOS sensor).	NTRF	₹ 34 Lakhs	5 Years (2016-2021)	P. Pujari & P.Kakoty	

Publications

Journal Publications

- Barman P., Gogoi D., Paul S., Saikia N., Sharma S. Steering independent electronic differential based traction control system for independent wheel drive neighborhood electric vehicle, *Journal of Electrical Systems*. 16 (4). 2020.
- Baruah R. K., Mahajan B. K., Chen Y. P. & Paily R. P. A Junctionless 4H Silicon Carbide Transistor for Harsh Environment Applications. *Journal of Electronic Materials*. 50. 2021 (In Press)
- Baruah S. M B., Nandi D., Gogoi P., Roy S. Primate vision: a single layer perception. *Neural Comput & Applic*. 2021.
- Chetia R, Baruah S. M. B & Sahu P. P. Quantum image edge detection using improved Sobel mask based on NEQR, *Quantum information processing*, 20 (1). 2021.
- Chutia S., Gohain M., Borah M. J., Kakoty N. M., Deka D. Thermal Degradation of Scenedesmus Obliquus for Biofuel Production. *Biomass Conversion and Biorefinery*. 2020.
- Das A. B., Goud V.V., Das C. & Sahu P.P. Development of Colorimetric pH Indicator Paper Using Anthocyanin for Rapid Quality Monitoring of Liquid Food, *Journal of Packaging Technology and Research* [in press]. 2021.
- Das J., Sahu P. P. & Deb P. H₂ evolution through solar guided water splitting using Fe based composite electrode. *Materials Today proceeding*, (in press). 2020.
- Das J. & Sahu P. P. Water splitting with screw pitched cylindrical electrode and Fe(OH)₂ catalyst under 1.4 Volt, *Renewable energy*. 165. 2021.
- Deka B., Datta S. Calibrationless Joint Compressed Sensing Reconstruction for Rapid Parallel MRI, *Biomedical Signal Processing and Control*. 58, 2020.
- Deka B., Datta S., Mullah H. U. & Hazarika S. Diffusion-weighted and Spectroscopic MRI Super-resolution using Sparse Representations, *Biomedical Signal Processing and Control*. 60. 2020.
- Deka B., Mullah H. U, Datta S., Lakshmi V., Ganesan R. & Fusco V. Sparse Representation Based Super-Resolution of MRI Images with Non-Local Total Variation Regularization, *SN Computer Science*. 1. 2020.
- Deka D. & Deka B. Characterization of heart rate variability signal for distinction of meditative and pre-meditative states. *Biomedical Signal Processing and Control*, 66, 2021.
- Deka D. & Deka B. Stratification of High-Risk Hypertensive Patients using Hybrid Heart Rate Variability Features and Boosting Algorithms. *IEEE Access*. 9. 2021.
- Desai M., Kandpal K., Goswami R. A Multiple-Trapping-and-Release Transport Based Threshold Voltage Model for Oxide Thin Film Transistors, *Journal of Electronic Materials*. 50. 2021
- Hatibaruah R., Nath V. K. & Hazarika D. 3D-local oriented zigzag ternary co-occurrence fused pattern for biomedical CT image retrieval. *Biomedical Engineering Letters*. 10. 2020.

- Hatibaruah R., Nath V. K. & Hazarika D. Computed tomography image retrieval via combination of two local bit-plane based dissimilarities using an adder. *International Journal of Wavelets, Multiresolution and Information Processing*. 19(1). 2021.
- Kumar S., Deka B., & Datta S. Multichannel ECG Compression using Block Sparsity based Joint Compressive Sensing, *Circuits, Systems and Signal Processing*. 39. 2020.
- Lee E. K., Baruah R. K., Bhamra H., Kim Y. J. & Yoo H. Recent advances in electrode development for biomedical applications. *Biomedical Engineering Letters*. 2021.
- Lee E.K., Baruah R. K., Leem J. W., Park W., Kim B. H., Urbas A., Ku Z., Kim Y. L., Alam M. A. & Lee C. H. Fractal Web Design of a Hemispherical Photodetector Array with Organic-Dye-Sensitized Graphene Hybrid Composites. *Advanced Materials*. 2020.
- Mehta M. & Goswami R. Perspectives on Dielectric Modulated Biosensing in Silicon Tunnel FETs, *Silicon* 2021.
- Mullah H. U., Deka B. & Prasad A.V. V. Fast Multispectral Image Super-resolution via Sparse Representation, *IET Image Processing*. 14. 2020.
- Narzary R., Maity S. & Sahu P. P. Coupled ZnO-SnO₂ Nanocomposite for Efficiency Enhancement of ZnO-SnO₂/p-Si Heterojunction Solar Cell, *IEEE Transactions on Electron Devices*. 68(2). 2021.
- Panicker N. J., Das J. & Sahu P. P. Synthesis of highly oxidized graphene (HOG) by using HNO₃ and KMnO₄ as oxidizing agents, *Materials Today proceeding*, (in press), 2020.
- Phukan P. & Sahu P. P. High performance UV photodetector based on Metal Semiconductor-Metal structure using TiO₂-rGO composite. *Optical materials*. 109. 2020.
- Saha R., Panda D. K., Goswami R., Bhowmick B., Baishya S. Analysis on effect of lateral straggle on analog, high frequency and DC parameters in Ge-source DMDG TFET. *Inter. J. RF Microwave. Comput. Aided. Eng.* 31. 2021.
- Sahu P. P. Optical switch based on Graphene clad two surface plasmonic polariton mode coupler. *Optik*. 2020.
- Senapati M. & Sahu P. P. Onsite fish quality monitoring using ultra-sensitive patch electrode capacitive sensor at room temperature. *Bioelectronics and biosensors*. 168. 2020.
- Sharma R., Yurduseven O., Deka B., & Fusco V. Hardware Enabled Acceleration of Near-Field Coded Aperture Radar Physical Model for Millimetre-Wave Computational Imaging. *Progress In Electromagnetics Research B*. 90. 2021.
- Shukla S. & Goswami R. Perspective - Performance Assessment of TFETs for low power applications: challenges and prospects. *ECS Journal of Solid-State Science and Technology*. 9. 2020.
- Sodhani A., Goswami R. & Kandpal K. Design of Pixel Circuit Using a-IGZO TFTs to Enhance Uniformity of AMOLED Displays by Threshold Voltage Compensation, *Arab J Sci Eng*. 2021.

Conference Proceedings

- Adil M., Baruah S. M. B. & Roy S. A Novel Two Electrode ECG Acquisition From Palm. Proceeding of Third International Conference on Advanced Computational and Communication Paradigms. SMIT, Sikkim, 2021.
- Baruah R. K., Mahajan B. K., Goswami D. & Pal A., Modeling of Delamination and Interfacial Stress in a Printed Flexible Electronic Device. Proceeding of the International Conference on Emerging Electronics (ICEE). IIT Delhi, 2020.
- Baruah S. M. B., Hazarika U, Das B. & Roy S. Primates Visual Cortex Inspired Novel Edge Detection Method. Proceeding of Third International Conference on Advanced Computational and Communication Paradigms. SMIT, Sikkim 2021.
- Das K & Sharma S. A System for Extraction of DC Motor Characteristics Using Motor-generator Coupling Technique for Use in Electric Vehicles, Proceedings of Symposium on Power Electronic and Renewable Energy Systems Control (Springer). IIT Bhubaneswar, 2020.

- Das T., Sut D. J., Gupta V., Gohain L., Kakoty P. & Kakoty N. M. A Mobile Robot for Hazardous Gas Sensing. Proceedings of the IEEE International Conference on Computational Performance Evaluation. Shillong, 2020.
- Datta S., Dandapat S. & Deka B. A Novel Framework for Enhancement of Diagnostic Information in MRI using Deep Super-Resolution, Proceeding of the IEEE Applied Signal Processing Conference (ASPCON). Kolkata, India, 2020.
- Datta S., Das V., Dandapat S. & Deka B. A Novel Framework for Enhancement of Diagnostic Information in MR Imaging using Super-Resolution, Proceeding of IEEE International Conference on Advanced Communication Technologies and Signal Processing. NIT Silchar, India, 2020.
- Deb D., Goswami R., Baruah R., Kandpal K. & Saha R, An SOI n-p-n Double Gate TFET for Low Power Applications, Proceeding of the 4th IEEE International Conference on Devices and Integrated Circuits. Kalyani, India, 2021
- Deka D. & Deka B. Computer-aided Detection of Congestive Heart Failure based on Nonlinear HRV Features, Proceeding of IEEE International Conference on Machine Learning & Applied Network Technologies. Hyderabad, India, 2020.
- Kakoty N. M., Kalita Z., Boruah A., Chittawadigi R. G. & Saha S. K. Development of A Technology Education Programme based on Self-Driven, Self-Learning and Self-Evaluating Approach. Proceeding of the International Conference on Advances in Robotics. IIT Kanpur, 2021.
- Kashyap R., Bhattacharjee A., Rangpi K., Barbhuiya N. H. & Mondal B. Portable surface plasmon resonance (SPR) measurement device for sensing applications, Proceeding of the IEEE 17th India Council International Conference (INDICON). New Delhi, 2020.
- Konthoujam B., Baruah S. M. B. & Roy S. Interference Model for NMDA Receptor, Proceeding of the IEEE International Conference on Computational Performance Evaluation (ComPE). NEHU, Shillong, 2020.
- Mahanta D., Hazarika D. & Nath V. K. Biomedical image retrieval using multi-scale local bit-plane arbitrary shaped patterns, Proceeding of the IEEE NCC. IIT Kanpur, 2021.
- Phukan N., Kakoty N. M., Gupta & Baruah N. EEG based Hand Movement Recognition: Feature Domain and Level of Decomposition. Proceeding of the 1st International & 13th National conference on Industrial Problems on Machines and Mechanisms. BITS Pilani, Hyderabad, 2020.
- Saha R., Panda D., Goswami R., Bhowmick B. and Baishya S. Effect of Drain Engineering on DC and RF Characteristics in Ge-source SD-ZHP-TFET, Proceeding of the 4th IEEE International Conference on Devices and Integrated Circuits. Kalyani, 2021.
- Saharia T, Baruah R. K., Goswami R, & Sonowal D. Validation and Implementation of a Smart Flood Surveillance System Based on Wireless Sensor Network, Springer International Conference on Micro/Nanoelectronics Devices, Proceeding of the Circuits and Systems (MNDCS-2021). NIT Silchar, 2021.
- Saikia A., Sill S., Baruah S. M. B., Roy S. & Das B. R. Android Interface for Handling ECG Data from GE MAC 600 ECG System. Proceeding of the IEEE International Conference on Computational Performance Evaluation (ComPE). NEHU, Shillong, 2020.
- Sharma R., Yurduseven O., Deka B. & Fusco V. Towards a convolutional neural network coupled millimetre-wave coded aperture image classifier system. Proceeding of the SPIE Defense Commercial Sensing. United States, 2021.

Books

- P. P. Sahu. Advance in Optical Networks and components. CRC press, New York, 2020.
- P. P. Sahu, Fundamentals of Optical Networks components. CRC press, New York, 2020.
- A. Hara & R. Goswami. Carbon Nanomaterial Electronics: Devices and Applications. Springer Nature, Singapore, 2021.

Books Chapters

- K. Das, A. Khan, A. Sarkar, P.Baishya, P.Kakoty & S. Baruah. Study of TiO₂ and ZnO nanostructures as wide bandgap semiconductor for the application of nanotechnology based solar cells. In P. K. Bora, S. Nandi & S. Laskar (Eds.). Emerging technologies for smart cities Series: Lecture notes in Electrical Engineering. Springer Singapore, 2021.
- D.Deka& B.Deka. Investigation on HRV Signal Dynamics for Meditative Intervention. In M. Pant, T. K. Sharma, R. Arya, B. Sahana, & H. Zolfagharinia (Eds.).Soft Computing: Theories and Applications. Springer, Singapore, 2020.
- S. Kumar, B. Deka, S. Datta. Multi-channel ECG Reconstruction based on Joint Compressed Sensing for Healthcare Applications, In M.Khosravy, N. Dey & C. A. Duque (Eds.). Compressed Sensing in Healthcare, Academic Press.Elsevier, Amsterdam, 2020.
- S. Datta & B. Deka, Calibrationless Parallel Compressed Sensing Reconstruction for Rapid Magnetic Resonance Imaging, Compressed Sensing in Healthcare. In M.Khosravy, N. Dey & C. A. Duque (Eds.). Academic Press, Elsevier, Amsterdam, 2020.
- R. Goswami, A. Deb, R. Rathi, P. Mahajan. Design and Analyses of a Food Protein Sensing System Based On Memristive Properties, In S. L.Tripathi, P. A. Alvi & U. Subramaniam (Eds.). Electrical and Electronic Devices, Materials and Circuits: Technological Challenges and Solutions. Scrivener-Wiley, New Jersey, USA,2021.
- J. C. Dutta.FET-Based Biosensors (BioFETs): Principle, Methods of Fabrication, Characteristics, and Applications. In P. Goswami (Ed.).Advanced Materials and Techniques for Biosensors and Bioanalytical Applications. CRC Press, Boca Raton, 2020.
- H. R. Thakur, G.Keshwani& J. C. Dutta. Modeling of Dual-Gate Carbon Nanotube Based Ion Sensitive Field Effect Transistor (DG-CNTISFET). In P.K.Mallick, P.Meher, A.Majumder & S.K. Das. (Eds.). Electronic Systems and Intelligent Computing. Springer, Singapore, 2020.
- B. Mondal&S. Zeng. Recent Advances in Surface Plasmon Resonance for Biosensing Applications and Future Prospects. In X. Zhao, M. Lu (Eds.).Nanophotonics in Biomedical Engineering. Springer, Singapore, 2021.
- S. M.Bujar Baruah, B. Das& S. Roy. Extracellular Conductivity and Nerve Signal Propagation: An Analytical Study. In S. K. Sabut, A. K. Ray, B.Pati & U.R. Acharya.(Eds.). Lecture Notes in Electrical Engineering book series. Springer, Singapore. 2021.

Patent: Granted or applied for during the reporting period

Inventor(s)	Patent	Patentnumber/Application Number	National/International
S. Sharma, B.Sarma, R. Chutia & P. P. Dutta	System for measuring and correction of alignment parameters camber and toe of wheel of a vehicle	357468 (Granted)	National
R. K. Baruah, A. Kumar, S. Dutta & S. Paul	Intelligent Helmet System	362974(Granted)	National
N. M. Kakoti & L. Gohain	An EMG Based Multi Grasp Prosthetic Hand with an Android Interface	202131022730(applied)	National
N. M. Kakoti & L. Gohain	An EMG based Prosthetic Hand Controller for Real Time Grasping realizing Neuromuscular Constraint	201931049269 (Published)	National
P. P.Sahu	A system and apparatus for Measuring and monitoring transformer oil breakdown voltage using Optical fiber sensor	201931020800 (Applied for)	National

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized By	Date/Period, Year	Place/Institute /Venue
P. Kakoty	Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	TLC, Tezpur University	8 - 22 October 2020	Tezpur University (Online)
	Online FDP on Development of E-Module with Four Quadrant Approach	Teaching Learning Centre	11 - 21 December 2020	Tezpur University (Online)
	One day webinar on Micro/Nano Electronic Devices and sensors	Department of ECE, Tezpur University	27 February 2021	Tezpur University (Online)

R. Goswami	4th IEEE International Conference on Devices and Integrated Circuits (DevIC) 2021	Kalyani Government Engineering College	19-20 May 2021	Kalyani Government Engineering College (Online)
R. K. Baruah	Winter School on Wearable Sensors and Devices,	IEEE Sensor Council	6-7 February 2021	(Online)
	1 week FDP on Outcome Based Education (OBE) and NBA Accreditation Process	BVICAM	23-27 November 2020	Tezpur University (online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
B. Deka	TEQIP III Sponsored National Level FDP on Computational Intelligence, Robotics and Real World Applications (CIRRA 2020), 2020	13 March 2020	Gauhati University
R. Goswami	International Conference on Nanomaterials	9 April 2021	Mahatma Gandhi University, Kottayam, Kerala, India.
	5-Day Faculty Development Programme on 'Simulation, Modeling and Applications of Semiconductor Devices'	5-9 July 2021	Harcourt Butler Technical University Kanpur, India [Online]

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, Year
Rob Analyzer based Online Competition 2021	2 May - 11 July 2021
One Day Webinar: Micro/ Nano Electronic Devices and Sensors [MiNaDS 2021]	27 February 2021

AWARDS & HONOURS/NOTABLE ACHIEVEMENTS

Faculty	Details of Achievement
B. Deka	<ul style="list-style-type: none"> Member, Editorial Board, BMC Biomedical Engineering, Springer Nature, 2021 onward. Scientific Member, Institute Ethical Committee, Tezpur Medical College & Hospital (TMCH), Tezpur Young Faculty Research Fellowship (YFRF) of Visvesvaraya Ph.D. programme under Ministry of Electronics and Information Technology (MeitY) for the Academic year 2020-21
V. K Nath	<ul style="list-style-type: none"> Young Faculty Research Fellowship (YFRF) of Visvesvaraya Ph.D.

	programme under Ministry of Electronics and Information Technology (MeitY) (A.Y-2020-21)
R. Goswami	<ul style="list-style-type: none"> • Young Scientist Award 2021 by ASTEC, Department of Science and Technology, Government of Assam • Best Paper Award for Deepjyoti Deb, RupamGoswami, Ratul Baruah, KavindraKandpal, Rajesh Saha,"An SOI n-p-n Double Gate TFET for Low Power Applications", <i>4th IEEE International Conference on Devices and Integrated Circuits (DevIC) 2021</i>, Kalyani, India, 19-20 May 2021. DOI: 10.1109/DevIC50843.2021.9455827
S. Roy	<ul style="list-style-type: none"> • Students/Best Innovative Engineering Idea of AEC Class'-88 Foundation, Dispur, Assam on IOT based low-cost portable mechanical ventilator for emergency use

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

GATE: 04

THE FACULTY MEMBERS AND STAFF**Professors**

Partha Pratim Sahu, Ph.D. (Jadavpur University)

Specialization/Research area: Optical Network, Clinical Instrumentation

Email: pps@tezu.ernet.in

Jiten Chandra Dutta, Ph.D. (Jadavpur University)

Specialization/Research area: Biosensors and Bioelectronics

Email: jitend@tezu.ernet.in

Satyajib Bhattacharyya, Ph.D.(Delhi University)

Specialization/Research area: Microwave Antennas, Absorbers and Materials

Email: sb@tezu.ernet.in

Santanu Sharma, Ph.D.(Tezpur University)

Specialization/Research area: Device(Bioelectronics), Vehicular power electronics

Email: sss@tezu.ernet.in

Soumik Roy, Ph.D. (Tezpur University)

Specialization/Research area: Neuro Engineering

Email: xoumik@tezu.ernet.in

Bhabesh Deka, Ph.D.(IIT Guwahati)

Specialization/Research area: Image Processing, Computer Vision, and Biomedical

Signal/Image Analysis using

Machine/Deep Learning

Email: bdeka@tezu.ernet.in

Vijay Kumar Nath, Ph.D.(IIT Guwahati)

Specialization/Research area: Image Processing, Machine Learning, Computer Vision, Pattern recognition, Deep Learning

Email: vknath@tezu.ernet.in

Associate professors

Nayan Moni Kakoty, Ph.D. (Tezpur University)
Specialization/Research area: Rehabilitation Robotics
Email: nkakoty@tezu.ernet.in

Deepika Hazarika, Ph.D (Tezpur University)
Specialization/Research area: Image processing
Email: deepika@tezu.ernet.in

Ratul Kumar Baruah, Ph.D. (IIT Guwahati)
Specialization/Research area: Nano electronics
Email: ratulkr@tezu.ernet.in

Assistant Professors

Riku Chutia, Ph.D.(Tezpur University)
Specialization/Research area: Instrumentation, Machine Olfaction and Embedded System
Email: riku@tezu.ernet.in

Biplob Mondal, Ph.D (Jadavpur University)
Specialization/Research area: Nanotechnology, Plasmonic sensor, chemical sensor
Email : biplobm@tezu.ernet.in

Durlav Sonowal, Ph.D.(Tezpur University)
Specialization/Research area: FPGA based system, ANN: Hardware Implementation
Email: dsn@tezu.ernet.in

Ananya Bonjyotsna, Ph.D. (Tezpur University)
Specialization/Research area: Audio Processing
Email: ananyab@tezu.ernet.in

Priyanka Kakoty, Ph.D (Tezpur University)
Specialization/Research area: MOS Gas sensor fabrication
Email: priyankak@tezu.ernet.in

Rupam Goswami, Ph.D (NIT Silchar)
Specialization/Research area: Microelectronics, Simulation and Modeling of Devices
Email: rupam21@tezu.ernet.in

Technical staff

Anukul Baishya, Ph. D (Javavpur University)
Email: anukul@tezu.ernet.in

Kulendra Sharma, B.E (ETI, Bangalore)
Technical Assistant
Email: kulen@tezu.ernet.in

Jiten C. Boro, Diploma in ETE (Jorhat)
Technical Assistant
Email: j_boro@tezu.ernet.in

Khagen Gogoi, B. Tech(Guwahati University)
Technical Assistant
Email: khageng@tezu.ernet.in

Satya Prasad Saikia, ITI, Electrical, (ITI, Tezpur)
Technician
Email: satyap@tezu.ernet.in

Rupak Sharma, ITI, Electronic Mechanic (ITI, Tezpur)
Lab Assistant
Email: rupak@tezu.ernet.in

Navanit Kumar Roy, ITI, Electronic Mechanic (ITI, Tezpur)
Lab Assistant
Email: navanit@tezu.ernet.in

Bipul Das, ITI, Machinist (ITI Tezpur)
Machine Operator
Email: bipulda@tezu.ernet.in

Office staff

Suren Baruah
Email: suren@tezu.ernet.in

Dibakar Nath
Email: dibakar@tezu.ernet.in

DEPARTMENT OF ENERGY

THE DEPARTMENT

The Department of Energy has been one of the vibrant academic Department of the University, engaging itself since last 25 years with a mandate to produce a qualified manpower pool in the field of energy, development of new and efficient energy technologies, R & D and extension activities in diverse areas of energy. The Department offers a two-year (four semesters) AICTE approved M. Tech. programme in Energy Technology, One year Post Graduate Diploma in Renewable Energy and Energy Management (under distance education mode through CODL) and Ph. D. in energy related areas. The thrust areas of research are Biomass energy, Solar energy, Energy-Environment interface, Energy Conservation and Management, Energy Efficiency, Climate Responsive Buildings, Hydrogen Energy, Fuel Cell and Rural Hybrid Energy. Apart from teaching and research, the Department also organizes training programmes, workshops and seminars in the relevant areas of energy. The Faculty of the Department has successfully completed several international collaborative research projects and has on-going international collaborative projects with several countries including UK, Brazil, South Africa, Sweden, Greece, Italy and Hungary. Currently, Department has fifteen external funded research projects including distinguished project under IMPRINT (Impacting Research, Innovation and Technology), Government of India.

Academic Programmes and Student intake

Programme	Intake
M.Tech. in Energy Technology	35
Ph.D.	Variable, 14 in 2020-21

Major Facilities and Equipment Available

- Gas Chromatograph
- Oxidation Stability Apparatus
- Auto Bomb Calorimeter
- Gas Analyser
- UV VIS (Spectrophotometer)
- Fuel Cell kit
- Computerized Diesel Engine Test Rig
- Micro hydel power generating equipment
- Dual Fuel Engine
- Petrol Engine Test Rig
- Closed top Gasifier
- Bio diesel pilot plant
- Muffle Furnace
- Grid Tied SPV system
- Vacuum furnace
- Wind Electric Generator
- Solar Water Heating System

- 1 kW SPV plant for DoE Garden lighting
- GIS Laboratory with hardware and software
- Biogas plant of capacity 50 m³
- Computation Laboratory equipped with Software and 13 Computers
- AdaptNET E-Lab facility equipped with Sever (2TB) and 18 Computers

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
D. C. Baruah	<ul style="list-style-type: none"> • The use of biochar (a bioenergy by-product) could be successfully demonstrated for mitigating N₂O emission from acidic sandy loam soils (outcome of international and intra-Departmental collaborative research) • New knowledge is created concerning biohydrogen production processes from the organic feedstocks (outcome of international (Queens University, Belfast) collaborative research) • A Decision Support System (DSS) is developed for planning of decentralized energy generation and implemented in Rural areas of Assam.
D. Deka	<ul style="list-style-type: none"> • Applied Research and Development for Industrial Realization of lignin recycling and conversion to value added International Market Products is at advanced stage (Indo-Hungary Project)
V. Verma	<ul style="list-style-type: none"> • Utilization of ground source energy for space heating using a nanofluid. • Analytical modeling of a radiant cooling system. • Solar Integrated Electrolyser System for Hydrogen Production Using Taguchi Method

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount	Duration	Investigators	Collaboration
Development of A Smart Platform for promotion of Renewable Energy in Assam	SITA, GoA	₹ 29.81 Lakhs	2 Years (2020-2021)	D. C. Baruah	State Innovation and Transformation Aayog, Govt. of Assam
Bioenergy from waste: exploring the multiplier benefits to poor communities of medium-scale technology interventions	University of Nottingham	\$ 42000	4 Years (2017-2021)	D. C. Baruah	HEFCE Newton fund through University of Nottingham Collaboration
Rural Hybrid Energy Enterprise	RCUK-DST	₹198 Lakhs	7 Years (2013-2020)	D. C. Baruah	IISc Bengaluru, IIT Ghy, NEERI

Systems					Nagpur, JNU New Delhi, MSE Chennai, TIDE Bengaluru
Strengthening education, research and innovation for climate smart crops in India AdaptNET	Erasmus and Capacity Building in Higher Education	\$ 970000	3 Years (2018-2021)	D. C. Baruah	University of Milano, Italy, Academy of Athens, Greece, Polytechnic University of Marche, Italy, Assam Agriculture University, ICRISAT, India, UASD India
Design and development of an all-purpose smart biogas reactor for household applications	AICTE	₹11 Lakhs	3 Years (2019-2022)	D. C. Baruah	--
Multi crop Residue Processing Technology Package for Production of Fuel and Fertilizer	SERB	₹216 Lakhs	3 Years (2019-2022)	D. C. Baruah	V K NARDEP, Cleanopolis Source Facility Biocity, IITD, IIT-KGP

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Applied Research and Development for Industrial Realization of lignin recycling and conversion to value added International Market Products	DST	₹ 48.38 Lakhs	3 Years (2021-2023)	D. Deka	Institute of Materials & Environmental Chemistry, Budapest Research Centre for Natural Science, Budapest
India-UK Center for Education and Research in Clean Energy (IUCERCE)	DST	₹74.56 Lakhs	4 years (2017-2021)	N. Sarmah	Loughborough University-UK, Imperial College-London, UK

PUBLICATIONS

Journal Publications

- Baruah D. & Baruah D. C. Decision support system-based planning of biomass gasification system for decentralised energy generation. *Renewable Energy Focus*. 38 (22:35). 2021.
- Borah M., Sarmah H., Bhuyan N., Mahanta D. & Deka D., Application of Box-Behnken design in optimization of biodiesel yield using WO₃/graphene quantum dot (GQD) system and its kinetics analysis. *Biomass Conversion and Biorefinery*. [DOI:10.1007/s13399-020-00717-x] 2020.
- Bhuyan N., Narzari R., Bujar Baruah S. M. & Kataki R. Comparative assessment of artificial neural network and response surface methodology for evaluation of the predictive capability on bio-oil yield of *Tithonia diversifolia* pyrolysis. *Biomass Conversion and Biorefinery*. [in Press] [DOI:10.1007/s13399-020-00806-x]. 2020
- Bezbaruah P. J., Borah D. & Baruah D. C. An Experimental Investigation to Check the Overall Performance of a Packed Bed Solar Air Heater. *Applied Solar Energy*. 56 (431-441). 2020.
- Chetia J., Gogoi N., Baruah D. C., Fouassier N. & Sippel F. Potential use of bioenergy power plant residue biochar in mitigating N₂O emission from acidic sandy loam soils: a comparative study. *Environmental Sustainability*. 4(365–373). 2021.
- Dev Choudhury N., Saha N., Phukan B. R. & Kataki R. Characterization and Evaluation of Energy Properties of Pellets produced from Coir pith, Saw dust and *Ipomoea carnea* and their blends. Energy Sources, Part A: Recovery, Utilization, and *Environmental Effects*. [DOI: 10.1080/15567036.2020.1871446] 2021.
- Dev Choudhury N., Saha N., Bhaumik S. & Kataki R. Production and Evaluation of Physicochemical, Rheological and Tribological Properties of *Cucurbita pepo* L Seed oil. *Biomass Conversion and Biorefinery*. [DOI:10.1007/s13399-020-01236-5] 2021.
- Dev Choudhury N., Saha N. & Kataki R. A study on the improvement of cold flow behaviour and thermal-oxidation stability of *Camellia sinensis assamica* (tea) oil lubricants as industrial lubricant. *IOP Conf. Ser.: Mater. Sci. Eng.* 1070 012124. 2021.
- Das S., Sarkar P. K. & Mahapatra S. Single particle combustion studies of coal/biomass fuel mixtures. *Energy*. 217(119329). 2021.
- Das S. K., Tahu M., Gohain M., Deka D. & Bora U. Bio-based sustainable heterogeneous catalyst for ipsohydroxylation of arylboronic acid. *Sustainable Chemistry and Pharmacy*. 17(100296). 2020.
- Das V., Tripathi A. M., Borah M. J., Dunford N. T. & Deka D. Cobalt-doped CaO catalyst synthesized and applied for algal biodiesel production. *Renewable Energy*. 161(1110-1119). 2020.
- Gogoi L., Gogoi N., Borkotoki B. & Kataki R. Efficacy of biochar application on seed germination and early growth of forest tree species in semi-evergreen, moist deciduous forest. *Forests, Trees and Livelihoods*. 29 (3). 2020.
- Gogoi L., Narzari R., Gogoi N., Borkotoki B. & Kataki R. Effect of Biochar on Soil Respiration from a Semi-evergreen, Moist Deciduous Forest Soil. *International Journal of Geosynthetics and Ground Engineering*. 6(26). 2020.
- Gohain M., Bardhan P., Laskar K., Saswati S., Mandal M., Bora U., Kalita M. C., Goud V. V. & Deka D. *Rhodotorula mucilaginosa* : a source for biodiesel production from yeast single cell oil and waste cooking oil. *Renewable Energy*. 160(220-230). 2020.
- Gohain M., Hasin M., Eldiehy, Bardhan P., K. S. H., Laskar K., Phukan H., Mandal M., Kalita D. & Deka D. Bioethanol production: A route to sustainability of fuel using bio-based heterogeneous catalyst derived from waste. *Process safety and environmental protection*. 146(190-200). 2021.

- Narzari R., Poddar M. K., Bordoloi N., Sarmah A. K. & Kataki, R. A comprehensive study to understand removal efficiency for Cr⁶⁺ using magnetic and activated biochar through Response Surface Methodology. *Biomass Conversion and Biorefiner.* 147. 2021.
- Osman A. I., Deka T. J., Barua D. C. & Rooney D. W. Critical challenges in biohydrogen production processes from the organic feedstocks. *Biomass Conversion and Biorefinery.* [DOI:10.1007/s13399-020-00965-x] 2020.
- Saha A. C., Verma V., Tarodiya R., Mahboob M.R. & Kumar R. Analytical modeling of a radiant cooling system for thermal performance analysis. *Materials Today: Proceedings- Elsevier.* [DOI:10.1016/j.matpr.2021.04.553] 2021.
- Sarma R., Tamuly A. & Kakati B. K. Recent developments in electricity generation by Microbial Fuel Cell using different substrates. *Materials Today: Proceedings.* 2021.
- Saikia S., Verma V., Kakati B. K., Sivasakthivel T. & Tarodiya R. Optimization of solar integrated electrolyser system for hydrogen production using Taguchi method. *Materials Today: Proceedings.* in press. 2021.
- Tarodiya R., Verma V. & Sivasakthivel T. A study on utilization of ground source energy for space heating using a nanofluid as a heat carrier. *Heat Transfer (Wiley).* 1-19. [DOI:10.1002/htj.22054] 2021.
- Thangavel S., Verma V., Tarodiya R. & Kaliyaperumal P. A study on Optimization of Horizontal Ground Heat Exchanger parameters for space heating application. *Materials Today: Proceedings- Elsevier,* [DOI:10.1016/j.matpr.2021.04.245] 2021.

Books

- R. Kataki, A. Pandey, S. K. Khanal & D. Pant. Current Developments in Biotechnology and Bioengineering: Sustainable Bioresources for Emerging Bioeconomy. Elsevier, USA, 2020.
- S. Mahapatra, M. Shahbaz, A. Vaccaro & V Emilia Balas (Eds.). Advances in Energy Technology. Springer, Singapore, 2020.

Book Chapters

- A. Bora & S. Mahapatra. Tar Generation in Open-Top and Closed-Top Downdraft Gasifiers. In S. Mahapatra, M. Shahbaz, A. Vaccaro & V. E. Balas (Eds.). Advances in Energy Technology. Springer, Singapore, pp. 115-125, 2021.
- C. Kumar & S. Mahapatra. Effect of Fuel Properties on Reaction Front in an Open-Top Downdraft Gasifier. In S. Mahapatra, M. Shahbaz, A. Vaccaro & V. E. Balas (Eds.). Advances in Energy Technology. Springer, Singapore, pp. 133-141, 2021.
- D. Sut & R. Kataki. A Biorefinery Based Zero-Waste Utilization of Non-edible Oilseeds for Biodiesel and Biofuel Production Along with Chemicals and Biomaterials. In P. Verma (Ed.). Biorefineries: A Step Towards Renewable and Clean Energy. Springer, Singapore, 2021.
- D. Barman, S. J. Hazarika & S. Mahapatra. Energy Performance Assessment of Gas-Based Thermal Power Plants. In S. Mahapatra, M. Shahbaz, A. Vaccaro & V. E. Balas (Eds.). Advances in Energy Technology. Springer, Singapore, pp. 203-210, 2021.
- J. Sarma, R. Narzari, L. Gogoi, N. Bharadwaj, N. Gogoi, R. Kataki & K. Gogoi. Orchid wealth of Northeast India and its conservation: A critical Concern. In H. C. Mazumdar (Ed). Bioluminescence – Annual Biological Communication. Eastern Book House, Guwahati, 2020.
- M. Bardalai, B. Das, P. P. Dutta & S. Mahapatra. Thermal performance study of bamboo and coal co-gasification in a downdraft gasifier. In B. Das, R. Patgiri, S. Bandyopadhyay & V. E. Balas (Eds). Modeling, Simulation and Optimization. Smart Innovation, Systems and Technologies. Springer, Singapore, 206, 2021.

- M. M. Phukon, R. Kumar, K. Gupta, P. Bardhan, N. Bhuyan, L. Gogoi, P. Bora, M. Mandal & R. Kataki. Aquatic Microbial Oxygenic Phototrophs: A Short Treatise on Diverse Applications and the Future Biofuel Scenario. In A. Singh, S. Srivastava, D. Rathore & D. Pant (Eds.). Environmental Microbiology and Biotechnology. Springer Nature, Singapore, 2021.
- M. Bardalai, B. Das, P. P. Dutta, Sadhan Mahapatra. Thermal performance study of bamboo and coal co-gasification in a downdraft gasifier. In B. Das, R. Patgiri, S. Bandyopadhyay & V. E. Balas (Eds.). Modeling, Simulation and Optimization. Smart Innovation, Systems and Technologies. Springer, Singapore, 206, 2021.
- N. Bhuyan, R. Narzari, L. Gogoi, N. Bordoloi, D. R. Palsaniya, U. Deb, N. Gogoi & R. Kataki. Valorization of agricultural wastes for multidimensional use. In R. Kataki, A. Pandey, D. Pant, & S. K. Khanal (Eds.). Sustainable Bioresources for Emerging Bioeconomy. Elsevier, Netherland, 2020.
- N. Bora, R. Narzari, N. Bhuyan & R. Kataki. Bioenergy-Byproducts Based Electrodes for Flexible Supercapacitors. In P. Verma (Ed.). Biorefineries: A Step Towards Renewable and Clean Energy. Springer, Singapore, 2021.
- P. Borah, N. Baruah, L. Gogoi, B. Borkotoki, N. Gogoi & R. Kataki. Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission. In J. Singh & C. Singh (Eds.). Biochar Applications in Agriculture and Environment Management. Springer, Switzerland, 2020.
- S. Tasmin Ali, P. Borah & S. Mahapatra. Site-Specific Design Optimization of Wind Turbines at Low Wind Speed Sites of North-East India. In S. Mahapatra, M. Shahbaz, A. Vaccaro & V. E. Balas (Eds.). Advances in Energy Technology. Springer, Singapore, 2021
- Vikas Verma. Optimization of Multi-Parabolic Profile Flat-Plate Solar Collector for Space-Heating Application. In S. Mahapatra, M. Shahbaz, A. Vaccaro & V. E. Balas (Eds.). Advances in Energy Technology, Springer Proceedings of ICAET, Singapore, 2020.

CONSULTANCY

Consultants	Title/Nature of the consultancy work	Client	Amount
D. C. Baruah	Development of a Smart Platform for Promotion of Renewable Energy in Assam	State Innovation & Transformation Aayog (SITA); Transformation and Development; Government of Assam; Dispur; Guwahati	₹ 8.58 Lakhs

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/ institute/ venue
B. Kakati	Workshop on Deep Eutectic Solvents for Environmental Remediation and Energy Storage	Indian Institute of Technology Guwahati, Assam, India.	29 July 2020	IIT, Guwahati
D. C. Baruah	Virtual Round Table Discussion on Quality Assessment in Higher Education – The need of the Hour	QS IGAUGE	11 December 2020	Online, Tezpur University
R. Katakati	Recent Development in Biomass to Energy	Department of Mechanical Engineering, NIT Arunachal Pradesh,	4 March 2021	NIT Arunachal Pradesh
R. Katakati	Innovative Research in Renewable Energy Technologies	IMPS College of Engineering and Technology	26 February 2021	Malda, WB
R Katakati	Thermochemical conversion of perennial grass biomass to energy and biomaterial, characterization of biofuel	Department of Mechanical Engineering, Jorhat Institute of Science & Technology	20 February 2021	JIST, Jorhat
R Katakati	Clean Energy Technology for Sustainability of the Environment	Department of Chemical Engineering, Assam Engineering College, Guwahati, Assam	27 January 2021	AEC, Guwahati
R Katakati	Refresher Course in Environmental Science	Department of Environmental Sciences, University of Jammu	30 December 2020	University of Jammu
R. Katakati	International Webinar on Bioenergy for Environment and Society	School of Environment and Sustainable Development, Central University of Gujarat	17 September 2020	University of Gujarat

R. Katakai	Potential of Bio-Energy in North-East India	Assam Science and Technology University (ASTU), Guwahati	8 September 2020	ASTU, Guwahati
R. Katakai	Water, Energy & Environment -2020	Department of Chemical Engineering, VSSUT, Burla, Odisha	5 September 2020	VSSUT, Odisha
R. Katakai	Emerging Technologies in Biofuel Production	Department of Mechanical Engineering, AEC, Guwahati	27 August 2020	AEC, Guwahati
R. Katakai	Biomass and Bioenergy	Department of Mechanical Engineering, Jorhat Institute of Science & Technology, Jorhat	25 August 2020	JIST, Jorhat
R. Katakai	Research Initiatives and current developments in Renewable energy sources.	Department of Mechanical Engineering, GIMT, Guwahati in collaboration with ASTU	9 & 12 August 2020	GIMT, Guwahati
R. Katakai	Innovative Research in Renewable Energy Technologies (IRRET-2021)	IMPS College, Malda, West Bengal, India	25 February 2021	IMPS College, Malda, West Bengal, India
R. Katakai	5th International Conference on Bioenergy, Environment and Sustainable Technologies	Department of Biotechnology, Arunai Engineering College, Tiruvannamalai, Tamandu, India	29 January 2021	Tiruvannamalai
R. Katakai	Recent Advances in Science and Technology	Assam Science and Technology University (ASTU)	17 August 2020	Assam Science and Technology University (ASTU)
R. Katakai	Integration of Basic ICT Tools in Teaching Pedagogy	Teaching Learning Centre in association with IQAC, Tezpur University	8 June 2020	Teaching Learning Centre in association with IQAC, Tezpur University

S. Mahapatra	State Level Resource Person Training Workshop for National Children's Science Congress, Assam,	Assam Science, Technology and Environmental Council	4-5 July 2021, 8-9 July 2021, 12-13 July 2021, 15-16 July 2021.	Online
S. Mahapatra	International Conference on Innovative Research in Renewable Energy Technologies (IRRET 2021)	IMPS College of Engineering and Technology, Malda, West Bengal	26 February 2021	Online
S. Mahapatra	International Conference on Emerging Renewable and Modern Energy (ICERME - 2021)	Assam Don Bosco University, Guwahati	12 February 2021	Online
S. Mahapatra	State Level Resource Person Training Workshop for National Children's Science Congress, Assam	Assam Science, Technology and Environmental Council	17-18 November 2020	Online
S. Mahapatra	ATAL-AICTE Faculty Development Program (FDP) on Energy Engineering, Applications and Control	Department of Electrical Engineering, NERIST	22 September 2020	Online
S. Mahapatra	Training program on Renewable Energy (Emphasis on Solar Off Grid PV system)	NPTI-NER, Guwahati	3 July 2020	Online
V. Verma	Webinar session on Desiccant Based Dehumidification and Cooling System	Department of Mechanical Engineering, MIC College of Technology	8 June 2020	
V. Verma	Webinar on Vibration Analysis of Machines	Surendra Institute of Engineering and Management, West Bengal	15 June 2020	
V. Verma	Faculty Development Program on Disruptive Technologies in Mechanical Engineering	Department of Mechanical Engineering, Sreenidhi Institute of Science & Technology, Hyderabad	8-13 June 2020	

V. Verma	Online workshop on Academic integrity with Turnitin	Central library, Tezpur University	3 June 2020.	Tezpur University (Online)
----------	---	------------------------------------	--------------	----------------------------

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
D. C. Baruah	ISAE (Indian Society of Agricultural Engineers) Webinar 2.0 Automation in Agriculture	20 May 2020	Online, Tezpur University
	National Webiner on Quality Research Publications Hallmark for Higher Education	22 July 2020	Birjhora Mahavidyalaya, Assam
	Making India Energy Independent Responses from academic fraternity – a talk in the Faculty Development Program Emerging Prospects of STEM Education in Engineering and Technology	24 July 2020	Royal School of Engineering & Technology (RSET), Guwahati
	TEQIP: III-Short term Course on Energy and its Applications	8 September 2020	NIT Srinagar
	Resource Circulation & Waste Management under Pandemic COVID -19 IconSWM - India - Philippines Connect Webinar Pre-event of 10th IconSWM-CE 2020	10 September 2020	India-Philippines Connect Webinar organized by International Conference on Sustainable Waste Management (IconSWM)
	Improved Cookstove and its challenges in the Online short-	2 December 2020	IIT Delhi

D. C. Baruah	term course on Biomass Valorization and its Life Cycle assessment		
	Outcome Based Pedagogic principle for teaching-learning in Engineering Education	6 January 2021	Nowgong Polytechnic, Nagaon, Assam
	Crop residue Biomass to Biofuel conversion	9 March 2021	Queens University, Belfast, UK

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Inauguration of the AdaptNET E-Lab	5 September 2020
Sustainable Technologies and Rural Development: A Gandhian Perspective Commemorating 150th Birth Anniversary of Mahatma Gandhi	31 August 2020
10th Professor Dolon Konwer Memorial Lectures	18 January 2021

DISTINGUISHED VISITORS

Name	Designation	Organization
G Vasudeo	Secretary, Vivekananda Kendra-NARDEP, Vivekanandapuram, Kanyakumari	Vivekananda Kendra- NARDEP, Vivekanandapuram, Kanyakumari

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Research Scholar/Student

- Rahul Sarma, Pranita Devi & Tarunodoy Dutta, M. Tech. students were awarded the Research and Innovation Grant of Tezpur University for their project work.
- Arunava Bhar, Research Scholar was awarded AICTE sponsored National Doctoral Fellowship (NDF).

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

Outreach programme organized

- Department is engaged in outreach activities where supply of clean cooking fuel (biogas) and organic fertilizer are planned for a rural community at Jhawani (Bihaguri development block, Sonitpur) using 2 tonnes of cowdung available with the villagers feeding in community biogas plants.

- All members of the Department contributed to/joined the TU programme to provide food materials to support needy people during COVID-19 lock down co-ordinated by Prof. D. Deka in May 2020

Industry-Academia linkage/interface

- Collaboration with four Industries viz., Biocity, Source Facility, VKNARDEP, and Cleanopolice aiming technology development for biomethane is going on under SERB-IMPRINT project
- Installation of a Smart Poly-Generation Micro-Grid at TU campus, with industry academia collaboration (Pamoja Cleantech, Sweden and KTH Royal Institute of Technology, Stockholm and Tezpur University), is at advanced stage of implementation

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

GATE: 09

NOTABLE PLACEMENTS

Name	Designation	Organization
Debasish Mandal	Junior Engineer	Northeast Frontier Railways
Gopal Tripathi	Junior Engineer	Northeast Frontier Railways
Partha Pratim Choudhury	Assistant Commissioner	Assam Public Service Commission
Biva Kanchan Gogoi	Assistant Commissioner	Assam Public Service Commission
Achinta Moni Das	Sub Inspector	Assam Police Service
Tanushree J.B. Nath	Ph.D. Student	UNSW, Australia
Nayan Jyoti Mazumdar	Ph.D. Student	Queen's University, Belfast, UK
Ujjiban Kakati	Ph.D. Student	IIT, Delhi
Subrajyoti Ghosh	Ph.D. Student	IIT, Delhi

THE FACULTY MEMBERS AND STAFF

Professors

Debendra Chandra Baruah, Ph.D. (PAU, Punjab)

Specialization/Areas of Interest: Renewable Energy, Energy Planning and Thermal Energy Management, Rural Energy Access

E-mail: baruahd@tezu.ernet.in

Dhanapati Deka, Ph.D. (Tezpur University)

Specialization/Areas of Interest: Biofuel and Bioenergy systems, Development of Renewable catalyst, E-mail: dhanapati@tezu.ernet.in

Rupam Kataki, Ph.D. (Tezpur University)

Specialization/Areas of Interest: Biomass and Biofuel, Energy Environment interaction

E-mail: rupam@tezu.ernet.in

Associate Professors

Sadhan Mahapatra, Ph.D. (IISc, Bangalore)

Specialization/Areas of Interest: Biomass Gasification, Climate responsive buildings, Decentralized Energy Options, Energy conservation

E-mail: sadhan@tezu.ernet.in

Assistant Professors

Pradyumna Kumar Choudhury, Ph.D. (Tezpur University)

Specialization/Areas of Interest: Solar Energy, Hybrid Energy System, Energy Conservation, Instrumentation & Control

E-mail: pkc@tezu.ernet.in

Biraj Kumar Kakati, Ph.D. (IIT Guwahati)

Specialization/Areas of Interest: Fuel cells and hydrogen technology, Electrochemical energy systems, Graphene nanotechnology, Chemical recovery of precious metal catalysts

E-mail: bkakati@tezu.ernet.in

Nabin Sarmah, Ph.D. (Heriot-Watt, Edinburgh)

Specialization/Areas of Interest: Solar Energy, Photovoltaic, Energy Systems

E-mail: nabin@tezu.ernet.in

Vikas Verma, Ph.D. (IIT Roorkee)

Specialization/Areas of Interest: Thermal Engineering, Solar Thermal Energy, Heat Transfer

E-mail: vikas@tezu.ernet.in

Adjunct Professors

Sasi K Kottayil, Ph.D. (Jadavpur University)

Specialization/Area of Interest: Smart Microgrids, Solar and Wind Energy, Hybrid mode of Energy Editorial Adviser - Energy Manager (Quarterly magazine of SEEM)

Director - SETREN Energy Solutions

E-mail: sasikottayil@gmail.com

Technical staff

Madhurjya Borah, B. E (North Maharashtra University)

Technical Officer

E-mail: madtech@tezu.ernet.in

Mr Tapanjit Borah, Diploma in Mechanical Engineering (Dibrugarh Polytechnic)/MCA (IGNOU)

Technical Assistant

E-mail: tapanji@tezu.ernet.in

Mr Troilokya Lahon, B.Sc. (Dibrugarh University)

Laboratory Assistant

E-mail: tlahon@tezu.ernet.in

Office staff

Polly Rajbonshi, M.Sc. (Dibrugarh University)

LDC

E-mail: poli227@tezu.ernet.in

Dinesh Bhuyan

MTS

Email: dinesh@tezu.ernet.in

DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY

THE DEPARTMENT

The Department of Food Engineering and Technology (FET) was established in the year 2006 with the aim of creating skilled human resources in the engineering aspect of food processing in order to cater to the needs of the rapidly growing food processing sector. Since its inception the Department has been imparting Post Graduate education in the area of food processing and technology. The B. Tech. programme in Food Engineering and Technology (FET) is approved by the All India Council for Technical Education (AICTE) and has the accreditation of the National Board of Accreditation (NBA) as a Tier-I programme. The M. Tech. in Food Engineering and Technology (FET) is also approved by the AICTE. AICTE offers PG Scholarship to GATE qualified students joining the M.Tech. programme of the Department. The Department also offers Ph. D. in Food Engineering and Technology and students may take admission through AICTE Doctoral Fellowship (ADF), NET/JRF, GATE etc.

The department has well developed laboratories for teaching and research created from grants received from various agencies viz., HRD grant from the Ministry of Food Processing Industries (MoFPI), Govt. of India, grant under the FIST programme (Level I) from the Department of Science and Technology (DST), grant under the UGC- SAP (DRS-I) programme of the University Grant Commission, and grant under the NEQIP Scheme of the AICTE. To cater the requirements of testing nutritional parameters of various food items by food industries and with the support from the MoFPI, the Department has established NABL accredited Food Quality Control Laboratory (FQCL). The Department has been recognized as the State Level Technical Institute (SLTI) for Assam and Meghalaya under the PM-FME scheme (PM Formalisation of Micro food processing Enterprises Scheme) of Ministry of Food Processing Industries (MoFPI), GoI, New Delhi.

Research activities at the Department are supported by sponsoring agencies like UGC, MoFPI, DST, DBT, DRDO, ICAR, AICTE, MSME, ASTEC, etc. Various projects carried out at the Department aims at developing effective and low cost technologies for the society. Some developed food products and processes have also been patented by the faculties. Workshops, conferences and seminars are organized regularly in the Department for knowledge sharing among peers as well as for motivating local youths to start their own enterprises.

Academic Programmes and Student intake

Programme	Student Intake
B. Tech in in Food Engineering & Technology	56
M. Tech in Food Engineering & Technology	23
Ph.D. in Food Engineering & Technology	Variable, 11 in 2020-21

Major Facilities and Equipment Available

- Milk Pasteuriser Unit (GOMA Engineering, India), Hunter Color Spectrophotometer (Hunter Lab, USA), Texture Analyser (Stable Micro System, UK), Rapid Viscosity Analyser (Newport, Australia), Freeze Dryer (Lyolab, India), HPLC (Waters, USA), Modified atmospheric packaging unit (Vacstar, Sweden), DSC-TGA (Netzsch, Germany), Encapsulator (Buchi, Switzerland), Gas

pycnometer (Porous Materials Inc., USA), Fermenter (Sartorius, Germany), Supercritical fluid extraction system (Waters, USA), Rheometer (Anton Paar, Austria), PCR (Eppendorf, USA)

- One dedicated library with more than 200 nos of books
- Computer laboratory with more than 30 computers with licensed software like MATLAB etc.

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
C. L. Mahanta	Starch nanoparticles conjugated with linoleic acid was also effective in lowering serum TGL, serum AST and serum ALT levels. Further, conjugation of tocotrienol with starch nanoparticle-linoleic acid conjugate was also effective in reducing liver fat accumulation and liver fibrosis in comparison to the free form besides lowering serum parameters.

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Electric field based novel techniques for pilot scale processing of juice and pulp from potential fruits of NE region	ICAR	₹ 128.4262 Lakhs	3 Years (2018-2021)	B. Srivastava	IIT Kharagpur and NES Barapani
Non-thermal pulsed light processing of fresh cut fruits of NE India: A novel hurdle approach for predicting enhanced shelf life and nutritional quality	AICTE	₹ 25.00 Lakhs	3 Years (2019-2022)	B. Srivastava	
Development of starch nanoparticles bioconjugated with tocotrienols and γ -oryzanol with hypo-cholesterolemic effect.	DBT	₹ 79.60 Lakhs	3.5Years (2020-2022)	C.L. Mahanta	Translational Health Science and Technology Institute, Faridabad
Evaluation of tree tomatoes (tamarillo) of Nagaland utilizing the pulp, peel and seeds for its commercialization	MoFPI	₹ 33.03489 Lakhs	2 Years (2018-2020)	C.L. Mahanta	
Processing of coconut	Coconut	₹ 28.00	2 Years	C.L. Mahanta	

milk, development of beverage from curcumin enriched nanoemulsified coconut milk (partially defatted) and pineapple juice and evaluation of its health implications	Development Board, GoI	Lakhs	(2019-2021)		
Solar greenhouse drying system for the production of "no cooking" rice from Assam and product quality modelling during storage	AICTE	₹ 25.00 Lakhs	3 Years (2019-2022)	M.K. Hazarika	
Development of Instant Pressure Drop based Parboiling Process for production of Komal Chawal with improved Quality" at Tezpur University	ASTECC	₹ 3.165 Lakhs	2 Years (2020-2022)	M.K. Hazarika	
Ultrasound assisted rapid immobilization of pectinase on solid support for juice clarification	AICTE	₹ 21.10 Lakhs	3 Years (2019-2022)	N. Sit	
Effect of pre-treatments on drying characteristics and oleoresin content of Bhut Jolokia (<i>Capsicum chinensis</i>)	UGC	₹ 10.00 Lakhs	3 Years (2018-2021)	N.R.S. Hulle	
Phytochemical profiling and valorization of Pomelofruits of North East Region"	MoFPI	₹ 41.32 Lakhs	2 Years (2021-2023)	P. Mishra	Y. Srivastava
Development of Enzyme based biosensor through sol-gel techniques for debittering of grapefruit and mosambi juice	SERB-DST	₹ 26.62 Lakhs	3 Years (2017-2020)	P. Mishra	
Usability of smart phone to evaluate the efficiency of	LSRB-DRDO	₹ 22.53842 Lakhs	3 Years (2018-2021)	P. Mishra	

polyaniline based sensor for indication of freshness of fish fillets during chemical spoilage					
Development of anti-inflammatory functional food from 'Norabogori' (<i>Prunus persica</i>) of Assam	MoFPI	₹ 27.70940 Lakhs	2 Years (2019-2021)	S.C. Deka	

PUBLICATIONS

Journal Publications

- Acharjee A., Afrin S. M. & Sit N. Physicochemical textural and rheological properties of yoghurt enriched with orange pomace powder. *Journal of Food Processing and Preservation*. 45(2). 2021.
- Akasapu K., Ojah N., Gupta A. K., Choudhury A. J. & Mishra P. An innovative approach for iron fortification of rice using cold plasma. *Food Research International*. 2020
- Altemimi A. B., Al-Hilphy A. R., Abedelmaksoud T. G., Aboud, S. A., Badwaik L. S., Noore S. & Pratap-Singh A. Infrared Radiation Favorably Influences the Quality Characteristics of Key Lime Juice. *Applied Sciences*. 11(6). 2021.
- Arafat Y., Altemimi A., Ibrahim S. A. & Badwaik, L. S. Valorization of Sweet Lime Peel for the Extraction of Essential Oil by Solvent Free Microwave Extraction Enhanced with Ultrasound Pre-treatment. *Molecules*. 25(18). 4072. 2020.
- Barman M., Das A. B. & Badwaik L. S. Effect of xanthan gum, guar gum, and pectin on physicochemical, color, textural, sensory, and drying characteristics of kiwi fruit leather. *Journal of Food Processing and Preservation*. e15478. 2021.
- Basumatary B., Bhattacharya S. & Das A. B. Olive (*Elaeagnus latifolia*) pulp and leather: Characterization after thermal treatment and interrelations among quality attributes. *Journal of Food Engineering*. 278. 109948. 2020.
- Begum Y. A., Baishya P., Das M. J., Chakraborty S. & Deka S. C. Novel approach for the development of dietary fibre-anthocyanin enriched functional bread from culinary banana bract. *International Journal of Food Science & Technology*. 55(11). 2020.
- Chakraborty S., Choudhary A. K., Sarma M., & Hazarika M. K. Reaction order and neural network approaches for the simulation of COVID-19 spreading kinetic in India. *Infectious Disease Modelling*. 5. 737-747. 2020.
- Chakraborty S., Gautam S. P., Bordoloi T. & Hazarika M. K. Neural network and computational fluid dynamics modeling for the gelatinization kinetics of instant controlled pressure drop treated parboiled rice. *Journal of Food Process Engineering*. 43(11). 2020.
- Chutia H. & Mahanta C. L. Green ultrasound and microwave extraction of carotenoids from passion fruit peel using vegetable oils as a solvent: optimization, comparison, kinetics, and thermodynamic studies. *Innovative Food Science & Emerging Technologies*. 102547. <https://doi.org/10.1016/j.ifset.2020.102547>. 2020.
- Chutia H. & Mahanta C. L. Influence of cold plasma voltage and time on quality attributes of tender coconut water (*Cocosnucifera* L.) and degradation kinetics of its blended beverage. *Journal of Food Processing and Preservation*. 45. <https://doi.org/10.1111/jfpp.15372>. 2021.
- Das A. & Sit N. Modification of Taro Starch and Starch Nanoparticles by Various Physical Methods and their Characterization. *Starch-Stärke*. 73(5-6). 2021.

- Das A. B., Goud V. V. & Das C. Degradation kinetics of anthocyanins from purple rice bran and effect of hydrocolloids on its stability. *Journal of Food Process Engineering*. 43(4), e13360. 2020.
- Das A. B., Goud V. V. & Das C. Extrusion cooking of microencapsulated anthocyanin incorporated rice flour and its sorption isotherm behavior. *Journal of Food Science and Biotechnology*. 10.1007/s10068-020-00841-4. 2020.
- Das D., Gupta A. K. & Mishra P. Drying of Citrus grandis (pomelo) fruit juice using block freeze concentration and spray drying. *Acta Alimentaria*. 49(3). 295-306. 2020.
- Das M. J., Das A. J., Chakraborty S., Baishya P., Ramteke A. & Deka S. C. Effects of microwave combined with ultrasound treatment on the pasteurization and nutritional properties of bottle gourd (*Lagenaria siceraria*) juice. *Journal of Food Processing and Preservation*. 44(12). 2020.
- Deka D & Hulle N. R. S. Supercritical fluid extraction of Bhut Jolokia oleoresin and its quality analysis. *SN Applied Sciences*. 3(2). 1-12. 2021.
- Devi L. S. & Das A. B. Effect of ionic liquid on sol-gel phase transition, kinetics and rheological properties of high amylose starch. *International Journal of Biological Macromolecules*. 162, 685-692. 2020.
- Gautam G., Duary R .K., Gupta K. & Mahanta C. L. Inhibition mechanism of 3-hydroxy, 3-methyl glutaryl CoA reductase by tocotrienol-rich rice bran fraction optimally extracted with ultrasonic energy. *International Journal of Biological Macromolecules*. 164. 1328-1341. <https://doi.org/10.1016/j.ijbiomac.2020.07.196>. 2020.
- Gayary M. A. & Mahanta C. L. Optimization of process parameters of osmotic pressure treatment and heat moisture treatment for rice starch using response surface methodology. *Journal of Food Measurement and Characterization*. 14. <https://doi.org/10.1007/s11694-020-00531-z>. 2020.
- Gupta A. K., Koch P. & Mishra P. (2020). Optimization of debittering and deacidification parameters for Pomelo juice and assessment of juice quality. *Journal of Food Science and Technology*. 1-7. 2020.
- Gupta A. K., Medhi M., Chakraborty S., Yumnam M. & Mishra P. Development of rapid and non-destructive technique for the determination of maturity indices of pomelo fruit (*Citrus grandis*). *Journal of Food Measurement and Characterization*. 15(2). 1463-1474. 2021.
- Gupta A. K., Mishra P., Senapati M. & Sahu P. P. A novel electrochemical device for naringin quantification and removal from bitter variety of citrus fruits. *Journal of Food Engineering*. 110637. 2021.
- Gupta A. K., Pathak U., Medhi M., Mastinu A., Sikarwar M. S. & Mishra P. Botanical Chemical and Pharmacological Properties of Artocarpus lakoocha (Monkey fruit). *Agricultural Reviews*. 41. 305-316. DOI:10.18805/ag.R-1989. 2020
- Gupta A. K., Pathak U., Tongbram T., Medhi M., Terdwongworakul A., Magwaza L.S., Mditshwa A., Chen T. and Mishra P. Emerging approaches to determine maturity of citrus fruit. *Critical Reviews in Food Science and Nutrition*. 1-22. 2021.
- Gupta A. K., Yumnam M., Medhi M., Koch P., Chakraborty S. & Mishra P. Isolation and Characterization of naringinase enzyme and its application in debittering of Pomelo juice (*Citrus grandis*): A comparative study with macroporous resin. *Journal of Food Processing and Preservation*. e15380. DOI: 10.1111/jfpp.15380. 2021.
- Jha A. K. & Sit N. Drying characteristics and kinetics of colour change and degradation of phytocomponents and antioxidant activity during convective drying of deseeded Terminalia chebula fruit. *Journal of Food Measurement and Characterization*. 14(4). 2067-2077. 2020.
- Kalita D., Jain S., Srivastava B. & Goud V. V. Sono-hydro priming process (ultrasound modulated hydration): Modelling hydration kinetic during paddy germination. *Ultrasonics Sonochemistry*. 70. 105321. 2021.

- Khurshida, S. & Deka S. C. Application of microwave and hydrothermal treatments for modification of cassava starch of Manipur region, India and development of cookies. *Journal of Food Science and Technology*. <https://doi.org/10.1007/s13197-021-05020-9>. 2021.
- Kumar A., Begum, A., Hoque M., Hussain S. & Srivastava B. 2021. Textural degradation, drying and rehydration behaviour of ohmically treated pineapple cubes. *LWT*. 142. 110988. 2021.
- Kumari T. & Deka S. C. Potential health benefits of garden pea seeds and pods: A review. *Legume Science*. <https://doi.org/10.1002/leg3.82>. 2021
- Makroo H. A., Rastogi N. K. & Srivastava B. Ohmic heating assisted inactivation of enzymes and microorganisms in foods: A review. *Trends in Food Science & Technology*. 97. 451-465. 2020.
- Moshahary S. & Mishra P. Synthesis of silver nanoparticles (AgNPs) using culinary banana peel extract for the detection of melamine in milk. *Journal of Food Science and Technology*. 58(2). 797-804. 2021.
- Pathaw P.M. S. , Mahanta C.L. & Bhattacharya S. Characteristics of gluten-free rice batter and baked cake made from the flour of heat-moisture-treated paddy of pigmented rice. *Journal of Food Processing and Preservation*. <https://doi.org/10.1111/jfpp.15206>. 2021.
- Ramchiary M. & Das, A. B. Vacuum-assisted extrusion of red rice (bao-dhan) flour: Physical and phytochemical comparison with conventional extrusion. *Journal of Food Processing and Preservation*. e14570. 2020.
- Rani R. & Badwaik L. S. Functional Properties of Oilseed Cakes and Defatted Meals of Mustard, Soybean and Flaxseed. *Waste and Biomass Valorization*. 1-9. 2021.
- Rizwana S. & Hazarika M. K. Application of Near-Infrared Spectroscopy for Rice Characterization Using Machine Learning. *Journal of the Institution of Engineers (India): Series A*. 101(4). 579-587.2020.
- Rohilla S. & Mahanta C. L. Optimization of extraction conditions for ultrasound-assisted extraction of phenolic compounds from tamarillo fruit (*Solanum betaceum*) using response surface methodology. *Journal of Food Measurement and Characterization*. 15. <https://doi.org/10.1007/s11694-020-00751-3>. 2021.
- Samyor D., Deka S. C. & Das A. B. Physicochemical and phytochemical properties of foam mat dried passion fruit (*Passiflora edulis sims*) powder and comparison with fruit pulp. *Journal of Food Science and Technology*. 1-10. 2020.
- Singamayum K., Chakraborty S., Das M. J., Sit N. & Deka S. C. Wheat and Cassava Flour-Based Composite Formulation of Cookies: Optimization of the Ingredient's Level by Simplex Lattice Design and Sensory Evaluation Using Fuzzy Logic. *Journal of Biosystems Engineering*. 46(1). 2021
- Singamayum, K., Chakraborty S., Das M. J., Sit N. & Deka S. C. Wheat and Cassava Flour-Based Composite Formulation of Cookies: Optimization of the Ingredient's Level by Simplex Lattice Design and Sensory Evaluation Using Fuzzy Logic. *Journal of Biosystems Engineering*. 46(1). 93-103. 2021.
- Singha K., Swami Hulle N. R., Deb S. & Rao, P. S. Physicochemical and Microbiological Characteristics of High-Pressure-Processed Ready-to-Eat Hilsa (*Tenulosa ilisha*) Curry. *Journal of Biosystems Engineering*. 45. 94-103. 2020.
- Singla M. & Sit N. Application of ultrasound in combination with other technologies in food processing: A review. *Ultrasonics Sonochemistry*. 2021
- Vegonia M. V. & Mahanta C. L. Physicochemical and rheological properties and in vitro digestibility of heat moisture treated and annealed starch of sohphlang (*Flemingia vestita*) tuber. *International Journal of Biological Macromolecules*. 168. <https://doi.org/10.1016/j.ijbiomac.2020.12.065>.2021.
- Wahengbam E. D., Green B. D. & Hazarika M. K. Characterization of a novel folic acid-fortified ready-to-eat parboiled rice. *Cereal Chemistry*. 96(3). 439-446. 2019.

- Watharkar R. B., Chakraborty S., Srivastav P. P. & Srivastava B. 2021. Physicochemical and mechanical properties during storage-cum maturity stages of raw harvested wild banana (*Musa balbisiana* BB). *Journal of Food Measurement and Characterization*. 1-14. 2021.
- Watharkar R., B. Pu Y., Ismail B. B., Srivastava B., Srivastav P. P. & Liu D. Change in physicochemical characteristics and volatile compounds during different stage of banana (*Musa nana* Lour vs. Dwarf Cavendish) ripening. *Journal of Food Measurement and Characterization*. 14(4). 2040-2050. 2020.

Conference Proceedings

- Gupta A. K., Sahu P. P. & Mishra P. Fabrication of real-time monitoring device for the degradation of bitter compounds in citrus fruit juices. Proceedings of the UGC Sponsored National Conference on Food safety, Nutritional Security and Sustainability. Shyama Prasad Mukherji College for Women, University of Delhi, 2020.

Books

- J. C. Contreras-Esquivel, L. S. Badwaik, P. Kannan & A. K. Haghi. Food Product Optimization for Quality and Safety Control-Process, Monitoring, and Standards. Apple Academic Press, Florida, 2020.

Book Chapters

- P. Talukdar, P. P. Das, M. K. Hazarika, Enthalpy–Entropy Compensation and Adsorption Characteristics of Legumes Using ANN Modeling, In J. C. Contreras-Esquivel, L. S. Badwaik, P. Kannan & A. K. Haghi (Eds.). Food Product Optimization for Quality and Safety Control-Process, Monitoring, and Standards. Apple Academic Press, Florida, 2020.
- A. K. Gupta & P. Mishra. Biosensor in Food Analysis, Emerging trends in Science and Technology (Concepts and Applications) Chapter-21: 174-181. 2021.
- J. Pal & L. S. Badwaik Microwave-Assisted Extraction of Phenolic Compounds from Ceylon Olive (*Elaeocarpus serratus*). In J. C. Contreras-Esquivel, L. S. Badwaik, P. Kannan & A. K. Haghi. Food Product Optimization for Quality and Safety Control: Process, Monitoring, and Standards. Apple Academic Press, Florida, 2020.

Other Publications

- A. K. Gupta, P. Koch, A. Shashank, M. Medhi & P. Mishra. Fruit juice preservation using UV irradiation: A novel approach for fruit juice industries. *Indian Food Industry Mag*, 2(5), 2020.

PATENT: GRANTED OR APPLIED FOR DURING THE REPORTING PERIOD

Inventor(s)	Patent	Patent number/Application Number	National/International
A. Bhattacharjee, D. Kumar & L. S. Badwaik	Development of low fat baked snacks using de-oiled soya flour	Provisional Patent Application no. 202031039202; Dated: 10-09-2020	National

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
C. L. Mahanta	Nutrition and Wellness in the Time of Pandemic	Handique Girl's College, Guwahati	25-26 July 2020	Guwahati
S. C. Deka	Digital Campus Placement Summit	Apli Ai Lab Pvt Ltd, Mumbai	26 September 2020	
S. C. Deka	FIT INDIA FREEDOM RUN	Tezpur University	2 October 2020	
M.K. Hazarika	Outcome Based Education (OBE) and NBA Accreditation Process	Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi	23-27 November 2020	New Delhi (Online)
M.K. Hazarika	IIC Online Sessions conducted by Institution's Innovation Council (IIC)	MHRD's Innovation Cell, New Delhi	28 April- 22 May 2020	New Delhi (Online)
M.K. Hazarika	ML and AI Using Covid-19 Virus Data Analysis	Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with National Social Summit, IIT Roorkee	6-7 May 2020	(Online)
L. S. Badwaik	Outcome Based Education (OBE) and NBA Accreditation Process	Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi	23-27 November 2020	New Delhi (Online)
N. R. S. Hulle	Emerging Food Processing Technologies: Prospects and Challenges for Food and Nutrition Security	AICTE Training And Learning (ATAL) Academy Online FDP	4-8 January 2021	Tezpur University, (Online)
N. R. S. Hulle	Training of Masters Trainers (EDP) under PMFME Scheme	PMFME-MoFPI New Delhi	17-21 November 2020	New Delhi (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
B. Srivastava	Inter disciplinary Refresher course on Engineering and Technology	1-14 December 2020	Mizoram University (Online)
B. Srivastava	International online faculty development programme on "Green Perspectives in Food Processing Sectors"	5-21 October 2020	National Institute of Food Technology Entrepreneurship and Management (Online)
B. Srivastava	27 th Indian Convention of Food Scientist and Technologist (ICFoST)	30 January -1 February 2020	Tezpur University, Tezpur,
C. L. Mahanta	Faculty Development programme on "Exploring Academic and Investigative Dimensions in Food Research"	2 - 7 November 2020	Mizoram University (Online)
C. L. Mahanta	Faculty Development programme on "Emerging Food Processing Technologies: Prospects and Challenges for Food and Nutrition Security"	4-8 January 2021	Tezpur University (Online)
L. S. Badwaik	Webinar on "Sustainable Materials for food packaging"	9 November 2020	Institute of Advanced Study in Science and Technology, Guwahati (Online)
M. K. Hazarika	Online Workshop on "Employability and Entrepreneurship Skill Development Opportunities for the Youth of Northeast India"	1-14 December 2020	DRDC, Mizoram University (Online)
M. K. Hazarika	Start Up scheme of the Govt. of India	27-29 November 2020	Tezpur University and Rajiv Gandhi National Institute of Youth Development, Sriperumbudur, Tamil Nadu, (Online)
M. K. Hazarika	ATAL- faculty development programme on Emerging food processing technologies: prospects and challenges food and nutrition security	4-8 January 2021	Dept. of Food Engineering & Technology, Tezpur University
S. C. Deka	Keynote Speaker at the online	18-22 August 2020	Department of

	faculty development programme on Fermented Foods and Beverages		Chemistry, Central Institute of Technology Kokrajhar, (Online)
S. C. Deka	"Job opportunity in industries" as a part of Lecture by Eminent People during the B. Tech. Student's Induction Programme-2020	17 November 2020	School of Engineering Tezpur University.
S. C. Deka	ATAL- faculty development programme on Emerging food processing technologies: prospects and challenges food and nutrition security	4-8 January 2021	Dept. of Food Engineering & Technology, Tezpur University (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
ATAL-AICTE sponsored online Faculty Development Programme on Emerging Food Processing Technologies: Prospects and Challenges for Food and Nutrition Security	4-8 January 2020

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Faculty members and Staff

- Prof. Sankar C. Deka became the Fellow of the Royal Society of Biology (FRSB) 2021
- Dr. N.S. Hulle has successfully cleared the assessment for Training of Master Trainers for Food Micro & Small Enterprises under Ministry of Food Processing Industries, Government of India. (December 2020)
- Dr. Poonam Mishra has been nominated for Master Trainers for F&V training for Assam and Meghalaya under Ministry of Food Processing Industries, Government of India. (November 2020)

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

GATE: 1

NOTABLE PLACEMENTS

Name	Designation	Organization
Koustav Mani Saharia	Assistant Manager	Goodricke Group Ltd
Sagar Sarma	Territory Sales incharge	GCMMF, Amul
Munmi Bhuyan	SPARC Intern	ITC Limited
Shreeste Das	SPARC Intern	ITC Limited
Dhanraj Purakayastha	Sales Engineer	Applied Testing Systems (P) Ltd. Noida, India.
Ohidur Rahman	Quality Executive	CG Foods, Guwahati
Dhritipaul Kalita	Quality Executive	Silver Drops
Jyotishmita Medhi	Quality Executive	Silver Drops
Mondeep Parashar	Quality Executive	CG Foods, Guwahati

THE FACULTY MEMBERS AND STAFF

Professors

Charu Lata Mahanta, Ph.D. (CFTRI, Mysore)

Specialization/ Research area: Rice Science and Technology, Product Development and Product Quality

Email: charu@tezu.ernet.in

Sankar Chandra Deka, Ph.D. (HAU, Hissar), FRSC, FRSB

Specialization/ Research area: Food Biochemistry, Food Quality, Fermented Foods

Email: sankar@tezu.ernet

Manuj Kumar Hazarika, Ph.D. (IIT-Kharagpur)

Specialization/ Research area: Dairy & Food Engineering, Transport Processes, Process Modeling

Email: mkhazarika@tezu.ernet.in

Brijesh Srivastava, Ph.D. (IIT-Kharagpur)

Specialization/ Research area: Process & Food Engineering, Fruits & Vegetable Processing and Machineries, Drying & Dehydration, Unit Operations in Food Engineering.

Email: brijesh@tezu.ernet.in

Nandan Sit, Ph.D. (Tezpur University)

Specialization/ Research area: Food Engineering, Biochemical Engineering, Starch Technology

Email: nandan@tezu.ernet.in

Associate Professors

Poonam Mishra, Ph.D. (Tezpur University)

Specialization//Research area: Food Technology

Email: poonam@tezu.ernet.in

Laxmikant Shivnath Badwaik, Ph.D. (Tezpur University)

Specialization//Research area: Food Engg. & Tech., Food Quality and Laws, Food Packaging

Email: badwaik@tezu.ernet.in

Assistant Professors

Raj Kumar Duary, Ph.D. (NDRI, Karnal) *On lien*

Specialization//Research area: Dairy Technology, Dairy Microbiology, Functional and Nutraceutical Foods

Email: duary@tezu.ernet.in

Amit Baran Das, Ph.D. (IIT Guwahati)

Specialization//Research area: Food Processing, Food Engineering

Email: amittu@tezu.ernet.in

Nishant Rachayya Swami Hulle, Ph.D. (IIT-Kharagpur)

Specialization//Research area: Food Process Technology, Non-thermal Processing, Product development

Email: nishant@tezu.ernet.in

Technical staff

Dipankar Kalita, Ph.D. (Tezpur University)

Specialization/Research area: Food Biochemistry, Food Microbiology

Email: dkalita@tezu.ernet.in

Arup Jyoti Das, Ph.D. (Tezpur University)

Specialization/Research area: Microbial biotechnology, Fermentation Technology

Email: arupdas@tezu.ernet.in

Labadep Kalita, Diploma in Mechanical Engineering (SCTE, Assam)

Specialization/Research area: Computerized Numerical Control Engineering

Email: labadeep@tezu.ernet.in

Swdwmsri Mushahary, M. Tech (Tezpur University)

Specialization/Research area: Food Engineering and Product Development

Email: swdwm26@tezu.ernet.in

Office staff

Krishna Bora

Email: krishnab@tezu.ernet.in

Anjan Keot

Email: akeot@tezu.ernet.in

DEPARTMENT OF MECHANICAL ENGINEERING

THE DEPARTMENT

The Mechanical Engineering (ME) department at Tezpur University was established in 2006. The department aims at producing skilled human resources with a strong foundation in ME for the heavy engineering and manufacturing industry. Another mission of the department is to train scholars in handling ME as well as interdisciplinary problems exploiting their domain knowledge and using latest technologies. There are 16 regular faculty members, 03 guest faculty members and 01 adjunct faculty member with various specializations and 11 technical staff members in the department. Presently the department is offering, M Tech (Specialization: Machine Design and Thermal and Fluids Engineering) and Ph.D. programmes in Mechanical Engineering. The department has various laboratories with state of the art facilities and one central workshop with all kinds of machineries. Both the B Tech and M Tech programmes offered in the department are AICTE approved. The B Tech programme in Mechanical Engineering is provisionally accredited by NBA with effective from 2019-2021. The department has the vision to emerge as a centre of excellence producing quality engineers and conducting cutting-edge research.

Academic Programmes and Student intake

Programme	Intake
B.Tech. in Mechanical Engineering	60
M.Tech. in Mechanical Engineering (Specialization: Machine Design and Thermal and Fluids Engineering)	18
Ph.D.	Variable, 08 in 2020-21

Major Facilities and Equipment Available

- Precision Lathe
- CNC Lathe and Milling Machine
- Universal Milling Machine
- Pelton turbine
- Propeller turbine
- Universal testing machine (UTM)
- Inverted metallurgical microscope with accessories and interface software
- Static and Dynamic balancing
- Sound level meter with sound level calibrator
- Universal vibration apparatus
- Sound level meter with sound level calibrator
- ANSYS academic teaching and Pro-E software
- Diesel Engine test set up VCR
- Variable compression ratio petrol engine
- Computerised single cylinder petrol engine test rig
- Vapour compression and vapour absorption refrigeration test rig
- Air conditioning test rig
- Cooling tower test rig

- Heat exchangers: Double pipe, shell and tube
- Dropwise and filmwise condensation apparatus
- VCR petrol engine

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
Design Development and Performance Testing of a Solar Dryer for Drying of <i>Garcinia pedunculata</i> with Thermal Energy Storage	AICTE/RPS	₹16.85 Lakhs	3 Years (2019-2022)	P. P. Dutta ¹
Design and development of an improved tricycle	ASTEC	₹ 2.96 Lakhs	2 Years (2020-2022)	P.P Dutta ¹
Multi-Crop Residue Processing Technology Package for Production of Fuel and Fertilizer	SERB_IMPRINT	₹ 143 Lakhs	3 Years (2020 - 2023)	D. C. Baruah (PI), S. Kashyap (co-PI), N. Sarmah (co-PI), D. Sonowal (co-PI) and E. Kalita (co-PI)

PUBLICATIONS

Journal Publications

- Bhuyan S. & Biswas A. Comparative investigation of Savonius and hybrid H-Savonius wind rotor- an energy and exergy analysis. *EAI Endorsed Transactions on Energy Web*. 8.2020.
- Bora J. & Kirtania S. Comparative study of elastic properties and mode I fracture energy of carbon nanotube/epoxy and carbonfibre/epoxy laminated composites. *Journal of Micro and Nano Systems Letters*. 8(19). 2020.
- Dutta P., Dutta P.P.¹& Kalita P. Thermal performance studies for drying of *Garcinia pedunculata* in a free convection corrugated type of solar dryer, *Renewable Energy*. 163. 2021.
- Dutta P.P.¹, Sharma D., Das H., Sharma A., Dutta P. & Dutta P.P.² Computational fluid dynamics and experimental analysis of a corrugated plate duct, *Mathematical Forum*. 28 (1). 2021.
- Gogoi T. K. & Hazarika P. Comparative assessment of four novel solar based triple effect absorption refrigeration systems integrated with organic Rankine and Kalina cycles. *Energy Conversion and Management*. 226. 2020.
- Kalita P., Dass A. K. & Hazarika J. A new approach for numerical-diffusion control of Flux-Vector-Splitting schemes for viscous-compressible flows. *International Journal of Numerical Methods for Heat and Fluid Flow*. 31. 2021.
- Kamal S.M. & Dixit U.S. Design of a disk-mandrel assembly for achieving rotational autofrettage in the disk. *IMechE Part C: Journal of Mechanical Engineering Science*. DOI: <https://doi.org/10.1177/0954406220954890>. 2020.

- Kamal S.M. Estimation of optimum rotational speed for rotational autofrettage of disks incorporating Bauschinger effect. *Mechanics Based Design of Structures and Machines*. DOI: <https://doi.org/10.1080/15397734.2020.1780608>. 2020.
- Kashyap S., Nath D. & Das D. Characterization, weathering and modeling of natural fibre based composites. *Materials Today: Proceedings*. 26(2). 2020.
- Kashyap S., Banik T., & Reddy T.S. Comparative study and modelling of machinability characteristics of single and double tempered AISI H13 steel during hard part finish turning using brazed tungsten carbide tip. *Materials Today: Proceedings*. 26(2). 2020.
- Mohanty U.K., Sharma A., Nakatani M., Kitagawa A., Tanaka, M. & Suga T. Thermal Modelling of Alternating Current Square Waveform Arc Welding. *Case Studies in Thermal Engineering*. 25. 2021.
- Nath D., Ansar D., Das B. & Bhuyan S. Experimental analysis of solar water heater with compound parabolic concentrator. *EAI Endorsed Transactions on Energy Web*. 8. 2020.
- Nondy J. & Gogoi T.K. A comparative study of metaheuristic techniques for the thermoenviromonic optimization of a gas turbine-based benchmark combined heat and power system. *ASME J. of Energy Resources Technology*. 143. 2021.
- Nondy J. & Gogoi T.K. Comparative performance analysis of four different combined power and cooling systems integrated with a topping gas turbine plant. *Energy Conversion and Management*. 223. 2020.
- Singh S.K. & Sarkar J. Improving the Energy Performance of Tubular Heat Exchangers Using Nanofluids: A Review. *Current Nanoscience*. 16. 2020.
- Singh S.K. & Sarkar J. Improving hydrothermal performance of double tube heat exchanger with modified twisted tape inserts using hybrid nanofluid. *Journal of Thermal Analysis and Calorimetry*. 143. 2020.
- Singh S.K. & Sarkar J. Improving hydrothermal performance of hybrid nanofluid in double tube heat exchanger using tapered wire coil turbulator. *Advanced Powder Technology*. 31. 2020.
- Singh S.K. & Sarkar J. Experimental hydrothermal characteristics of concentric tube heat exchanger with V-cut twisted tape turbulator using PCM dispersed mono/hybrid nanofluids. *Experimental Heat Transfer*. 34. 2021.
- Singh S.K. & Sarkar J. Thermohydraulic behavior of concentric tube heat exchanger inserted with conical wire coil using mono/hybrid nanofluids. *International Communications in Heat and Mass Transfer*. 122. 2021.
- Singh S.K. & Sarkar J. Hydrothermal performance comparison of modified twisted tapes and wire coils in tubular heat exchanger using hybrid nanofluid. *International Journal of Thermal Sciences*. 166. 2021.
- Reddy T.S., Banik T., Velagala R. & Kashyap S. A study and modeling of cutting forces in dry turning of heat treated AISI H13 tool steel with brazed tungsten carbide tip. *Materials today: Proceedings*. 24(2). 2020.

Conference Proceedings

- Bardalai M. Estimation of Kinetic Parameters and Heat Requirement in Some Bio-masses. Proceedings of the IMBIC. Kolkata, India, 2020.
- Chowdhury B. & Deb S.K. Time Series Analysis of Manufacturing Defects – A Case of Refrigerator Liner Manufacturing. Proceedings of the Conference on International Virtual Conference on Applied Science, Technology, Management and Language Studies (ASTMLS 2020), Sona College of Technology, Salem, 2020.
- Chowdhury B. & Deb S.K. Optimizing Thermoforming of Refrigerator Liners to Reduce Liner Rejection Rate-A Case Study Using Fractional Factorial Design of Experiments, Proceedings of

the Conference on International Congress on Advances in Material Science and Engineering (CAMSE 2020), Shobhit University, Gangoh, 2020.

- Dutta P. P.², Kumar A. K., Singh A., Saha, K., Hazarika, B., Narzary A. & Sharma T. Design and Development of Voice Controllable Wheelchair. Proceedings of 8th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, 2020.
- Nondy J. & Gogoi T.K. Energy and Exergy analyses of a gas turbine and heat-regenerative steam turbine integrated combined cycle power plant. Proceedings of the Thermo fluids and Renewable Energy (TFRE), India, 2020
- Saikia B. & Chowdhury B. Analysis of Performance Parameters of a Shell and Tube Heat Exchanger using Design of Experiments. Proceedings of the Conference on International Virtual Conference on Applied Science, Technology, Management and Language Studies (ASTMLS 2020), Sona College of Technology, Salem, 2020.
- Saikia B. & Chowdhury B. Analysis of heat transfer rate and overall heat transfer coefficient of a shell and tube heat exchanger using Design of Experiments. Proceedings of the Conference on International Congress on Advances in Material Science and Engineering (CAMSE 2020), Shobhit University, Gangoh, 2020.

Book Chapters

- A. Sharma & P.P. Dutta¹. Mathematical modelling of withering characteristics of tea leaves in Assam, India. In B. Kakati et al. (Eds.). Advances in Science and Technology. Tata Mc Graw Hill, New Delhi, 2021.
- D. Deka & D. Datta. Optimization of Crude Oil Preheating Process Using Evolutionary Algorithms. In B. Das et al. (Eds.). Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206. Springer, Singapore, 2021.
- D. Datta, A. Saikia & Z. Kalita. Stability of Female Bicyclists on Sudden Braking. In B. Das et al. (Eds.). Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206. Springer, Singapore, 2021.
- D. Datta, Z. Kalita & S. Saikia. Stability of Bicycle at Low Speed. In B. Das et al. (Eds.). Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206. Springer, Singapore, 2021.
- D. Datta, C. Deb, A. Hafila & D. Das. Approximating Non-intersecting Closed Curves Through Four-Bar Linkage Mechanism. In B. Das et al. (Eds.). Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206. Springer, Singapore, 2021.
- H. Pathak, S. Das, R. Doley, & S. Kashyap. Optimization of Cutting Parameters for AISI H13 Tool Steel by Taguchi Method and Artificial Neural Network. In M. Khosrow-Pour (Ed.). Deep Learning and Neural Networks: Concepts, Methodologies, Tools and Applications. IGI Global, USA, 2020.
- J. Bora & S. Kirtania. A comparative study on mechanical properties of carbon fiber/epoxy and carbon nanotube/epoxy composite laminates. In R. Saikia (Ed.). Spectrum: Recent Trends in Multidisciplinary Research. Eudoxia Research Centre, India, 2020.
- K. Kapila & S. Kirtania. Fabrication and characterization of ramie fiber based hybrid composites. In K. M. Pandey, R.D. Misra, P. K. Patowari and U. S. Dixit (Eds.). Recent Advances in Mechanical Engineering, Lecture Notes in Mechanical Engineering. Springer, Singapore, 2021.
- M. Bardalai, A. Yamin, B. Gogoi & R. Goswami. Heat Transfer in Noncircular Microchannels Using Water and Ethylene Glycol as Base Fluids with Zn and ZnO Nanoparticles. In C. Prakash, S. Singh, J.P. Davim (Eds.). Characterization, Testing, Measurement, and Metrology. CRC Press, Taylor & Francis Group, London, New York, 2020.

- M. Bardalai & D.K. Mahanta. Characterization of Bael Shell (*Aegle marmelos*) Pyrolytic Biochar. In R.M. Singari, M.Mathiyazhagan, H. Kumar (Eds.). *Advances in Manufacturing and Industrial Engineering, Lecture Notes in Mechanical Engineering*. Springer, Singapore, 2021.
- M. Bardalai, B. Das, P.P. Dutta¹ & S. Mahapatra. Thermal Performance Study of Bamboo and Coal Co-gasification in a Downdraft Gasifier. In B. Das, R. Patgiri, S. Bandyopadhyay, V.E. Balas (Eds.). *Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206*. Springer, Singapore, 2021.
- P.P. Dutta¹, H. Kakati, M. Bardalai & P. P. Dutta². Performance Studies with Trapezoidal, Sinusoidal and Square Corrugated Aluminium Alloy (AlMn1Cu) Plate Ducts. In B. Das, R. Patgiri, S. Bandyopadhyay, V.E. Balas (Eds.). *Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206*. Springer, Singapore, 2021.
- P. Dutta, P.P. Dutta¹ & P. Kalita. Experimental investigation of thin layer drying kinetics of *Garcinia pedunculata* dried in a forced convection environmental chamber. In B. Kakati et al. (Eds.). *Advances in Science and Technology*. Tata Mc Graw Hill, New Delhi, 2021.
- P.P. Dutta¹ & P. Goswami. A Comparative thermal performance studies between two different configurations of absorber plates in a double pass solar air heater using CFD and experimental analysis. In B. Kakati et al. (Eds.). *Advances in Science and Technology*. Tata Mc Graw Hill, New Delhi, 2021.
- P.J. Saikia, P.P. Dutta¹ & P. Kalita. Simulation and Experimental Performance Studies of a Computerized Spark Ignition Engine. In K. Pandey, R. Misra, P. Patowari, U. Dixit (Eds.). *Recent Advances in Mechanical Engineering, Lecture Notes in Mechanical Engineering*. Springer, Singapore, 2021.
- R. Borpatragohain & P.P. Dutta¹. Modelling and Performance Analysis of Improved Biomass Cook Stove. In B. Kakati et al. (Eds.). *Advances in Science and Technology*. Tata Mc Graw Hill, New Delhi, 2021.
- R. Barpatragohain, N. Bharali & P.P. Dutta¹. Thermal Performance Evaluation of an Improved Biomass Cook stove for Domestic Applications. In S. Revankar et al. (Eds.). *Proceedings of International Conference on Thermofluids, Lecture Notes in Mechanical Engineering*. Springer, Singapore, 2021.
- S.B. Shivhare, P. Kalita & P. Haloi. Effects of Numerical Dissipation and Dispersion on Computing the Convection of a Sharp Scalar Cone. In B. Das et al. (Eds.). *Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206*. Springer, Singapore, 2021.
- S. Kashyap & D. Gogoi. Study of industrial lime sludge waste filled coir-jute reinforced polyester hybrid composites. In R. Saikia (Ed). *Spectrum Vol. 1*. Eudoxia Research Centre, India, 2020.
- S. S. Begum, H. Jangid, A. P. Goswami & P. P. Dutta¹. Design and Modelling of a Parabolic Trough Solar Collector. In B. Kakati et al. (Eds.). *Advances in Science and Technology*. Tata Mc Graw Hill, New Delhi, 2021.
- S. Sarmah & D. Datta. Product Priority Problem: A Multi-objective Optimization Approach for Product Development Based on Customers' Priority. In B. Das et al. (Eds.). *Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies 206*. Springer, Singapore, 2021.
- S. S. Sarvankar, A. A. Phukan, A. Konwar & P. Kalita. Effects of Gurney Flap and Suction Slots on the Aerodynamics of a NACA0012 Airfoil. In B. Das, R. Patgiri, S. Bandyopadhyay & V. E. Balas (Eds.). *Modeling, Simulation and Optimization, Smart Innovation, Systems and Technologies*. Springer, Singapore, 2021.

Other Publications

- V. K. Mehta. Examination in the Times of Corona, *The Assam Tribune*, June 18, 2020.
- V. K. Mehta. *Ganitiya Phasaana (A mathematical fiction): Sandarbh*, 73, September-October, 2020. https://www.researchgate.net/publication/349029441_Ganitiya_Fasana_in_Hindi

- V. K. Mehta. Zameeni Haqeeqat (The ground reality): Sandarbh, 74, November-December, 2020. https://www.researchgate.net/publication/349029190_Zameeni_Haqiqat_In_Hindi

PATENT: GRANTED OR APPLIED FOR DURING THE REPORTING PERIOD

Inventor(s)	Patent	Patent number/ Application Number	National/International
B. Sharma, S. Sharma, R. Chutia, P.P. Dutta ¹	System for Measuring and Correction of Alignment Camber and Toe of Wheel of a Vehicle	(Indian Patent No: 357468)	National

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w'ps/sym)	Organized by	Date/Period , year	Place/institute/ venue
B. Chowdhury	One week FDP on Pedagogy of Scientific Writing, Reporting and Scholarly Networks	Feroze Gandhi Institute of Engineering And Technology, Raebareli, India	19-23 June 2020	Feroze Gandhi Institute of Engineering and Technology, Raebareli, India (Online)
	International Virtual Conference on Applied Science, Technology, Management and Language Studies (ASTMLS 2020)	Sona College of Technology, Salem and IEEE, India	11-12 December 2020	Sona College of Technology, Salem, India (Online)
	International Congress on Advances in Material Science and Engineering (CAMSE 2020)	Shobhit University Gangoh, STEM Research Society and NIT Jalandhar, India	28-30 December 2020	Shobhit University Gangoh, India (Online)
	One week FDP on 'Research Methodology: Tools and Techniques - II'	Mechanical Engineering Department, SVNIT, Surat, India	01-05 February 2021	SVNIT, Surat, India (Online)
	One week FDP on 'Recent Development in Biomass to Energy'	Mechanical Engineering Department, NIT, Itanagar, India	01-05 March 2021	NIT, Itanagar, India (Online)
M. Bardalai	International Online Conference on Smart Grid Energy Systems and Control (SGESC-2021)	Department of Electrical Engineering, National Institute of Technology Kurukshetra. India	19-21 March 2021	National Institute of Technology Kurukshetra. India (Online)

	3 rd International Conference on ADVANCES IN MECHANICAL ENGINEERING AND NANOTECHNOLOGY (ICAMEN 2021)	Department of Mechanical Engineering, Manipal University Jaipur, India	18–19 March 2021	Manipal University Jaipur (Online)
	14 th International Conference of IMBIC on Mathematical Sciences for Advancement of Science and Technology (MSAST 2020)	Institute for Mathematics, Bio-informatics, Information-Technology and Computer Science (IMBIC), Kolkata, India.	21–23 December 2020	(IMBIC), Kolkata (Online)
	International Conference on Advances in Mechanical and Industrial Engineering (ICAMIE 2020)	KIIT, Odisha, India.	11–13 December 2020	KIIT, Odisha(Online)
	International Conference on Modeling, Simulation and Optimization (COMSO 2020)	NIT Silchar, India	3-5 August 2020	NIT Silchar (Online)
	Interdisciplinary course on Changing Perspective on Pedagogy	Teaching Learning Centre, Tezpur University, India	8-22 October 2020	Tezpur University (Online)
	Webinar series on “Research Initiative and Current Developments in Renewable Energy Sources”	GIMT and ASTU, Guwahati, India	9-13 August 2020	Guwahati (Online)
	STTP on Modeling and Simulation using MATLAB	GIMT, Guwahati	24-28 July 2020	GIMT, Guwahati (Online)
Polash P. Dutta	Online FDP on Design and Manufacturing	AICTE Training and Learning (ATAL) Academy	15-19 February 2021	Pillai College of Engineering, India (Online)
	FDP on "Artificial Intelligence	AICTE Training and Learning (ATAL) Academy	14-18 September 2020	NERIST, Arunachal Pradesh (Online)
P. Haloi	FDP on 'Model Curriculum'	NIT Mizoram	15-19 March 2021	NIT Mizoram (Online)

	FDP on 'Examination Reforms'	NIT Mizoram	15-19 February 2021	NIT Mizoram (Online)
	Webinar Series on 'Recent Research Trends in Tribology'	GIMT Guwahati	3-7 August 2020	GIMT Guwahati (Online)
P. Kalita	Faculty Development Programme on "Outcome Based Education (OBE) and NBA Accreditation Process"	Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi	23-27 November 2020	BVICAM, New Delhi (Online)
S. Bhuyan	Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	Teachers learning centre (TLC), Tezpur University	8-22 October 2020	Tezpur University (Online)
	HVAC&R Energy efficient buildings	Thapar Institute of Engineering and Technology	23-27 September 2020	Thapar Institute of Engineering and Technology (Online)
S. Kirtania	11 th Int. Conf. on Materials Processing and Characterization	Department of Mechanical Engineering & Metallurgy Engineering and Material Science.	15-17 December 2020	IIT Indore, Madhya Pradesh (Online)
	Nat. Conf. on Materials, Mechanics & modelling	Department of Mechanical Engineering	29-30 August 2020	NIT Jamshedpur, Jharkhand. (Online)
	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	Teaching Learning Centre	15 February - 1 March 2021	Tezpur University, Assam. (Online)
	Weeklong Online Workshop on Assessment and Evaluation	Teaching Learning Centre	24-29 August 2020	Tezpur University, Assam. (Online)
	Pedagogy of Scientific Writing, Reporting and Scholarly Networks	Feroze Gandhi Institute of Engineering and Technology	19-23 June 2020	Raebareli, Uttar Pradesh. (Online)
	Online Basic Training on Use of ICT in Teaching	Teaching Learning Centre	20 and 23 April 2020	Tezpur University, Assam. (Online)

T.K. Gogoi	INTEGRATION OF BASIC ICT TOOLS in TEACHING PEDAGOGY	Teaching Learning Centre, Tezpur University	8-9 June 2020	Tezpur University (Online)
------------	---	---	---------------	----------------------------

TALKS BY THE FACULTY MEMBER SABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
M. Bardalai	Webinar Series on Emerging Technologies in Biofuel Production (ETBP-2020)	26-27 August 2020	Assam Engineering College and Assam Science and Technology University, India (Online)
P P. Dutta ²	Webinar session on Role of Artificial Intelligence in Oil and Gas Industry: Current Scenario and Future Perspectives	22 November 2020	Federation of Indian Petroleum Industry. Dibrugarh University student chapter (Online)
P. Kalita	8 th International Conference on Advancements & Futuristic Trends in Mechanical and Materials Engineering (AFTMME-20)	19-20 December 2020	Yadavindra College of Engineering, Punjabi University Campus (Online)
S.M. Kamal	Keynote talk on 'Recent Developments in Autofrettage and Future Research Directions' in the <i>8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020)</i> .	19-20 Dec, 2020	IIT Ropar (Online)
T.K. Gogoi	Recent Advancements and Emerging Challenges in Science and Technology for Sustainable Development (RESTS-2020)	14-15 July 2020	Dibrugarh University Institute of Engineering Technology (DUIET) (Online)

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Faculty members and staff

- Partha Pratun Dutta Fellow, Institute of Engineer (India), Kolkata (2021).
- B. Chowdhury, Best Paper Award, International Virtual Conference on Applied Science, Technology, Management and Language Studies (ASTMLS 2020), Sona College of Technology, Tamilnadu, India.
- B. Chowdhury, STEM Research Society Award, STEM Research Society in International Congress on Advances in Material Science and Engineering (CAMSE 2020), Shobhit University, Gangoh, UP, India.
- U.K. Mahanty, Best Paper Presentation Award, 2nd International Conference on Aspects of Materials Science and Engineering (ICAMSE-2021), Punjab University, Chandigarh, India.

Research Scholar/Student

- Puja Dutta, Best paper award, 3rd International Conference on Advances in Mechanical Engineering and Nanotechnology (ICAMEN 2021), Manipal University Jaipur and Research and Consultancy Section, National Institute of Technology, Uttarakhand, India.
- Bikshya Saikia, STEM Research Society Award, STEM Research Society in International Congress on Advances in Material Science and Engineering (CAMSE 2020), Shobhit University, Gangoh, UP, India.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

GATE: 03

NOTABLE PLACEMENTS

Name	Designation	Organization
Ratnadeep Malakar (B.Tech.)	Senior Officer/Engineer	Oil India Ltd
Sahitya Sikhar Ghosh (B.Tech.)	Assistant System Engineer- Trainee	TCS
Bhargav Jyoti Mahanta (B.Tech.)	Assistant System Engineer- Trainee	TCS
Akashdeep Bora (B.Tech.)	Assistant System Engineer- Trainee	TCS
Pankaj Upadhaya (B.Tech.)	Programmer analyst Trainee	Cognizant Technologies
Jugmita Patgiri (B.Tech.)	Programmer analyst Trainee	Cognizant Technologies

THE FACULTY MEMBERS AND STAFF**Professors**

Dilip Datta, Ph.D. (IIT Kanpur)

Specialization: Optimization/Design

E-Mail: ddatta@tezu.ernet.in

Partha Pratim Dutta, Ph.D. (Tezpur University)

Specialization/Areas of interest: Energy Technology

E-mail: ppdutta@tezu.ernet.in

Tapan Kumar Gogoi, Ph.D. (Tezpur University)

Specialization/Areas of interest: Thermal Energy and Environment Engineering

E-mail: tapan_g@tezu.ernet.in

Assistant Professors

Barnali Choudhury, Ph.D. (Gauhati University)

Specialization/Areas of interest: Thermal Engineering.

E-mail: barnali@tezu.ernet.in

Monoj Bardalai, Ph.D. (Gauhati University)

Specialization/Areas of interest: Bioenergy, Thermal Engineering

E-mail: monojb@tezu.ernet.in

Paragmoni Kalita, Ph.D. (IIT Guwahati)

Specialization/Areas of interest: Heat Power Engineering

E-mail: paragmk@tezu.ernet.in

Polash Protim Dutta, Ph.D. (IIT Guwahati)

Specialization/Areas of interest: CAD/CAM

E-mail: polashd@tezu.ernet.in

Prabin Haloi, M.E. (Gauhati University)

Specialization/Areas of interest: Fluid and Thermal Engineering, Energy.

E-mail: haloi_p@tezu.ernet.in

Rakesh Bhadra, M.E. (IEST)

Specialization/Areas of interest: Manufacturing / Production Engineering.

E-mail: r.bhadr@tezu.ernet.in

Sanjib Banerjee, Ph.D. (IIT Guwahati)

Specialization/Areas of interest: Materials and Manufacturing

E-mail: sanjibb@tezu.ernet.in

Satadru Kashyap, Ph.D. (Tezpur University)

Specialization/Areas of interest: Material Science, Mechanical Metallurgy, Characterization Techniques, Bioceramics

E-mail: satadru@tezu.ernet.in

Seikh Mustafa Kamal, Ph.D. (IIT Guwahati)

Specialization/Areas of interest: Plasticity, Autofrettage, Stress/Strain Analysis

E-mail: smkmech@tezu.ernet.in

Sikha Bhuyan, M.Tech. (NIT Silchar)

Specialization/Areas of interest: Thermal Engineering.

E-mail: sikha5@tezu.ernet.in

Sushen Kirtania, Ph.D. (IIT Guwahati)

Specialization/Areas of interest: Machine Design

E-mail: sushen@tezu.ernet.in

Vivek Kumar Mehta, Ph.D. (IIT Kanpur)

Specialization/Areas of interest: Robotics, Optimization.

E-mail: vkmehta@tezu.ernet.in

Zahnupriya Kalita, Ph.D. (Tezpur University)

Specialization/Areas of interest: Mechatronics

E-mail: zk@tezu.ernet.in

Guest Faculty

Emon Barua, Ph.D. (NIT Silchar)

Specialization/Areas of interest: Materials Science and Design

E-mail: emon@tezu.ac.in

Sumit Kumar Singh, Ph.D. (IIT BHU)

Specialization/Areas of interest: Thermal and Fluid Engineering, Nanofluid, Heat Exchanger

E-mail: sumit@tezu.ac.in

Uttam Kumar Mahanty, Ph.D. (IIT Hyderabad)

Specialization/Areas of interest: Integrated Design and Manufacturing Engineering

E-mail: uttam.bareshwar@gmail.com

Adjunct Faculty

Prof. Mordechai Perl, DSc (Israel Institute of Technology, Israel)

Specialization/Areas of interest: Fracture Mechanics, Bio-mechanics

E-mail: merpr@bgumail.bgu.ac.il

Technical officer

Prabin Kumar Bora, B.Tech.
E-mail: pkbora@tezu.ernet.in

Senior Technical Assistant

Heman Malakar, B.Tech.
E-mail: heman@tezu.ernet.in

Technical Assistants

Anupjyoti Nath, Diploma
E-mail: anupn@tezu.ernet.in

Guna Kanat Borah, Diploma
E-mail: gunakt@tezu.ernet.in

Technicians

Dipak Gogoi, ITI
E-mail: gunakt@tezu.ernet.in

Mitharam Handique, ITI
E-mail: mitharam@tezu.ernet.in

Khargeswar Rangpi, ITI
E-mail: rangpi@tezu.ernet.in

Poalsh Rabha, ITI
E-mail: prabha@tezu.ernet.in

Sasthendra Kumar Nath, ITI
E-mail: sknath@tezu.ernet.in

Draftsmen

Bhaskar Baruah, Diploma
E-mail: bbaruah@tezu.ernet.in

Uttam Kumar Nath, Diploma
E-mail: uttam@tezu.ernet.in

Office staff

Dipanjali Sinha, MA (English), B.Ed
UDC
E-mail: dsinha@tezu.ernet.in

Maniram Bania
MTS

Partha Protim Dutta: P. P. Dutta¹
Polash Protim Dutta: P. P. Dutta²

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

Dean, School of Humanities and Social Sciences

Department of Assamese

Department of Cultural Studies

Department of Education

Department of English

Department of Foreign Languages

Department of Hindi

Department of Law

Department of Mass Communication and Journalism

Department of Social Work

Department of Sociology

Centre for Assamese Studies

Centre for Endangered Languages

Chandraprabha Saikiani Centre for Women Studies

Dr. Ambedkar Chair

DEAN, SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

The School of Humanities and Social Sciences is one of the four Schools of Tezpur University and consists of ten academic departments: the Department of English, the Department of Cultural Studies, the Department of Mass Communication and Journalism, the Department of Sociology, the Department of Hindi, the Department of Education, the Department of Law, the Department of Foreign Languages, and the Department of Assamese. In addition, there are five centres: The Centre for Potential for Excellence in Particular Areas, the Centre for Assamese Studies, the Centre for Inclusive Development, the Centre for Women's Studies, and the Centre for Endangered Languages.

A primary responsibility of the School, mentioned in the university's statutes, is the promotion and preservation of the culture of Assam and the northeast. The School is committed to the objectives of a liberal education. Our ideal is to impart the soft skills and knowledge traditionally associated with a liberal arts education. We believe that such skills have not lost their importance even in a milieu favours that technological knowledge over others. That the National Education Policy 2020 recognizes the role and importance of liberal education is a matter of encouragement for us.

The faculty have had to meet the fresh challenges brought about by COVID-19. Due to the onset of the first wave, and subsequent declaration of lockdown measures, our faculty moved their activities online to ensure no disruption in their services. However, as the year progressed, the need to professionalize what began as a crisis-control measure was increasingly felt. Hence a concerted attempt was made to adequately address the problem of ensuring quality in all activities, including teaching, conduct of examinations, seminars, and workshops.

Students have been allotted faculty mentors and have received support from faculty at this difficult time. This included handholding in students' mental health cases resulting from the pandemic. Thus, we continue to take student support seriously, especially in a pandemic year. It needs to be mentioned that this has been a stressful time for faculty and staff as well. Apart from the new challenges mentioned, working from home (which has become the norm) has called for an increase in professional commitment as the traditional distinction of work and home space/time has been blurred.

PERSONAL OD THE OFFICE OF THE DEAN

Prof. Prasanta Kumar Das
Dean, School of Humanities and Social Sciences

Amar Bharali (UDC)
Email
Email: amar@tezu.ernet.in

Guna Borah (MTS)

DEPARTMENT OF ASSAMESE

THE DEPARTMENT

The Department of Assamese, established in 2019, is a new department. However, it may be said to have begun life as the Centre for Assamese Studies which was established in 2011. The primary aim of the Centre was to undertake and foster research in Assamese language and culture and one of its achievements was the creation of an extensive digital archive of Assamese manuscripts, books, and important documents, from the medieval period to the modern. The present Department incorporates such existing facilities.

In view of the paucity of standard texts of the classical and canonical works of Assamese literature (for example, the works of Madhava Kandali and Sankaradeva, Madhavadeva, Rama Saraswati and others), including concordances to the major works of Assamese literature, the Department's first programme, the post-graduate degree programme in Assamese incorporates courses in textual criticism/text-critical studies and digital humanities. Textual criticism/text-critical studies and digital humanities have also been identified as the thrust areas in research.

Academic Programmes and Student intake

Programme	Intake
M.A. in Assamese	20

PUBLICATIONS

Journal Publications

- Das J. Jatir Ghai Gharar Bheti Garhota Sikhyak Sahityik Padmanath (Padmanath: The Pioneer of Assamese Society). *Satsari*.16(3).2020.
- Das J. Radha Govindra Baruah: The Architect of Modern Assam and His Times. *IJM*. 11(11).2020.
- Das J. Assamese Campus Novel of 21st Century: An Introductory Discourse. *IJARESM*. 8(11). 2020.
- Deka S. Sivanath Bhattacharya aru Asamar Puthi Prakashar Itihash (Sivanath Bhattacharya and history of book publication in Assam). *Satsari*. 16(6-7).2021.
- Neog S. J. Asamiya Calacitra Sahitya (Assamese Film literature). *Gariyashi*. 27(11). 2020.
- Neog S. J. Seuji-Adhyanar Alokak Sampratik Asamiya Natak (Contemporary Assamese Drama: A study in the light of Green-Studies), *Satsari*.16(5).2020.
- Neog S. J. Pradip Kurbah films: an analytical study. *E-Cine India*. 8. 2021
- Neog S. J. The Surrealist elements in Bhaskar Hazarika's Films: An analytical study. *E-Cine India*. 9.2021.

Books

- S. Deka. Barmajhili (Short Story Collection in Assamese). Panchajany, Guwahati, 2020.
- S. Deka (Ed.). Hemaprabha Das Racana Sambhar. Assam Publishing Company, Guwahati, 2020.

Book Chapters

- J. Das. Pariparsha Samalosana: Ek Parichyajnapak Alocana (Ecocriticism: An Introduction). In P. Bora (Ed.). *Sahitya: Dristikon aru Bicar*. Dibrugarh University, Dibrugarh, 2020.

- J. Das. Asamiya Bhrman Sahityar Samikshatmak Itibritta (A study of Assamese travel literature). In P. Deka Bujarbarua. (Ed.). Tulanamulak Sahitya aru Paridhiya kshetra. All Assam Students' Union, Guwahati, 2021.

Other Publications

- S. Deka (Ed.). Alap (an academic journal, 6th Issue). Bandhav, Guwahati, 2020.
- S. Deka. What Lies Over Here? (Short Story). In A. Kashyap (Ed.). How to Tell the Story of an Insurgency. Harper Collins, India, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w'ps/sym.	Organized by	Date/Period, year	Place/Institute/Venue
J. Das	One week online faculty development programme on Research Methodology	Kumar Bhaskar Varma Sanskrit and Ancient Studies University and Barbhag College	24-30 June 2020	KBVSAS University, Nalbari (Online)
	Weeklong online workshop on Assessment and Evaluation	Teaching Learning Centre, Tezpur University	24-29 August 2020	Tezpur University (Online)
	Workshop on Development of E-module in Four Quadrant Approach	Teaching Learning Centre, Tezpur University	11-21 December 2020	Tezpur University (Online)
S. Deka	Workshop on Development of E-module in Four Quadrant Approach	Teaching Learning Centre, Tezpur University	11-21 December 2020	Tezpur University (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/Institute/Venue
J. Das	Radio talk on Ecocriticism and Assamese Literature on Gyanmailinee Community Radio, Dibrugarh University	30 July 2020	Dibrugarh University (Online)
	Speaker in National Seminar on Current Literary Trends, Practices and Status of Assamese Literature, organized by Sahitya Akademi in collaboration with Dept. of Assamese, Tezpur University,	22-23 March 2021	Tezpur University
S. Deka	Lecture on Mamoni Raisom Goswami Rajnaitik Cetana in a panel discussion on the Contribution of Mamoni Raisom Goswami organized by Nezine	June 21 2020	Guwahati (Online)

S. Deka	Talk entitled Introducing Medieval Assamese organized by Kuhipaath in collaboration with Centre for Indigenous Endangered Languages, Dr. Shyama Prasad Mukherjee University, Ranchi.	August 23 2020	Ranchi (Online)
	Convenor, Moderator and Panelist of the Maheswar Neog Memorial discussion on Life and Works of Professor Maheswar Neog organized by Professor Maheswar Neog Memorial Trust.	13 September 2020	Guwahati (Online)
	A speech on The Curious Translation of Sutika Patal: Print, New Literate Sphere and the Practice of the Pre-modern Verse Texts in Colonial Assam in a Webinar on Assamese Literature in Modern Era organized by Indira Gandhi National Centre for the Arts, Regional Centre (NERC) Guwahati.	27 November 2020	Guwahati (Online)
S. J. Neog	Resource Person in the Web-talk on the theme Eco-criticism and Assamese Drama organized by Youth Minds, Guwahati	12 July 2020	Guwahati (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Workshop on Professional Curriculum Development	17 July 2020
Lecture on Aesthetics and Literature by Prof. Nagen Saikia	12 November 2020
Lecture on The Language of Madhava Kandali's Ramayana by Prof. Lilabati Saikia Bora	18 November 2020
Lecture on Digital Humanities and Culture by Dr. Samantak Das	25 November 2020
Lecture on State formation process in early and medieval Assam by Dr. Chandan Kumar Sharma	30 November 2020
Lecture on Importance of Digital Humanities by Dr. Mayurakshi Chaudhuri	10 December 2020
Lecture on Digital Humanities and Literature by Dr. Arjun Ghosh	16 December 2020
Lecture on Evolution of Assamese Script by Prof. Kanak Ch. Saharia	26 December 2020
Online Faculty Development Programme(FDP) in Assamese	28 December 2021-2 January 2021
Lecture on Reading Tejimola: Doing Theory by Prof. Anna Kurian	7 January 2021
Lecture on Eastern Literary Theory by Prof. Nava Kumar Handiqui	19 January 2021
Lecture on Structuralism by Prof. Madan M. Sarma	28 January 2021
Lecture on Contemporary Assamese Poetry by Prof. M. Kamaluddin Ahmed	30 January 2021

Lecture on Translation Studies and Assamese Translation by Prof. Tarinee Deka	3 February 2021
Lecture on New Media and Recent Changes in Assamese Language by Prof. Upen Rabha Hakacham	8 February 2021
Lecture on Significance of International Mother Language Day by Dr. Lakshmi Nandan Bora	21 February 2021
Lecture on Introduction to Phonetics and Phonology by Dr. Bhaskar Sarma	16- 20 March 2021
Lecture on Origin and Growth of Assamese Novel by Dr. Arabinda Rajkhowa	16 March 2021
Lecture on Future of Folklore by Prof. Satyakam Borthakur	16 March 2021
Lecture on Ethnic Culture of North East India by Prof Upen Rabha Hakacham	16 March 2021
Lecture on Dramatization of Poetry by Gunakar Dev Goswami	16 March 2021
Lecture on Folk Drama Tradition in Assam by Prof. Prafulla Kr. Nath	17 March 2021
Lecture on Tradition of Assamese Folk Songs by Dr. Anil Saikia	17 March 2021
Lecture on Existence and Tradition: Yeshe Dorjee Thongchi's 'Sawa Kota Manuh' by Prof Bibhash Choudhury	17 March 2021
Lecture on Contemporary Assamese Radio Play by Nayan Prasad	17 March 2021
Lecture on Theatre Management, Production and Performance by Jyoti Narayan Nath	18 March 2021
Lecture on The Picture of Evolution and Discourse of Society: Arupa Patangia Kalita's 'Felanee' by Prof. Bibhash Choudhury	18 March 2021
Lecture on Stage Design and Theatre Direction by Rabijita Gogoi	18 March 2021
National Seminar on Current Literary Trends, Practices and Status of Assamese Literature	22-23 March 2021
Lecture on Challenges of Theatre Management, Production and Performance in Assam by Dr. Jahanara Begum	23 March 2021
Lecture on Writing Assamese in Digital Medium and Software Tools by Mridul Kr. Sharmah	23 March 2021
Lecture on Easy Way to Contribute in Assamese Wikipedia by Dr. Gitartha Bordoloi	23 March 2021

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET

NET-JRF: 1

THE FACULTY MEMBERS AND STAFF

Associate Professors

Subrat Jyoti Neog, Ph.D. (Gauhati University)

Specialization/Research area: Assamese Literature, Film Studies, Theatre Studies, Stylistics, Creative Writing (Play and Screenwriting)

Email: subrat@tezu.ernet.in

Assistant Professors

Sanjib Deka, Ph.D. (Gauhati University)

Specialization/Research area: Study of Assamese Language, Medieval Assamese Language, Assamese Morphology, Nineteenth Century Assam, Printing History, Creative Writing
Email: sanjibd@tezu.ernet.in

Jyotishman Das, M.Phil. (Dibrugarh University)

Specialization/Research area: Sociology of Assamese Literature, Assamese Novel, Assamese Mass Media, Creative Writing, Life Writing, Travel Writing
Email: jyotish@tezu.ernet.in

Technical staff

Chandrasekhar Roy, B.Com. (Krishna Kanta Handiqui State Open University)

Email: chaser7@tezu.ernet.in

Malati Boro

MTS

DEPARTMENT OF CULTURAL STUDIES

THE DEPARTMENT

The Department of Cultural Studies, Tezpur University, is one of the earliest Departments fully devoted to the pursuit of Cultural Studies in India. 'Culture', as understood in the context of academic engagement of this department, is the repository of ideas and values, lifeways, modes of communication and ways of making sense of the 'self'. Today, culture is perceived as a premise upon which identities are being authenticated to assert/resist/negotiate notions and practices of ethnicity, nation, gender, territory, and many similar categories.

Founded in 1995, the Department of Cultural Studies is a vibrant academic entity that engages with cultural products, practices, and forms in all its dimensions, with a special focus on Northeast India. Students and faculty in the Department engage in exciting, interdisciplinary approaches to traditional fields of study where the aim is to explore new cultural and cross-cultural phenomena from multiple points of view. Further, the Department undertakes social intervention using folklore and culture as media. Researchers and faculty, drawn from various disciplines like Anthropology, Performance Studies, Literatures, Folklore, Media and Film Studies, Gender Studies are actively engaged in exploring subjects like ethnicity, religious institutions, folklore and culture, local and national media, cultural theory, transformation and transaction in translated literatures and formation of nationalities.

Academic Programmes and Student intake

Programme	Intake
M.A. in Cultural Studies	58
Ph.D.	Variable, 12 in 2020 - 21

Major Facilities and Equipment Available

Facilities:

- Cultural Interpretation Centre
- Wall of Heroes: A photo gallery of Indian freedom fighters
- Departmental Library
- Audio-Visual cum Seminar Hall
- Multimedia editing Facility
- Repository for digitized cultural assets (Digital Archive)
- Classrooms with multi-media projection system

Equipment available

- Rack Server with console
- Professional workstations for management of multimedia contents
- NAS Storage
- Multimedia Projector installed in the classrooms
- Standing Multi Touch Kiosk installed in the CIC
- Digital Camcorder
- Digital Signage

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
Cultural Memory in North-East India: A Research and Documentation Programme on Textual and Visual Narratives	UGC	₹ 230 Lakhs	5 Years (2016-21)	D. P Nath
SAP-DRS II: Sacred Spaces on the Banks of the River Brahmaputra	UGC	₹ 76 Lakhs	5 Years (2018- 23)	D. P Nath
Archiving, Modeling and Visualization of the Eco-Cultural Heritage of Majuli River Island of Assam	DST	₹ 21.17 Lakhs	3 Years (2019-2022)	P. Dutta

PUBLICATIONS**Journal Publications**

- Dutta J. & Nath D. P. Sankatkalin Sahitya aru Adhyanar Prasongikata. *Satsori*. 16 (2). 2020.
- Konwar J. G. & Konwar B. K. Xu Xamparkar Birol Namuna Moglou Rajkumari aru Asomor Borkunwari Kuranganayani (Part 1). *Gariyoshi*. 28(5). 2021.
- Konwar J. G. & Phukan B. J. An Understanding of Slogans- the Rhetoric of the Assam Movement (1979-1985). *Journal of Indian Anthropological Society*. 56. 2021.
- Mech S. & Nath D. P. The Anthropology of Dress: A Study in the change of Assamese women dress in Assam. *Antrocom Online Journal of Anthropology*. 16 (2). 2020.
- Nadukkandiyil H. Migration and Mobility in Petrolands: Reflections on Home Films of Kerala. *South Asian Popular Culture*. 18(1). 2020.

Books

- J. G. Konwar. Textile Heritage of Assam: A Treasury of Traditional Craft. UGC's Centre with Potential for Excellence in Particular Areas (CPEPA) on Cultural Memory in North East India: A research and Documentation Programme on Textual and Visual Narratives, Department of Cultural Studies, Tezpur University, 2020.
- M. Baruah (Ed.). Women and Urbanity: Cultural Memory of North-East India. Tezpur University, Tezpur, 2020.
- M. Goswami. Chandraprabha Saikiani: A Force in History. DVS Publishers, Guwahati, 2020.

Book Chapters

- K. Dutta & M. Baruah. Rural Development through Self- Help Group: A Tool to Give Voice to the Voiceless. In B. Saikia & S. Jena (Eds.). Rural Development in India: Challenges and the Tasks Ahead. EBH Publishers, Guwahati, 2020.
- M. Goswami & M. Mahanta. Globalization as a Threat: Narratives of Women Weavers. In M. Barua (Ed.) Women And Urbanity: Cultural Memory of North-East India. Tezpur University, 2020.
- M. Kandali. The Sita Kungri and the Somahadi. In Search of Sita through Sabin Alun, the Karbi Oral Narration of Ramayana. In Anushabda (Ed.). Rama in Indian Languages, Vani Book Company, Delhi and Ayodhya Research Centre, U. P., 2020.

- S. Dowerah & D. P. Nath. Memory, Homeland and the Search for the 'Native' in Bokul. In A. Ara, D. Sharma, B. J. Gogoi & S. Sen (Eds.). Narrative Cultures of North East India: Traditions, Texts and Representations. Pen-craft International, New Delhi, 2021.

Other Publications

- D. P. Nath, S. Thakur, B. Snook, J. V. Das, K. J. Goswami, J. Duwarah & D. Pegu. (Eds.). Folklore for Adolescent Empowerment and Social Change. E-Training Module. A Collaborative Venture by the Department of Cultural Studies, Tezpur University, Samagra Shiksha, Assam and UNICEF, Assam, 2021.
- M. Kandali. Hang On Boys, A creative fiction. Autumn Special Volume, Amar Assam Newspaper, Guwahati, 2020.
- M. Kandali. Chena Path, Achena Path, Chhaya Path, A creative fiction. Aalap, the Journal of Literature, Culture & Current Affairs, Guwahati, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
J. G. Konwar	Poi Sanglong/Poi Khamsang : The Study of Rite of Passage in Tai man's life in Tai Yai Community of Ban Pangmoo Village, Maehongson, Thailand and Tai Aiton Community of Banlung Mantai, Karbi Anglong District, Assam, India.	Institute Innovation Technology Educational and Research for Eastern Institute of Technology Suvarnabhumi (EITS)	27 - 28 March 2021	Thailand (Online)
	Online Workshop on Assessment and Evaluation	Teaching Learning Centre, Tezpur University	14 -19 December 2020.	Tezpur University (Online)
	Online Hands-on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	Teaching Learning Centre, Tezpur University	8 - 9 June 2020.	Tezpur University (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
D. P. Nath	Delivered lecture on 'Literature in Times of Crises' in a National Webinar	24 June 2020	Department of English, Lakhimpur Girls' College, Lakhimpur (Online)
	Spoke as a Resource Person on 'The Continuing Relevance of Gandhi' in an International Webinar jointly organized by the Department of Cultural Studies, Tezpur University and The University of Auckland, Auckland, New Zealand	19 August 2020	Tezpur University (Online)
	Spoke as a Resource Person on "Reading Gandhi Today" in an International Webinar titled 'Mahatma Gandhi: Reflections from Beyond the Past and Into the Future' jointly organized by Tezpur University & Queen's University Belfast, Northern Ireland UK & Indian Community Centre, Belfast, Northern Ireland, UK	31 August 2020	Tezpur University (Online)
	Spoke as a Resource Person on "Setting an	28 August 2020	Mumbai University (Online)

D. P. Nath	Agenda for Cultural Studies in India” National Webinar on Cultural Studies organized by the Department of English		
	Special Lecture on ‘M.K. Gandhi and some Unanswered Questions of the Last Century’ organized by the Department of Political Science and the Centre for South East Asian Studies	7 September 2020	Gauhati University (Online)
	Special Lecture on ‘Creativity and Traditional Cultural Expressions’ organized by the Department of Modern Indian Languages and Literary Studies,	22 October 2020	University of Delhi (Online)
	Special talk on ‘Literature and Resilience in Times of Uncertainty’ in an ICSSR Sponsored National Webinar, organized by the Department of English, Surya Sen Mahavidyalaya, Siliguri, West Bengal	8 February 2021	Surya Sen Mahavidyalaya, Siliguri
J. G. Konwar	Food Culture & Identity: An Ethnic Approach in a Webinar Food,	15 January 2021	IGNCA-NERC, Guwahati

	Culture and Practices among the Communities of North-East India,” in a National Webinar organized by Indira Gandhi National Centre for Arts-North Eastern Regional Centre, Guwahati		
M. Baruah	Online webinar, Organised by The Africa-Asia Youth Foundation-AAYFO Backlash of COVID-19 on The Women Of the Streets: Health Degeneration, Economic Agony and Abrupt Lifestyle Turn Around to further strengthen the vision of the organization.	22 June 2020	The Africa-Asia Youth Foundation-AAYFO (Assam Chapter)
	National Webinar organised by the Department of English and IQAC of BSS Arts, Science and Commerce College, Makni, Aurangabad On Cultural Studies	10 June 2020	Aurangabad (Online)
M. Kandali	Online delivery of an invited Talk on Indian Paintings in the international lecture series in CCRT	9 June 2020	Centre for Cultural Research & Training , Under Ministry of Culture , Govt. of India, New Delhi
	Invited Panelist in the National	8 July 2020	Regional Centre of Sahitya Academy, Kolkata Studio for central sahitya

	Webinar on Women Consciousness and Assamese Literature organized by Sahitya Academy , Delhi		academy, New Delhi.
M. Kandali	Delivery of an invited talk 'Gender and Contemporary Culture' in the National Webinar on Gender Sensitization	6 August 2020	IQAC Cell, Tihu College, Assam.
	Delivered two invited lectures in two sessions in the National Online workshop for Introducing Cultural Inputs in Curriculum Teaching for All India Higher secondary teachers conducted by CCRT, Delhi.	21 September 2020	Delivered from the studio of CCRT, regional Centre at Guwahati, Assam.
	Delivered one invited talk about Assamese Culture, Visual Art and Literature in the online international webinar of Asian Literary Society	29 November 2020	Asian Literary society, New Delhi.
M. Kandali	Delivered one invited lecture Feminist Discourse and contemporary Art practices in the national seminar	2 January 2021	Srimanta Sankardev Kalakhetra, Guwahati, Assam.

	on Contemporary Art & Practices conducted by Srimanta Sankardev Kalakhetra.		
	Delivered an invited talk and paper Representation and Reconstruction of History in Assamese Literature in the national seminar conducted by TU Assamese Department.	22 March 2021	Department of Assamese, Tezpur University, Assam,
	Participated in the online panel discussion about Gyanpeeth Award winner writer Birendra Kumar Bhattacharya organized by NEzine e journal and Media House.	18 June 2020	NEzine Media online platform, Guwahati, Assam.
	Invited Talk on the Paintings of Bishnu Rabha, the cultural doyen of Assam organized by Assam Nrityanjali Academy on the occasion of Rabha Divas	20 June 2020	Studio of Nrityanjali Academy, Guwahati. Assam.
	Participated in the online panel discussion about the Political Cartoons of Assam organized by NEzine e journal and Media House.	5 July 2020	NEzine Media online platform, Guwahati, Assam.

	Delivered talk on Creative Expressions in the series talk by eminent persons in the B.Tech. Student's Induction Programme 2020.	26 November 2020	School of Engineering, Tezpur University, Assam.
P. Dutta	Delivered a lecture on Assam-Rajasthan Cultural Linkages: Few Personal Notes in the webinar on Ek Bharat Shreshtha Bharat	28 July 2020	Press Information Bureau, Guwahati

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
International Webinar on Dance and Community: Sense of belonging through Performance	6 March, 2021

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- A 2-day training programme of State level resource persons on the module Folklore adolescent Empowerment, organized jointly by the department of Cultural Studies and Samagra Siksha, Assam and UNICEF, Assam during 11 - 12 February 2021.
- A 4-day workshop was organized on Review and Finalization of the Module Folklore for Adolescent Empowerment and Social Change at Tezpur University.

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET

UGC-NET: 01

UGC NET-JRF: 06

NOTABLE PLACEMENTS

Name	Designation	Organization
Uddipan Sarmah	Senior Project Assistant	IIT Bombay
Swikrita Dowerah	Guest Lecturer	Delhi University
Neelakshi Gohain	Project Technical Officer	Indian Council of Medical Research
Gauri Hazarika	Assistant	State Institute of Panchayat and Rural Development

THE FACULTY MEMBERSAND STAFF

Professors

Debarshi Prasad Nath, Ph.D. (RGU)

Specialization/Areas of interest: Cultural and Literary Theory, Comparative Literature and Translation, Cultural History

E-mail: dpnath@tezu.ernet.in

Associate Professors

Madhurima Goswami, Ph.D. (Tezpur)

Specialization/Areas of interest: Indian poetics, Performing studies, Women's studies

E-mail: mgs@tezu.ernet.in

Parasmoni Dutta, Ph.D. (Tezpur)

Specialization/Areas of interest: Heritage Studies, Popular Culture

E-mail: paras@tezu.ernet.in

Assistant Professors

Juri Gogoi Konwar, Ph.D. (Dibrugarh)

Specialization/Areas of interest: Anthropology of Textile, Anthropology of Food Ethnicity, Medical Anthropology

Email: jgkon@tezu.ernet.in

Jayanta Vishnu Das, Ph.D. (Tezpur)

Specialization/Areas of interest: Media and Culture, Television Studies, Media and Globalization

E-mail: jvdas@tezu.ernet.in

Mandakini Baruah, Ph.D. (Tezpur)

Specialization/Areas of interest: Gender Studies, Folklore Studies, Paremiology.

E-mail: mb@tezu.ernet.in

Hashik N K, Ph.D. (Hyderabad)

Specialization/Areas of interest: Performance Studies, Community Studies

E-mail: hashikk@tezu.ernet.in

Moushumi Kandali, Ph.D. (Baroda)

Specialization/Areas of interest: Visual & Literary Culture, Contemporary Art & Culture of North-East India.

E-mail: moushumi@tezu.ernet.in

Office staff

Subhra Devi, Ph.D. (National Museum Institute, Delhi)

Specialization/Areas of interests: Heritology and Heritage Studies, Museum Education, Preventive Conservation

E-mail: sd@tezu.ernet.in

Ashish Dutta, B. Com.

Upper Division Clerk

E-mail: ashish@tezu.ernet.in

Lohit Bhuyan

Multi-Tasking Staff

E-mail: lohit@tezu.ernet.in

DEPARTMENT OF EDUCATION

THE DEPARTMENT

The Department of Education, Tezpur University was established in the year 2014 with an aim to prepare learner for meaningful careers in the field of education. Teacher Education Program assists students in developing knowledge, skills, and dispositions necessary to become effective and caring teachers in an ever-changing society. At present the department of education is running four programmes. The first is MA in Education programme which provides learners wider and more comprehensive understanding of education as a field of knowledge. Second is Two Year B.Ed. programme which prepares students for work as a teacher in schools. And the third one is Ph.D. which provides doctorate degree awarded by University which qualifies the holder to teach at the University level in the degree's field, or to work in a specific profession.

Academic Programmes and Student intake

Programme	Intake
2 Year B. Ed.	50
Integrated B. Ed. with B. Sc./ B. A.	50
M. A. in Education	35
Ph. D. (Education)	Variable, 08 in 2020-21

Major Facilities and Equipment Available

- Psychology Resource Centre
- Art and Craft Resource Centre
- Curriculum Lab
- ICT Lab
- Conference Room

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Problems faced by the children of Tea Garden workers at secondary level education in Assam: An analytical Study	ICSSR, New Delhi	₹3.50 Lakhs	1 Year 2020-2021	N. R. Roy	
Substance abuse and suicidal behavior among college students in North East India	ICMR, Delhi	₹ 28.24 Lakhs	1 Year 2021-2022	N. R. Roy	

PUBLICATIONS

Journal Publications

- Das P. & Roy N. R. Artificial Intelligence: A Way towards Effective Activity Based Classroom. *Palarch's Journal of Archaeology of Egypt/Egyptology*. 18(4). 2021.
- Das R. & Pallai P. Study on Internship in Teacher Education in Assam. *International Journal of Advanced Science and Technology*. 29(05). 2020.
- Devi B., Sultana Y. & Pallai P. Education for children with special need: A case study on Sneha-Tirtha. *Psycho-lingua, A half yearly referred and peer reviewed journal*.50(2).2020
- Devi T. & Roy N.R. Educational Aspiration Level of Scheduled Caste and Non-Scheduled Caste Students of Assam: A Comparative Study. *Education India: A Quarterly Refereed Journal of Dialogues on Education*. 10(1). 2021.
- Mazumdar S. & Pallai P. A study of the attitude of secondary of secondary school teachers towards the profession of teaching in Hojai District. *Solid state technology*, 63(2s). 2020.
- Mushahari M. & Sharma H. Awareness towards Environmental Education among Students of Tezpur University. *Education India Journal: A Quarterly Refereed Journal of Dialogues on Education*. 9(4). 2020.
- Pradhan S. & Das P. Influence of metacognition on academic achievement and learning style of undergraduate students in Tezpur University. *European Journal of Educational Research*. 10(1). 2021.
- Rai K. & Singh R. Doctoral Attrition: An Emerging issue of concern for Research in Higher Education. *Shodh Sarita*. 7(28). 2020.
- Rai K. & Singh R. Management of Hospital waste: A conscious Step towards Safeguarding Life and the Environment. *Shodh Sanchar Bulletin*. 10 (40). 2020.
- Roy N. R., Singh R. & Debnath D. Attitude towards teaching profession among under graduate students in relation to peer pressure. *Shodh Sanchar Bulletin*. 11 (41). 2021.
- Roy N.R., Singh R. & Debnath D. Attitude Towards Teaching Profession Among Under Graduate Students In Relation To Peer Pressure. *Shodh Sanchar*. 11(41). 2021.
- Roy B., Pallai P. & Sultana Y. A study on the attitude of distant learners towards student support services of Distance Education: An Exploration. *Indian journal of Psychometry and Education. A half yearly referred and peer reviewed journal*. 51(2). 2020.
- Sharma H. & Pathak M. A Study on the Attitude and Awareness of Teachers and Students towards Juvenile Delinquency. *Education India Journal: A Quarterly Refereed Journal of Dialogues on Education*. 10(1). 2020.
- Singh R. & Khatiwora D. Academic Resilience among Higher Secondary Students of Mising Community in relation to Child Rearing Practice. *International Journal of Management (IJM)*. 11 (11). 2020.
- Singh R. & Sultana N. Empowerment among Adolescent Girls in Muslim Community in relation to Locality and type of Family. *International Journal of Management (IJM)*. 11 (11). 2020.
- Singh R. & Sarkar G. A study of attitude towards education of girls and educational level among the Koch Rajbongshis of Assam. *Shodh Sarita*. 8 (29). 2021.

- Singh A. & Pallai P. Preparing teachers for Inclusive classroom: Re-conceptualizing Elementary Teacher Education program in Assam *Education India Journal: A Quarterly Refereed Journal of Dialogues on Education*. 10(1). 2021.

Conference Proceedings

- Das R. & Pallai P. Role of Supervisor during School Internship of B.Ed Programme in Assam. Proceedings of the International Conference on Continuity, Consistency and Innovation in Applied Science and Humanities- August, 2020.
- Padmavathy R. D. Effect of Social Media Platforms Usage among Higher Education Learners in Covid 19. Proceedings of the Social Media Networks and Society, Tamil Nadu Teachers Education University, Chennai, 2021.

Book Chapters

- Das R. & Pallai P. Perception of B.Ed students towards School Internship of Secondary teacher education in Assam. Multidisciplinary Subjects for Research. R. B. Saksena & Dilip A. Ode (Eds). Red'shine, India 2020.
- Pallai P. & Singh A. Individualized Education Plan (IEP): An instrument of inclusion. Recent Trends in Inclusive Education. Vanitha C. (Ed.). Today and Tomorrow's Printers and Publication, New Delhi, 2021.
- Saikia H. & Roy N. R. A New Paradigm of Teaching Learning Process in Pre-Primary Education: A Study in the Pre-Primary Schools of Tezpur, Assam. Dilip A. Ode, Jigeshkumar D. Chauhan & Sruthi S. (Eds.) Multidisciplinary Subjects for Research-III. Red'shine Publication, Sweden/India, 2020.
- Singh R. & Rai K. Metacognitive Awareness of Undergraduate Students in Sikkim with Reference to their Knowledge of Cognition and Regulation of Cognition. Cognition and Related Psychology of 21st Century Learners. Pradeep R. V. & Sameer Babu M. (Ed.). APH Publishing corporation, New Delhi, 2020.
- Singh R. & Mukherjee D. Exploration of Innovative Classroom Practices with Special Reference to NCF 2005 and Educational Perspective of Rabindranath Tagore: A Reflective Study. Meaningful Education. Hem Raj, Kanan Kapil, Fatma Gausiya, & Openderjeet Kaur (Eds.). Twenty First Century Publication, Patiala, 2021.
- Yadav S. & Singh G. E-Learning and E-Assessment. In D. Joshi (Ed.). Innovative ICT Practices in Teaching Learning. Writers Choice, New Delhi, 2021.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
G. Singh	Two Day Workshop on Online Basic Training on Use of ICT in Teaching	Teaching Learning Centre, Tezpur University under PMMMMNMTT Scheme of Ministry of Human Resource Development, Government of India.	20-23 April 2020	Tezpur University (Online Mode)

G. Singh	Webinar on COVID 19- Psychosocial Issues, Challenges & Interventions	Education of Centre of Education, IITE Gandhinagar, Gujarat	23-24 April 2020	IITE, Gandhinagar Gujarat (Online Mode)
	Role of Emotional Intelligence in Combating COVID 19	Department of Education & Training University School of Humanities and Social Sciences Gautam Buddha University, Greater Noida, U.P., India.	3 May 2020	Gautam Buddha University, Greater Noida, U.P. India (Online Mode)
	One-Day National Webinar on Digital Accessibility for Persons with Disabilities: Opportunities and Challenges	National Institute for the Empowerment of Persons with Visual Disabilities (Divyangjan) in association with Vardhman Mahaveer Open University, Kota (VMOU) and Commonwealth Educational Media Centre for Asia (CEMCA)	7 May 2020	National Institute for the Empowerment of Persons with Visual Disabilities (Divyangjan), Dehradun (Online Mode)
	International Webinar on The Role of E-Learning during Lockdown: Academic Challenges and the Road Ahead	IQAC in collaboration with the Department of Education, Patna Women's College, Autonomous, Patna University, Patna	8-9 May 2020	Patna Women's College, Autonomous, Patna University, Patna (Online Mode)
	Two-Day International Webinar on COVID-19 and Emotional Wellness	School of Education Central University of Jammu, under the aegis of PMMMNMTT Scheme of Ministry of Human Resource Development, Government of India.	15-16 May 2020	Central University of Jammu (Online Mode)
	Two Weeks Online Training Programme on Inclusive Education: Best Practices	Centre for Disability Studies & Educational Research (CDSER); Netaji Subhas Open University (NSOU), Kolkata, West Bengal; Commonwealth Educational Media Center for Asia (CEMCA), New Delhi	17-31 May 2020	CEMCA, New Delhi (Online Mode)
	A National Webinar Series (12 Sessions) on Knowledge Generation in Education during COVID-19 Pandemic- Qualitative Research	Bombay Teacher's Training College, HSNC University, Mumbai & Department of Education, University of Mumbai.	1-6 June 2020	HSNC University, Mumbai & Department of Education, University of Mumbai. (Online Mode)
	3 days Online National Workshop on	Teaching Learning Centre under (PMMMNMTT), Shri Lal	8-10 June 2020	Shri Lal Bahadur Shastri National

	Design & Develop: Online Assessment	Bahadur Shastri National Sanskrit University, A Central University, New Delhi		Sanskrit University, A Central University, New Delhi. (Online Mode)
	3 Days Online Workshops on Qualitative Research and Its Types	Guru Nanak Dev University Amritsar, School of Education, PMMMNTT, MOE, Govt of India	5-7 October 2020	Guru Nanak Dev University, Amritsar (Online Mode)
	10 days Online National Workshop on Quantitative and Qualitative Approaches in Research	Teaching Learning Centre under (PMMMNTT), Shri Lal Bahadur Shastri National Sanskrit University, A Central University, New Delhi	18-28 November 2020	Shri Lal Bahadur Shastri National Sanskrit University, A Central University, New Delhi. (Online Mode)
	Interdisciplinary Refresher Course on Curriculum & Pedagogy	Teaching Learning Centre, Tezpur University under PMMMNTT Scheme of Ministry of Human Resource Development, Government of India.	15 February-1 March 2021	Tezpur University (Online Mode)
P. Pallai	Exploring Techno-pedagogical skills of senior secondary school teachers of Sonitpur district, Assam	International conference on Emerging Trends in ICT in Education organized by CIET, NCERT	24-26 March 2021	CIET, NCERT (Online Mode)
	Examining the attitudes of two year B.Ed students of Sonitpur district towards E-Learning: students perspectives	Department of Education, University of Baroda	25-27 March 2021	University of Baroda (Online Mode)
	A study on Cybercrime Awareness among B.Ed students of Nagaon districts	Centre For Pre-Service Teacher Education, School Of Education, NEHU	27-28 January 2021	NEHU (Online Mode)
	Attitude of adolescents students towards Life skills with special reference to Biswanath District, Assam	Department Of Education, Lady Irwin College, University Of Delhi	22 December 2020	University of Delhi (Online Mode)
	Individualized Education Plan (IEP): An instrument of inclusion in the national webinar on recent trends in inclusive education	School of Education, Central University of Kerela	2-3 November 2020	Central University of Kerela

R. Singh	Refresher Course on Changing Perspectives in Pedagogy.	TLC, Tezpur University	8-22 October 2020	Tezpur University (Online Mode)
R. D. Padmavathy	International Webinar on Mat lab applications in Sciences and Engineering	Baba Farhid college Patiala	29 May 2020	Baba Farhid college Patiala (Online Mode)
	International Webinar Series on Advocacy Leadership for Positive Aging	BDU- Heritage Centre for Gerontology and Heritage Foundation, Hyderabad and Pass It On Network, Asia Pacific	23- 24 July 2020	BDU- Heritage Centre for Gerontology and Heritage Foundation, Hyderabad and Pass It On Network, Asia Pacific (Online Mode)
	International Webinar Series on Addressing the Various Effects of COVID-19 Pandemic and Managing Stress	K.C.DAS Commerce college, Guwahati	25 July 2020	K.C. DAS Commerce college, Guwahati (Online Mode)
	International Webinar Series on Tools for Language Classroom	Nirmala College for Women, Coimbatore	3 Aug 2020	Nirmala College for Women, Coimbatore (Online Mode)
	International Webinar on Hiroshima Day for Peace in Gandhi an Perspective	Rajiv Gandhi University, Arunachal Pradesh	6 Aug 2020	Rajiv Gandhi University, Arunachal Pradesh (Online Mode)
	National Webinar on Reorienting Academic Leadership, Pedagogy and Research in the Time of Crisis	Tezpur University	30 May 2020	Tezpur University (Online Mode)
	National Webinar on Be an Effective Leader	Bishop Agniswamy college of Education, Mutton	10 July 2020	Bishop Agniswamy college of Education, Mutton (Online Mode)
	National Webinar on COVID-19 Pandemic: Its Economic and Socio-Psychological Issues	Pub Majuli College. Majuli, Assam	26 July 2020	Pub Majuli College.Majuli, Assam (Online Mode)
	National Webinar on Role of Colleges in Preventing Violence against Women	RTM Nagpur University Nagpur	27 July 2020	RTM Nagpur University Nagpur (Online Mode)

R. D. Padmavathy	National Webinar on Mathematica- The only place where maths is easy	K.L.E. Society's Degree college, Bangalore	29 July 2020	K.L.E. Society's Degree college, Bangalore (Online Mode)
	National Webinar on Revised Assessment and Accreditation (A&A) Framework of NAAC: IQA, DVV and SSS	IQAC of Paschim Guwahati Mahavidyalaya, Dharapur, Guwahati & Mahatma Phule Mahavidyalaya, Kingaon	30 July 2020	IQAC of Paschim Guwahati Mahavidyalaya, Dharapur Guwahati & Mahatma Phule Mahavidyalaya, Kingaon (Online Mode)
	National Webinar on Emerging Trends of Techno Skills in Education	St. Thomas College, Bhilai	31 July 2020	St. Thomas College, Bhilai (Online Mode)
	National Webinar on Classroom Communication Strategies For Teacher Trainees	St. John's College of Education, Palayamkottai	2 Aug 2020	St. John's College of Education, Palayamkottai (Online Mode)
	National Webinar on National Education Policy 2020	KLE Society's Degree College, Nagarbhavi, Bengaluru	31 July 2020	KLE Society's Degree College, Nagarbhavi, Bengaluru (Online Mode)
	National Webinar on Value Initiatives in Higher Education	Shri Mrityunjaya Arts, Commerce & Centre for Post-Graduation Studies in Commerce Dharwad, Karnataka	21 Aug 2020	Shri Mrityunjaya Arts, Commerce & Centre for Post-Graduation Studies in Commerce Dharwad, Karnataka (Online Mode)
	Ten Days Online Workshop on School Activities based Practicum (Two Year B.Ed Curriculum)	Dewan Institute of Management Studies, UP	12 -21 July 2020	Dewan Institute of Management Studies, U.P. (Online Mode)
	National Webinar cum Workshop on "E-Learning as a tool to reduce gap between teacher and taught in this tough time of COVID-19"	Shiva College of Education Ghumarwin Bilaspur ,Himachal Pradesh -174021	23-24 July 2020	Shiva College of Education Ghumarwin Bilaspur, Himachal Pradesh -174021 (Online Mode)
	National Online Workshop on "Effective Online	Manhanth Madhusudan College, Bihar	5 Aug 2020	Manhanth Madhusudan College, Bihar

	Teaching–Learning Using Google Forms”			(Online Mode)
	National workshop on NAAC	Govt. P. G. College Bilaspur, Rampur	2- 8 Aug 2020	Govt. P. G. College Bilaspur, Rampur (Online Mode)
	National Seminar on Social Media Networks and Society	Tamil Nadu Teachers Education University, Chennai	3- 4 Feb 2021	Tamil Nadu Teachers Education University, Chennai (Online Mode)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
N. R. Roy	Global Lecture Series 2020 organised by School of Education & Social Sciences, Management and Science University, Malaysia with Collaboration to Department of Education, Tezpur University	20 November 2020	School of Education and Social Sciences, Management and Science University, Malaysia.
	National Level Webinar Knowledge Series On Horizons in Research	13 July 2020	Lady Willington Institute Of Advanced Study in Education, Kamarajarsalai, Triplicane, Chennai, India
	Challenges and Strategies in Teaching Learning and Evaluation to Cope Up with present Situation	27 June 2020	Department of Education and IQAC, Lumding College
	Challenges and Strategies in Teacher Education During COVID-19	13 July 2020	Institute of Advanced Studies of Education (IASE), Tripura
	Changing Scenario of Teaching Learning and Evaluation: Challenges and Tasks Ahead	29 July 2020	IQAC Cell, DCB Girls’ College, Jorhat, Assam
	Professional Development for Teachers on the Wake of COVID-19	18 December 2020	Department of Education, University of Science Technology and Management, Meghalaya
	Issues and strategies in	26 July 2020	Department of Education,

N. R. Roy	Higher Education during and after COVID 19		Sivsagar Girls' College, Sivsagar, Assam.
	Parents of the challenged children with Attention Deficit and Hyperactive Disorder (ADHD): Dos and Don't	3 January 2021	Department of Education, Jadavpur University, Kolkata, West Bengal
	National Education Policy 2020	9 November 2020	Department of Education, Bengtal College, Chirang, Assam, India
	Covid-19 Pandemic: Impact And Strategies For Higher Education & National Education Policy 2020 (Nep 2020)	6 August 2020	Department of Education, DCB Girls' College, Jorhat, Assam
	National Education Policy 2020	30 August 2020	Department of Education, Janata College, Sefranguri, BTAD (Assam)
	Research Methods in Social Sciences: Reflection about Critical Aspects	28 August 2020	National Psychological Corporation, Agra & Tripura University, Tripura
	Present Educational system in India and Gandhian thoughts	25 November 2020	Centre for Adivasi Research & Development, Utkal University, Odhisha.
	National Education Policy 2020	20 August 2020	Department of Education, Raha College, Nagao, Assam
	National Education Policy 2020	29 August 2020	Department of Education & Internal Quality Assurance Cell (IQAC) T.H.B. College, Jamugurihat, Sonitpur, Assam
	Lockdown and its impact on Education in general and he in particular	10 August 2020	Department of Education, Amguri College
R. Singh	Global Lecture Series 2020 organised by School of Education & Social Sciences, Management and Science University, Malaysia with Collaboration to Department of Education, Tezpur University	18 November 2020	Tezpur University

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
One-day Webinar on- Reorienting Academic Leadership, Pedagogy and Research in the Time of Crisis	30 May 2020
Panel Discussion On- National Education Policy 2020 and North East India: Exploring the Roadmap	26 August 2020
Global Lecture Series 2020-Under Faculty Exchange Programme as the Part of MoU Between Tezpur University And Management and Science University, Malaysia	9-11 November 2020
Celebration of National Education Day 2020	11 November 2020
Three days' workshop on-Professional Development for Teachers on the wake of COVID-19, in collaboration with Prof QH school of Education, USTM, Meghalaya.	18- 20 December 2020

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET:

JRF	:04
NET	:28
SLET	:07
TET/CTET	:40

NOTABLE PLACEMENTS

More than 25 students who have passed out in year 2020 from B.Ed. and M.A. in Education programme, got employed as Assistant Professor and Graduate Teacher in various schools and colleges of Assam in the month of Jan-Feb 2021. Some of the notable placements are:

Name	Designation	Organization
Rashmi Das	Assistant Professor	Jorhat College
Dimpal Khatiwora	Assistant Professor	D.C.B Girl's College, Jorhat
Sumi Das	Assistant Teacher	Mazrowmari High School, Dhekiajuli.
Anita Lama	Assistant Teacher	North Lakhimpur Girls Higher Secondary School
Gitali Das	Assistant Professor	Govt. Model College, Deithor
Munmi Saikia	Graduate Teacher	North Lakhimpur Girl's Higher Secondary School
Supriya Mazumdar	Assistant Professor	Government Model College, Kaziranga
Purnima Padi	Assistant Professor	Jorhat College
Sangita Sahu	Graduate Teacher	Sankardev Higher Secondary School, Nagaon
Aparajita Devi	Assistant Teacher	Assam Police MES

THE FACULTY MEMBERS AND STAFF

Professors

Nil Ratan Roy, Ph.D. (Assam University)

Specialization/ Research Area: Curriculum Development, Educational Planning and Administration, Teacher Education, Education for Disadvantaged groups, Measurement and Evaluation

E-mail: niledn@tezu.ernet.in

Associate Professors

Mohammad Shaheer Siddiqui, Ph.D. (MJP Rohilkhand University, Bareilly)

Specialization/ Research Area: Philosophy & Economics of Education, Pedagogy of English & Social Science, Indian Spiritual Traditions & Sufism Islamic Philosophy of Education for Sustainable Development

E-mail: 622mssiddiqui@gmail.com

Assistant Professors

Yeasmin Sultana, Ph.D. (Assam University)

Specialization/ Research Area: Language Education, Educational Technology, Research Methodology in Education

E-mail: yeasmin@tezu.ernet.in

R. D. Padmavathy, Ph.D. (Pondicherry)

Specialization/ Research Area: Mathematics Education, Research Methodology & Statistics in Education, Educational Psychology, Cognitive Science, Educational Technology, e-content Development, Guidance and Counseling, Environmental Education, Adult and Continuing Education.

E-mail: padma@tezu.ernet.in

Hitesh Sharma, Ph.D. (DAVV, Indore)

Specialization/ Research Area: Educational Psychology, ICT in Education, Research Methodology and SPSS, Educational Administration, Guidance and Counseling, Method of Teaching Physical sciences, Method Of Teaching Biological sciences, Early Childhood Education

E-mail: hitesh@tezu.ernet.in

Sashapra Chakrawarty, Ph.D. (BHU)

Specialization/ Research Area: Educational Psychology, Educational Research, Special Needs Education, Method of Teaching in Biological Science/Elementary Education.

E-mail: sashapra@tezu.ernet.in

Pratima Pallai, Ph.D. (Lucknow)

Specialization/ Research Area: Pedagogy of Social Science, ICT in Education, Teacher Education Measurement and Evaluation

E-mail: pratima@tezu.ernet.in

Md. Asif, M.A. (AMU), M.Ed. (Jamia Millia Islamia)

Specialization/ Research Area: Contemporary Indian Education, Teacher Education, Educational Technology, Pedagogy of Social Science

E-mail: mdasif@tezu.ernet.in

Sradhanjali Pradhan, Ph.D. (Utkal)

Specialization/ Research Area: Pedagogy of Physical Science, Educational Technology and ICT in Education, Measurement and Evaluation

E-mail: sradha@tezu.ernet.in

Rajinder Singh, Ph.D. (Panjab University)

Specialization/Areas of Interest: Educational Technology, Educational Research, Special Education, ICT in Education, Language Education, Environmental Education, Educational Guidance and Counselling

E-mail: badotra@tezu.ernet.in

Sanghamitra Das, Ph.D. (NIEPA, New Delhi)

Specialization/ Research Area: Gender and Education

Email: Sanghamitradas82@gmail.com

Gopal Singh, Ph.D. (R.I.E. Ajmer, NCERT/ MDSU, Ajmer)

Specialization/ Research Area: Science Education, Learning & Teaching, Guidance & Counselling/Constructivism & Thinking Skills

email: drgrana@tezuernet.in

Technical staff

Amarnath Sah, MCA (SMU, Gangtok)

Specialization/ Research Area: Computer Networks, Web Technologies and ICT in Education

Email: amarsah@tezu.ernet.in

Office Staff

Nilakshi Saikia

Laboratory Assistant

Email: nilakshi@tezu.ernet.in

Chandan Nath

Library Attendant

Email: nathchn@tezu.ernet.in

Anupam Saikia

Laboratory Attendant

Email: anupams@tezu.ernet.in

Suman Handique

Office Assistant (Contractual)

Email: sumanh@tezu.ernet.in

Nitai Bauri

MTS

Email: nitai12@tezu.ernet.in

DEPARTMENT OF ENGLISH

THE DEPARTMENT

The Department of English (formerly Department of English and Foreign Languages), was established in 1994. The department has the following academic programmes: Integrated MA in English (introduced in 2011), MA in English (introduced in 1997), MA in Linguistics and Language Technology (introduced in 2012), and Ph.D. Under the general rubric of English Literature, the department imparts teaching and research in English Literature, Women's Writing in English, American Literature, Indian Writing in English, English Language Teaching, and Translation Studies. Similarly, under the rubric of Linguistics, the department imparts teaching and research in Core Linguistics, Linguistics Theories, Field Linguistics, Computational Linguistics, Documentation and Archiving. The department also runs a 5-year, 10-semester Integrated MA (English) programme (introduced in August 2011). The foreign language wing of the department has been expanded into the department of Foreign Languages since December 2019.

Academic programmes and Student intake

Academic Programme	Student Intake
M.A. English (4 semesters)	63
M.A. Linguistics and Language Technology (4 semesters)	38
Integrated M.A. in English (10 semesters)	25
Ph.D.	Variable, 10 in 2020-21

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Women and the Making of the Public Sphere in Contemporary Assam: An Oral history Digital Archive	ICSSR	₹10 Lakhs	2 Years (2018-2020)	H. Medhi & R. Narzary
Documentation and Revitalization of Ntenyi, Khongdei and Zyphe: three endangered languages of North east India	North Eastern Council, Shillong	₹79.04 Lakhs	2 Years (2020-2022)	M. Barbora
SAP- DRS-II	UGC	₹98 Lakhs	5 Years (2015-2020)	P. K. Das
A Stimulus-Appraisal based Study on Motivation Affect in L2 Learning at the Tertiary Level with reference to Engineering Students Learning English as an L2 in Assam	DST	₹28.4 Lakhs	3 Years (2019-2022)	S. K. Doley

PUBLICATIONS

Journal Publications

- Das P. K. A Nineteenth Century 'Act East' Policy: The Shan Mission of the American Baptist Missionaries. *Aitihya The Heritage*. XI(2). 2020.
- Pal A., Gope A., Obayemi J. D. & Iannacchione G. S. Concentration-driven phase transition and self-assembly in drying droplets of diluting whole blood. *Scientific Reports*. 10(1).2020.
- Pal A., Gope A., Athair A. S. & Iannacchione G. S. A comparative study of the drying evolution and dried morphology of two globular proteins in de-ionized water solutions. *RSC Advances*. 10(29). 2020.
- Pal A., Gope A., & Iannacchione G.S. Concentration and Temperature dependence of Protein and Blood Drying Droplets. *Biomolecules*. 11(2).
- Patgiri B. Voicing Assimilation as a Universal Phonological Process: A Case Study of Nalbaria Assamese. *International Journal of Dravidian Linguistics (IJDL)*. 50 (2). 2021.
- Phukan K. & Nath A. K. Studying Kinship Relations of the Tai Ahom Community in Ethnolinguistic Perspective: Family Structure and Code of Conduct. *Shodh Sarita*. 7(28). 2020.
- Phukan K. & Nath A. K. An Ethnolinguistic Analysis of Kinship Terms in Tai Ahom. *Jadavpur Journal of Languages and Linguistics*. 4 (2). 2020.
- Sabnam M. & Nath A. K. A Comparative Study of Color Expressives in Bodo, Deori and Mising. *Shodh Sanchar Bulletin*. 11(41). 2021.

Book Chapters

- A. Aman, N. S. Dash, J. Chakraborty & A Gope. In T. Khan *et al.* (Eds.). Consonants in Khortha. Alternative Horizons in Linguistics: A Festschrift in Honour of Prof. Panchanan Mohanty. Lincom Europa, Germany, 2020.
- F. Danta. Protocols of Colonial Hunting: Surveillance, Transgression and the Allegory of Empire in F. T. Pollok's Wild Sports of Burma and Assam. In Arzuman Ara *et al.* (Eds.). Narrative Cultures of North East India. Pencraft International, Delhi, 2021.
- S.K. Doley. Ram is a Good Boy. In Anushabda (Ed.). *Rama in the Indian Languages*. Vani Prakashan, New Delhi, 2020.
- S. Sahoo, Introduction. Debraj Roy: My Story. In Trans. S. Sahoo & U. Roy. Eastern Readers Publication, Jorhat, 2020.
- M. Sabnam & A. K. Nath. Expressives in Bodo. In T. Khan (Ed.). Queries in the Structure of Language. Central Institute of Indian Languages, Mysuru, 2020.

Other Publications

- Gope, Video Lecture: Speech mechanism (Generation of e-module as part of TLC's mission to generate e-content), funded by MHRD, Govt., of India under PMMMNMTT Scheme. (Published on June 18, 2020). <https://youtu.be/DHQmJHiLcN8>
- S. Sahoo & U. Roy. Trans. *Debraj Roy: My Story*. Eastern Readers Publication, Jorhat, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
A. Gope	Virtual International Conference on Multiple	Yonphula Centenary College, Royal University of Bhutan	10-12 September 2020	Bhutan (Online)

	Dimensions of South Asian Literary Imagination: Classic to Contemporary			
	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	TLC, Tezpur University under PMMMNMTT scheme of MHRD	08 - 22 October 2020	Tezpur (Online)
	Online Basic Training Program on use of ICT in Teaching	TLC, Tezpur University	20-23 April 2020	Tezpur (Online)
A. K. Nath	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	TLC, Tezpur University under PMMMNMTT	15 February -1 March 2021	Tezpur (Online)
	A weeklong Workshop on Assessment and Evaluation	TLC, Tezpur University under PMMMNMTT	24-28 August 2020	Tezpur (Online)
B.K. Danta	Seminar on Rivers in the Literary Traditions of India	IIAS, Shimla	6-8 October 2020	Shimla (Online)
	International seminar on The Polite World of Bhakti	Centre for Translation and Digital Humanities, Ravenshaw University, University of Hyderabad and NIT, Rourkela	5-7 February 2021	Rourkela (Online)
H. Medhi	Workshop on online basic training on use of ICT in teaching	TLC, Tezpur University under PMMMNMTT	20-23 April 2020	Tezpur (Online)
	How to Publish with Oxford Journals	TU Central Library and South Asia Office, Oxford University Press	4 August 2020	Tezpur (Online)
	National Webinar on Philosophy and Literature: Some Basic Issues	Centre for Studies in Philosophy, Dibrugarh University	12 August 2020	Dibrugarh (Online)
	Social Movements and Women's Agency in the 20th Century	Duke University Gender Colloquium	16 October 2020	United Kingdom (Online)
	Engendering Caste, Sexualizing Race	Centre for Studies in Gender and Sexuality, Ashoka University, and the Center for Study of Gender and Sexuality, New York University	11 November 2020	New Delhi (Online)
	Gender based violence: Contexts and	Social Science Research	23 January 2020	India (Online)

	Contestations	Community		
	Sentencing: Making Academic Writing Less Punishing and More Enjoyable	Krea University, Chennai	12 February 2021	Chennai (Online)
P. K. Das	Workshop on Academic Integrity	Central Library, Tezpur University with Turnitin	3 June 2020	Tezpur (Online)
	Virtual workshop on Integration of Basic ICT Tools	TLC, Tezpur University and IQAC	8 - 9 June 2020	Tezpur
	Webinar on Contemporary Assamese Literature	Department of Assamese, Tezpur University	12 June 2020	Tezpur (Online)
	Conclave on Transformational Reforms in Higher Education under National Education Policy 2020	UGC, MHRD	7 August 2020	Tezpur (Online)
	Webinar on M.K. Gandhi: The Continuing Relevance	Tezpur University and The University of Auckland	19 August 2020	Tezpur (Online)
	A panel discussion, National Education Policy 2020 and Northeast India: Exploring the Road Map	Department of Education, Tezpur University	26 August 2020	Tezpur (Online)
	Webinar on Covid-19: Promotion of health and well-being for students of North East region	Department of Mass Communication and Journalism, TU in collaboration with the Rajiv Gandhi National Institute for Youth Development, Sriperumbudur (Tamil Nadu)	4 - 5 January 2021	Tezpur (Online)
	Virtual meet of the Director-General, Indian Council for Cultural Relations (ICCR) with Vice Chancellors and International Students' Advisers	Indian Council for Cultural Relations (ICCR)	1 March 2021	New Delhi (Online)
	International webinar on Dance and Community: Sense of Belonging through Performance	Department of Cultural Studies, TU	7 March 2021	Tezpur (Online)

	75 Years of Independence: Reflecting the Glorious Achievements of India	NSS, Tezpur University	12 March 2021	Tezpur (Online)
G. K. Borah	Workshop on Developing an Orthography: Issues and Challenges	CFEL, Tezpur University		Tezpur University (Online)
	9 th Endangered and Lesser-Known Languages Virtual Conference 2021	CFEL, TU in collaboration with SEL, Lucknow, UP.	20-21 February 2021	Tezpur University (Online)
	An Intonational Model for South Asian Languages by Prof. Sameer udDowla Khan, Reed College, Oregon, USA.	Talk 1 of Indo-Phon Talk Series.	1 October 2020	United States (Online)
	Grammatical tone and its segmental correlates: An overview by Dr. Laura McPherson, Dartmouth College, UK.	Talk 5 of Indo Phon Talk Series.	5 November 2020	United Kingdom (Online)
	Prosody through the ears of the ordinary listener by Prof. Jennifer Cole, Northwestern University, Illinois, USA.	Talk 6 of Indo Phon Talk Series.	18 November 2020	United States (Online)
S. Sahoo	Two-day National Seminar on Current Literary Trends and Practices and Status of Assamese Literature	Department of Assamese, Tezpur University in collaboration with Sahitya Akademi	22 - 23 March 2021	Tezpur (Online)
S. K. Doley	9 th ELKL Conference	Centre for Endangered Languages, Tezpur University	20-21 February 2021	Tezpur (Online)

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
A. Gope	CURAJ Linguistics Talk Series, organized by Department of Linguistics, School of Humanities and Languages, Central University of Rajasthan, India	19 September 2020	Rajasthan (Online)
	Lecture on Introduction to Linguistics and its Components organized by Yonphula Centenary College, Royal University of Bhutan	1 - 2 June 2020	Bhutan (Online)
A. K. Nath	International Symposium on Recent Theories in Linguistics and their Applications organized by Central University of Rajasthan	17-18 March 2021	Rajasthan (Online)
	A two day National Webinar on Modern Thought and Practices of Assamese Linguistics Studies	1-2 August 2020	Department of Assamese and IQAC, Kumar Bhaskar Varma Sanskrit And Ancient Studies University, Assam (Online)
	IQAC lecture series of Sualkuchi College	28 July 2020	Sualkuchi College, Assam (Online)
B.K. Danta	Workshop on Improving Scientific Research Writing and Publication Skill	12 October 2020	ICSSR, Shillong and SS College, Hailakhandi (Online)
	Refresher Course on Language, Comparative Literature and Cultural Studies	14 November and 21 November 2021	UGC HRDC, Gauhati (Online)
	Refresher Course Recent Trends in Language and Literature	2 December 2020	UGC-HRDC, The University of Burdwan (Online)
	Refresher Course in English Literature & Language (Margins and Marginalities)	1 December 2020	UGC-HRDC, Jamia Milia Islamia University (Online)
	Faculty Induction Programme	25 February 2021	UGC-Human Resource Development Centre, Jawaharlal Nehru University (Online)

	Invited talk (online) on Gandhi and National Education Policy	2 March 2021	Jhanji Hemnath Sarma College (Online)
F. Danta	International Webinar on Global/Native Shakespeares	21- 28 September 2020	Central University of Karnataka (Online)
	Refresher Course on “Reimagining the Margins: Perspectives from Literature, Culture and Society”	26 November - 10 December 2020	The Human Resource Development Centre, Jamia Milia Islamia (Online)
H. Medhi	Panel Discussion on Alternate Ways of Engagement of School students, teachers and parents in the wake of Covid-19 and beyond (Online)	10 April 2020	TISS Mumbai (Online)
	National Webinar on Literature and Marginality (Online)	8-9 July 2020	Mahapurush Srimanta Sankardev Viswavidyalay (Online)
	International Webinar on Ideas and Trends of Feminism, Gender Equality and Women’s Movement	7 August 2020	Tezpur (Online)
	Contesting Narratives: Rethinking the Idea of India’s North East (?)	23 January 2021	Gargaon College, Sivagar (Online)
P. K. Das	Online talk on Traditional Literary Criticism	5 July 2020	Bankura Christian College, West Bengal (Online)
	A webinar talk Literature during Pandemic Times	29 July 2020	Department of English, Demow College, Sivasagar (Online)
	A webinar talk Literature during Pandemic Times	9 August 2020	Department of English, KBR College, Orang and the Department of English and Education, Mazbat College (Online)
	A talk on anglophone writing from Northeast India in the Webinar on Contemporary Indian Literature	31 October 2020	Swarnalipi journal. Tezpur (Online)
	A talk on NEP 2020 and Decentring English in Higher Education, in the Online Interdisciplinary Refresher Course on Changing Perspectives in	9 October 2020	TLC, Tezpur University (Online)

	Higher Education		
	An online talk on NEP 2020 and English in Higher Education in the Interdisciplinary Refresher Course	17 February 2021	TLC, Tezpur (Online)
R. Narzary	Invited Talk in a National Webinar on Education in India and the Present Scenario: Critical Issues organized by Tezpur College, Tezpur	16 July 2020	Tezpur College, Tezpur (Online)
S. Sahoo	Invited Lecture in an International Webinar titled Humanitarian Perspective of the Pandemic	18- 20 June 2020	Department of Humanities and Social Sciences, Faculty of CMHSS, Assam Downtown University (Online)
	Invited Talk on Postcolonial Translation: A Case of Rita Choudhury's <i>Chinatown Days</i> organized by Internal Quality Assurance Cell (IQAC), Chaiduar College in association with the Department of English, Chaiduar College	12 July 2020	Department of English, Chaiduar College (Online)
	Invited Talk in a Webinar on Gandhi, Self and the Nation: Representations of Gandhi in Life Writing in Assamese	17 July 2020	Department of English & the Department of Assamese, Khowang College (Online)
	Resource person in Refresher Course in Comparative Literature and Cultural Studies organized by NEHU	10 - 23 March 2021	NEHU (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Alumni Reconnect Programme Career Choices: Let's get candid with Parash	20 April 2021

NOTABLE PLACEMENTS

Name	Designation	Organization
Maitreyee Dutta	Assistant Professor	Khagarijan College, Khagarijan
Anwasha Gogoi	Assistant Professor	BRM Government Model College, Doomdooma

Jushmi Gogoi	Assistant Professor	PNGB Govt. Model College, Kakopathar
PahareeKonwar	Assistant Professor	Dhakuakhana College, Dhakuakhana
Priya Naha	Content Writer	Acadecraft Private Limited, NOIDA

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

NET:09

FACULTY MEMBERS AND STAFF**Professors**

Bijay K. Danta, Ph.D. (Utkal University)

Specialization/Areas of interest: American Literature, Critical Theory

E-mail: bkdanta@tezu.ernet.in

Farheena Danta, Ph.D. (Dibrugarh University)

Specialization/Areas of interest: American Literature, Modernist Poetics, Cultural Studies

E-mail: fdefl@tezu.ernet.in

Prasanta Kumar Das, Ph.D. (Gauhati University)

Dean, School of Humanities and Social Sciences

Specialization/Areas of interest: Indian Writing in English, American Literature

E-mail: prsntdas@tezu.ernet.in

Madhumita Barbora, Ph.D. (Tezpur University)

Specialization/Areas of interest: Linguistics (Morphology, Syntax, Language Acquisition), Language Documentation, Field Linguistics

E-mail: mmb@tezu.ernet.in

Gautam Kumar Borah, Ph.D. (NTNU, Norway)

Specialization/Areas of interest: Philosophy of Language, General and Cognitive Linguistics, English Literature, Applied Linguistics

E-mail: gkb@tezu.ernet.in

Sravani Biswas, Ph.D. (North Eastern Hill University)

Specialization/Areas of interest: Critical Theory, Indian Writing in English

E-mail: sravani@tezu.ernet.in

Associate Professors

Debasish Mohapatra, Ph.D. (EFLU, Hyderabad)

Specialization/Areas of interest: Curriculum Development, Materials Production, Language Policy

E-mail: deva@tezu.ernet.in

Hemjyoti Medhi, Ph.D. (University of Delhi)

Specialization/Areas of interest:

Gender and Literature, Women's Movements, Vernacular Public Sphere, Oral History, Colonial Print Cultures

E-mail: hjyoti@tezu.ernet.in

Sanjib Sahoo, Ph.D. (Tezpur University)

Specialization/Areas of interest: Indian Writing in English, Ecocriticism, Travel Writing

E-mail: ssahoo1@tezu.ernet.in

Assistant Professors

Reetamoni Narzary, Ph.D. (Tezpur University)

Specialization/Areas of interest: Women's Writing, Postcolonial Studies, Indian Writing in English

E-mail: reita@tezu.ernet.in

Pallavi Jha, Ph.D. (University of Hyderabad)

Specialization/Areas of interest: Children's Literature, Popular Culture and Literature, Postcolonial Writing

E-mail: pjefl@tezu.ernet.in

Bashabi Gogoi, Ph.D. (Gauhati University)

Specialization/Areas of interest: Indian Writing in English, Adaptation Theory

E-mail: b_gogoi@tezu.ernet.in

Arup Kumar Nath, Ph.D. (Jawaharlal Nehru University)

Specialization/Areas of interest: Language Typology, Morphology, Language Endangerment, Multilingualism, Sociolinguistics

E-mail: akn@tezu.ernet.in

Bipasha Patgiri, M.Phil. (Jawaharlal Nehru University)

Specialization/Areas of interest: Phonology (Prosody, Dialectology, Language Typology and Syntax)

E-mail: bipasha@tezu.ernet.in

Esther Daimari, Ph.D. (Gauhati University)

Specialization/Areas of interest: South Asian Literature

E-mail: esther@tezu.ernet.in

Amalesh Gope, Ph.D. (IIT Guwahati)

Specialization/Areas of interest: Acoustic Phonetics with special interest in Tone, Psychoacoustics, Computational Linguistics, International Phonology and Language Documentation

E-mail: amaleshgope5sept@gmail.com

Sarat Kumar Doley, Ph.D. (EFLU, Shillong)

Specialization/Areas of interest: English Language Education

E-mail: dolesar@tezu.ernet.in

Technical staff

Hemen Das, M.Sc.(IT) (Gauhati University)

Technical Assistant

E-mail: hemen@tezu.ernet.in

Office staff

Jayanta Kumar Gogoi, M.Com. (Dibrugarh University)

UDC

E-mail: jayanta@tezu.ernet.in

Pranab Kumar Borah

MTS

E-mail: pkbborah@tezu.ernet.in

DEPARTMENT OF FOREIGN LANGUAGES

THE DEPARTMENT

The Department of Foreign Languages was established in 2019. It offers a full-time Certificate Course in Chinese and Open Elective Choice Based Credit Type Courses in German, French and Chinese languages. The Department is committed to foster professionals with competent skills in languages, intercultural communication, international affairs and cultural understanding from various nuanced perspectives. Apart from conventional courses, the Department, at the request of the Indian Army, offered a short-term Chinese course for selected personnel. The Department also organized several online talks by experts as part of its China Studies lecture series.

Academic Programmes and Student intake

Programme	Intake
Certificate Course in Chinese	39
Open Elective in Chinese, German, French	120

Major Facilities and Equipment Available

The Department is in the process of creating Information and Communication Technology facilities. It has a small language laboratory, audio-visual teaching aids, and a small library of foreign-language books.

PUBLICATIONS

Journal Publications

- Lanamai D. & Kikhi K. Contested Borders and Borderlands in Northeast India: (IL) Legitimate Claims of Naga Identity Assertion. *Sociological Bulletin*. 69. (2). 2020.
- Pallavi. The Role of Emotions in Identity Formations of Female Literary Characters in Partition-Narratives. *ShodhSarita*. 7. (28). 2020.
- Pallavi. Representation of the 'Banality of Evil' in Indian Cinema and Web Series. *Jankriti*. 6. (69-70). 2021.

Consultant	Title/Nature of the consultancy work	Client	Amount
R. Chakraborty & D. Lanamai	Customized Training Chinese course in Chinese Language (for Army-sponsored candidates)	Indian Army (HQ 4 Corps)	₹2.75 Lakhs

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w'ps/ sym.	Organized by	Date/Period, year	Place/institute/venue
D. Lanamai	Workshop on Basic Training on Use of ICT in Teaching	Teaching Learning Centre	20-23 April 2020	Tezpur University, Online

D. Lanamai	Zoom Webinar on National Education Policy 2020: Envisaging	Nagaland College Principals' Association	10 August 2020	Japfü Christian College, Online
	Online Panel Discussion on Contesting Narratives: Rethinking the Idea of India's North East.	AtheNEum (A repository of knowledge from North East).	23 January 2021	New Delhi, Online
	The 13th All India Conference of China Studies.	Institute of Chinese Studies (ICS), Delhi and Indian Institute of Technology, Madras (IIT-M) China Studies Centre.	28-30 January 2021	Delhi and Indian Institute of Technology, Madras, Online
Pallavi	Online Basic Training on Use of ICT in Teaching	Teaching Learning Centre, Tezpur University	20-23 April 2020	Tezpur University, Online
	Online FDP on Development of E-Module with Four Quadrant Approach	Teaching Learning Centre, Tezpur University	11-21 December 2020	Tezpur University, Online
	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	Teaching Learning Centre, Tezpur University	15 February – 1 March 2020	Tezpur University, Online
	Webinar on 'The Animal Turn: Animals in Literature and Culture'	Dept of Germanic Studies, EFLU, Hyderabad	12-16 October 2020	EFLU, Hyderabad, Online
R. Chakraborty	Workshop on Academic Integrity with Turnitin	Central Library, Tezpur University and Turnitin	2 June 2020	Tezpur University, Online
	Webinar on Plagiarism Detection Software	Central Library, Tezpur University and INFLIBET	27 June 2020	Tezpur University, Online
R. Chakraborty	Orientation Programme on NAAC Assessment and Accreditation Process	NAAC Council	3 August 2020	Tezpur University, Online
	Workshop on Assessment and Evaluation	Teaching Learning Centre, Tezpur University	24-29 August 2020	Tezpur University, Online

	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	Teaching Learning Centre, Tezpur University	15 February-1 March 2021	Tezpur University, Online
--	--	---	--------------------------	---------------------------

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
D. Lanamai	International webinar on Living in the Present: Nagas in 21 st Century, 'Research Priorities in Contemporary Nagaland'.	6 February 2021	Sanskriti-North Eastern Institute of Cultural Research, Guwahati, Online
	Naming Practices, Narratives and Identity: A Liangmai (Naga) Context	26 November 2020	Naga Scholars' Association, New Delhi, Online
Pallavi	In conversation with Raj Shekhar (Lyricist, Bollywood)	6 June 2020	Theatre Group Sehar, New Delhi Online
	JNU Campus and Women's Freedom (panel talk)	8 March 2021	Aravali Samvaad, JNU, New Delhi, Online
R. Chakraborty	Historical Perspective of Chinese Proverbs	9 December 2020	Understanding China from a Multidisciplinary Perspective, Cheena Bhavan, Visva Bharati, Online
	Challenges of Teaching Chinese in India	18 November 2020	Dept of Foreign Languages, BHU, Online

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Online lecture by Professor Rajendra Dingle, Centre for German Studies, JNU on A Phenomenological Turn in Higher Studies: Foreign Language Teaching and Learning in India	14 October 2020
Online lecture by Dr. Avijit Banerjee, Head of the Department of Chinese, Visva Bharati University on Challenges in Online Foreign Teaching in India in the Midst of the Covid-19 Pandemic	28 December 2020
Online lecture on "The Communist Party of China's Foreign Policy: Of Regime Survival, Status and Power", by Dr. Jacob T. Jabin, Associate Professor of International Relations and Governance Studies at Shiv Nadar University	22 March 2021

THE FACULTY MEMBERS AND STAFF

Professors

Prasanta Kumar Das, PhD (Gauhati University)
Specialization/Research area: Indian anglophone writing
Email: prsntdas@tezu.ernet.in

Assistant Professors

Rathijit Chakraborty, M.Phil. (JNU)
Specialization/Research area: Chinese Language and Literature
Email: rathijit@tezu.ernet.in

Daveirou Lanamai, M. A. (JNU)
Specialization: Chinese Language, Literature & Culture, Folklore & Folk Literature, Intercultural Studies
Email: davei@tezu.ernet.in

Pallavi, Ph.D. (German Studies) (JNU)
Specialization: German Literature, Partition Literature, Literature, Gender and Emotions, Comparative Studies
Email: manjari23@tezu.ernet.in

Office staff

Chandra Shekhar Roy
Office Assistant
Email: chaser7@tezu.ernet.in

Ranjit Saikia
MTS
Email: saikia@tezu.ernet.in

DEPARTMENT OF HINDI

THE DEPARTMENT

The Department of Hindi was established in January 2010 and it started an MA programme in Hindi from 2013. At present the Department also runs the following programmes: Post Graduate Diploma Programme in Translation (Hindi), Hindi as a Modern Indian Language (MIL); PhD in Hindi literature/language). Apart from these programmes, the Department also runs a Certificate Course in Official Hindi (Level-1), which is mean for the employees of the University.

Academic Programmes and Student intake

Programme	Intake
Certificate Course	10
P.G. Diploma in Translation	31
M.A. in Hindi	31
Ph.D.	Variable, 02 in 2020-21

PUBLICATIONS

Journal Publications

- Anju Lata. Bhartiya Bhashaye Evam Vaidik Gayan Vigayan. *Bhasha*. 2020.
- Anju Lata. Mohbhang Ke Dohare Mulya Tatha Mohbhang Ki Vyakhaya. *JNU Parisar*. 2020.
- Anushabda. Naye Pratimanon Ke Nirman aur Samajik Hastakshep Ki Kavita. *Gaveshana*. 2020
- Anushabda. Waishwik Patal Par Pahachan Banata Asamiya Cinema. *Bhasha*. 2020.
- Sharma P. Mahamati Prannath: Bhashayi Ekta ki Talash. *Visvabharati Patrika*. 2020.
- Tripathi S. Pandit Vidyaniwas Mishra Ke Nibandhon Ki Bhashik Banawat-Bunawat. *Visva Hindi Patrika*. 2020.
- Tripathi S. Lokka Sahitya. *Vishwabharati Patrika*. 2020.

Book Chapters

- Anju Lata. Lockdown: Mere Anubhav: Mere Vichar. Lockdown: Mere Anubhav: Mere Vichar. (Ed.) Vidhushi Sharma Vanya Publication, Kanpur. 2020
- Shukla S. Vikalang Vimarsh Aur Asmita Ka Sawal. Uttarshati Ke Sahityik Vimarsh. (Ed.) Pooja Tiwari & Jinit Saba, Notion Press Publication, Chennai, 2020.
- Shukla S. Social Media ki Samajik Pariwartan Mein Mahattwapurna Bhumika. Social Media Aur Hindi. (Ed.) Dr. Kalpana Gavali, Maya Publication, Kanpur. 2020.
- Tripathi S. Bhartiya Bhashaon Mein Ramkatha (Asamiya Bhasha Part-2). Gunon Ke Smuchchay: Ram. In Anushabda (Ed.). Vani Prakashan, New Delhi. 2020.

Books

- Anushabda. Bhartiya Bhasao Main Ramkatha Part-1. Bhartiya Bhasao Main Ramkatha Part-1. Vani Prakashan New Delhi 2020.
- Anushabda. Bhartiya Bhasao Main Ramkatha Part-2. Bhartiya Bhasao Main Ramkatha Part-2. Vani Prakashan New Delhi 2020.

- Anushabda. Rama in the Indian Languages (Assamese Language). Rama in the Indian Languages (Assamese Language). Vani Prakashan New Delhi 2020.

Placement of Students:

Name	Designation	Organisation
Chayanika Saikia	Assistant Professor	Nagaon College
Jashodhara Bora	Assistant Professor	Roha College, Nagaon
Aditi Saikia	Graduate Teacher	Education Dept. Govt. of Assam
Monshree Gogoi	Graduate Teacher	Education Dept. Govt. of Assam
Nilakshee Singh	Graduate Teacher	Education Dept. Govt. of Assam
Trishna Dutta	Hindi Teacher	Education Dept. Govt. of Assam
Bornali Gogoi	Hindi Teacher	Education Dept. Govt. of Assam
Hira Chetry	Hindi Teacher	Education Dept. Govt. of Assam

Qualified Student NET/ JRF:

JRF (UGC): 02

NET: 02

THE FACULTY MEMBERS AND STAFF

Professor

Dr Suryakant Tripathi, Ph.D. (Banaras Hindu University)

Specialization/Areas of Interest: Applied Linguistics, Indian Poetics, Folkloristic

E-mail: sktripathi@tezu.ernet.in

Associate Professor

Dr Anju Lata, Ph.D. (Tezpur University)

Specialization/Areas of Interest: Medieval Poetry, Fiction

E-mail: anju@tezu.ernet.in

Assistant Professors

Dr Anushabda, Ph.D. (University of Delhi)

Specialization/Areas of Interest: Linguistics, Media, Poetry, Indian and Western Poetics.

E-mail: anush@tezu.ernet.in

Dr Pramod Kumar Sharma, Ph.D. (University of Hyderabad)

Specialization/Areas of Interest: Medieval Poetry

E-mail: pramods@tezu.ernet.in

Miss Shipra Shukla, M.Phil. (Delhi)

Specialization/Areas of Interest: Modern Hindi Literature.

E-mail: shipras@tezu.ernet.in

Office staff

Sashi Ingti, B. A. (Gauhati University)

Assistant Email: ingti@tezu.ernet.in

Ajoy Kr. Nath

MTS

DEPARTMENT OF LAW

THE DEPARTMENT

The Department of Law was established in the year 2016-17 under the school of Humanities and Social Sciences with a vision to produce legal luminaries who will add value to the field of teaching, judiciary, law making, law enforcement officers and more importantly work for the society as a good citizen. Presently, the Department is offering two year LL.M. programme with specializations in International Human Rights, International Humanitarian Law & Law Relating to Migrants and Criminology & Criminal law. The objective of the programme is to make the department a vibrant centre of legal education and research and give an opportunity to all aspirants who want to be a good academicians, researchers and work for social transformation. The second batch of the department will soon complete their programme by the end of spring semester 2021. The curriculum was modified giving meaning to evaluation process and procedure to practical papers and dissertation. Amidst COVID 19 Pandemic, the faculty members made remarkable efforts to continue the teaching learning process applying creative pedagogical methods. They were also constantly in touch with the students, making sure that along with their academic progress, the well-being of their mental and physical health is given priority to.

It is the department's priority to inculcate among the student's the quality of a good teacher, social sensitivity and nationalism and towards that end, the department has celebrated Constitutional Day, Human Rights Day, training programme in e-legal resources, etc.

Academic Programmes and Student intake

Programme	Intake
LL.M. (2 Years)	25

PUBLICATIONS

Journal Publications

- Dhar Sarkar M.& Acharjee M. Crime Against Senior Citizens in India: A Glaring Reality. *Indian Journal of Law and Justice*. September 2020.
- Roy P.&Kumar P. Position of RAW as a Surveillance Agency in India: A Brief Study. *Wesleyan Journal of Research*. 2020.

Book Chapters

- A. Syiem, The 'Stay Home, Stay Safe' Paradox. In S. E. Thomas, I. Jaising, A. Agarwal, M. Arya, P. Dhawan & V. Sharma (Eds.). *The Gendered Contagion: Perspectives on Domestic Violence During COVID-19*. National Law School of India University (NLSIU), Bengaluru, Centre for Women and the Law National Law School of India University Nagarbhavi, Bangalore, 2020.

Other Publications:

- D.K. Sarmah, Academic Video Lecture Modules on Media Law course for M.A. Programme in Mass Communication (Open and Distance Learning), Centre for Open and Distance Learning –Institutional LMS, Law and Justice, Tezpur University, 2020.

- D.K. Sarmah, Academic Video Lecture Modules on Media Law course for M.A. Programme in Mass Communication (Open and Distance Learning), Law and Justice, Centre for Open and Distance Learning –Institutional LMS, Tezpur University, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute /venue
A. H. Syiem	Two Day Workshop on Online Basic Training on Use of ICT In Teaching	Teaching and Learning Centre, TU	20-23 April 2020	Tezpur University (Online)
	Two-Day Hands-on Workshop on Integration of Basic ICT tools in teaching pedagogy	Teaching Learning Centre, TU in collaboration with IQAC	8-9 June 2020	Tezpur University (Online)
	Two-Weeks Faculty Development Programme on Advanced Concepts For Developing MOOCS sponsored by MHRD	TLC, Ramanujan College, DU	2-17 July 2020	Ramanujan College, Delhi University (Online)
	Five Days National Workshop on Research Methodology	ICFAI Law School, Dehradun	2-6 August 2020	ICFAI Law School (Online)
D. K. Sarmah	Two-Day Hands-on Workshop on Integration of Basic ICT tools in teaching pedagogy	Teaching Learning Centre, TU in collaboration with IQAC	8- 9 June 2020	Tezpur University (Online)
	Interdisciplinary Refresher Course on Curriculum and Pedagogy	Teaching Learning Centre, TU	1 February- 15 March 2021	Tezpur University (Online)
M. Acharjee	Webinar on Defamation and Freedom of Speech	Law Joint in association with Bar Council of Delhi	5 July 2020	Delhi (Online)
	One Day National Webinar on Intellectual Property Rights: Relevance and Protection Issues and Challenges	Government Centre of Legal Education & IQAC Hooghly Mohsin College	6 July 2020	West Bengal (Online)

M. Acharjee	Webinar on “Human Rights in India During Pandemic Period of Covid -19 with Special Reference to Article 21 of Indian Constitution	IQAC, Guwahati College	07 July 2020	Guwahati, Assam (Online)
	One day National Webinar on Content Analysis as a Tool of Socio Legal Research	Department of Law, The University of Burdwan	10 July 2020	West Bengal (Online)
	Webinar on Constitutional Validity of Capital Punishment	Law Joint in association with Bar Council of Delhi	12 July 2020	Delhi (Online)
	Webinar on “Distance and Online Education in the backdrop of Covid-19: Issues and Challenges	Īndira Gandhi National Open University, Regional Computer Lab (RCL), Agartala Regional Centre	19 July 2020	Agartala (Online)
	National Webinar on Constitutionalism and Transformative Constitutionalism	Department of Law, Gauhati University	17 September 2020	Gauhati (Online)
	Two-Day Hands-on Workshop on Integration of Basic ICT tools in teaching pedagogy	Teaching Learning Centre, TU in collaboration with IQAC	8-9 June 2020	Tezpur University (Online)
P. R. Kumar	Second JNU Workshop for Empowering Teaching through Online Mode(JNU -WETOM II)	JNU, New Delhi	9-10 May 2020	JNU (Online)
	Two Day International Webinar on COVID-19 and Emotional Wellness	School of Education, Central University of Jammu	15-16 May 2020	Jammu (Online)
	International Webinar on Quarantine and Prevention of Disease: International and	Centre of Post Graduate Legal Studies & Department of Human Rights, School of Legal	25May 2020	Lucknow, Uttar Pradesh (Online)

P. R. Kumar	Comparative Law Perspective	Studies, BBA University, Lucknow		
	Webinar on Artificial Intelligence & Its Future Perspective	International School of Management, Patna	30 May2020	Patna, Bihar (Online)
	International Webinar on “Impact of Covid-19 on Environment, Economy and Ethical Empowerment”	St. Andrew`s College, Gorakhpur, Uttar Pradesh	5-6 June 2020	Gorakhpur Uttar Pradesh
	Webinar on International Copyright Treaties and its Relevance for Digital Platform	Legal Aid Committee, Ram Manohar Lohiya National Law University, Lucknow	6 June 2020	Lucknow, Uttar Pradesh (Online)
	Two-Day Hands-on Workshop on Integration of Basic ICT tools in teaching pedagogy	Teaching Learning Centre, TU in collaboration with IQAC	8-9 June2020	Tezpur University (Online)
P. R. Kumar	Third JNU Workshop for Empowering Teaching through Online Mode(JNU -WETOM III) on Online Assessment and Evaluation	JNU-WETOM, Jawahar Law University, New Delhi	13-14 June 2020	New Delhi (Online)
	National Webinar on The Constitution of India and Affirmative Action	IQAC, BRM Government Law College, Guwahati, Assam	17 July 2020	Guwahati Assam (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
A. H. Syiem	Online Special Lecture on Judicial Review and Judicial Activism.	3September 2020	St. Anthony’s College, Department of Political Science, Shillong. (Online)
	Online Lecture on Intervention to Tackle Sexual Assault Against Women.	9October 2020	Chandraprabha Saikiani Center for Women Studies, Tezpur University. (Online)

	Webinar on Human Rights on occasion of Human Rights Day The Pandemic and Human Rights: Impact and Response.	10December 2020	The Legal Care and Support Centre, Department of Law, NEHU in collaboration with the Meghalaya Legal Services Authority. (Online)
	Early Childhood Educators Training Program on Child Sexual Abuse and Law	13December 2020	Assam Rifles Camp, Lokra, Balipara, Assam (Online)
	Online Guest Lecture on Victims under Rome Statute of the International Criminal Court.	18December 2020	National Law University and Judicial Academy, Assam(Online)
P. R. Kumar	Online Lecture Series on Independence of Judiciary and Appointment of Judges in India: Revisiting the Collegium Versus Commission Model	17July 2020	NEF Law College, Christian Basti, Guwahati (Online)
	International Virtual Conference on Re-Skilling of Teachers and National Education Policy-2020	30August 2020	Pt. Kamalapati Tripathi Rajkiya PG College, Chandauli U.P (Online)
	UGC Sponsored Short Term Course on Gender Sensitization	4December2020	UGC Human Resource Development Centre, Sant Gadge Baba Amravati University, Amravati, Maharashtra (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Constitution Day Celebration	26 November 2020
Workshop on SCC Online remote access and legal research webinar	12 June 2020
SCC Online legal research database- My folder and case compilation	27April 2021

OTHER IMPORTANT ACTIVITIES

Outreach programme organized

Citizen's Duties Awareness Program was organised by the Department of Law in collaboration with Department of Justice, Ministry of Law and Justice, Govt. of India. It was a one year long programme starting from 26November 2019 to 26November 2020. 18 Students of the Department acted as presenters and 300 + students have been benefited by the Awareness Program.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET/AIBE

NET: 1

AIBE: 1

NOTABLE PLACEMENTS

Name	Designation	Organization
Dipshreeya Das	Assistant Professor	Arka Jain University
Prince Kumar	Assistant Professor	Geeta Institute of Law
Pompi Saikia	Language Officer	APSC

THE FACULTY MEMBERS AND STAFF**Associate Professors**

PriyaRanjan Kumar, Ph.D. (Gauhati University, Guwahati)

Specialization/Research Area: Constitutional Law, Administrative Law, Law and Social Transformation, Judicial Process, Contract Law, Laws on terrorism

Email: pranjan@tezu.ernet.in

Assistant Professors:

Angel Habamon Syiem, LL.M.(Symbiosis Law School Pune)

Specialization/Research Area: Human Rights Laws and Tribal Issues

Email: angelsy@tezu.ernet.in

Madhumita Acharjee, LL.M. (Assam University)

Specialization/Research Area: Criminal Law, Criminology, Juvenile Justice, Rights of elderly persons

Email: madhuap@tezu.ernet.in

Debajit Kumar Sarmah, LL.M. (Indraprastha University)

Specialization/Research Area: Criminology and Criminal Law

Email: dksarmah@tezu.ernet.in

Office staff

Ms. Meetaly Tamuly

L.D.C

E-mail ID: meetaly@tezu.ernet.in

Chand Md. Ali

M.T.S

E-mail ID: chandmd@tezu.ernet.in

DEPARTMENT OF MASS COMMUNICATION AND JOURNALISM

THE DEPARTMENT

The Department of Mass Communication and Journalism offers conducive learning environment driven by a passion for Media and Communication Studies. The Department is dedicated to the interdisciplinary understanding of communication in an increasingly networked society. As the technological advancement yield a social environment that is constantly changing and evolving; The MA Mass Communication and Journalism (MCJ) and MA Communication for Development (C4D) programmes equip the students with the recent developments in theory and practice while remaining true to the mission of emphasizing professional excellence along with social commitment.

Over the years, the Department has evolved as a nodal centre for teaching-learning, training and research in communication studies with national and international collaborations. This is epitomized in the numerous accolades it has received. It had been placed at the top position among Indian universities in the Times Higher Education Asia University Ranking 2018 in the Communication and Media Studies category. Moreover, our students are well placed in some of the reputed academic institutions, national and international media houses, government and non-government organizations engaged in the development sector.

The Department is committed to exploring ways in which media and communications connect us with the world and how these relationships help shape the societies in which we live. The faculty, with variety of specializations and wide-ranging experience, not only stimulate the students with intellectual curiosity but also facilitate professional competency that is much demanded in an ever-changing communication environment.

Academic Programmes and Student intake

Programme	Intake
M.A in Mass Communication and Journalism (MCJ)	44
M.A in Communication for Development (C4D)	15
Ph.D.	Variable, 05 in 2020-21

Major Facilities and Equipment Available

- 14 Apple computers with Final Cut Pro software for video editing
- TV studio with Panasonic P2 Camera (05 nos.)
- Sony DSR 570wspl Camera (02 nos.)
- Canon 5D Mark III (01 no.), Canon 1500D (05 Nos.)
- Teleprompter and other studio recording facilities
- 11 Nos. of Desktops with Sony Sound Forge with Pro Tools Console for audio editing
- 18 nos. of Windows Intel i7 Desktops with QuarkXpress and Adobe software for print media practical
- Screening hall
- Audio studio with existing equipment

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
Historical Continuity and Cultural Connotations of the Mask Traditions of North East India	ICSSR	₹9.7 Lakhs	2 Years (2020-2022)	J. Chakraborty

PUBLICATIONS**Journal Publications**

- Bora A. Cinema as A Tool for Health and Risk Communication: Issues and Challenges. *Global Media Journal, Indian Edition*. 12(2).2020.
- Bora A.& Deori M. Assamese Cinema through Nine Decades: Challenging Journey with Encouraging Trends. *Global Media Journal – Indian Edition*.12(2).2020.
- Bora A. Education During COVID19 and Beyond: Transition from Face-to-Face to Blended Learning. *Vivekananda Journal of Research*.9(2).2020.
- Bora A.& Behera SK. Challenges of Fake News Mis-information, Dis-information, Mal-information in an Increasingly-Networked Human World. *Communicator*.54(4). 2019.
- Bora A. Health Communication and Beyond: Exploring Newer Horizons. *Communicator*.55(1-2). 2020
- Bora A. National Education Policy-2020: The Policy with futuristic Vision. Special issue on Implementation Strategies for National Education Policy – 2020 – holistic and multidisciplinary education with Technology Integration. *University News*.59.2021
- Deori M., Bora A. & Baruah N. New Media and Vernacular Press: A study on the Status of the Online Journalism in Assam. *Communicator*.57(1-1).2021.
- Malakar K. Informality of Work, Poverty and Feminization of Workforce: Implications of Neoliberalism. *EPRA International Journal of Research and Development (IJRD)*.5(4).2020.
- Pegu U. K. & Paul S. Media Polarization and Assertion of Majoritarianism in Indian News Media. *The Journal of Communication and Media Studies*. 6(2). 2021.

Publications (Research Scholars/Students)

- Sharma H. Stanislavski and Indian Media: An exploration of ‘So Sorry’ Politicians, *Stanislavski Studies*. 9(1). 2021
- Bhuyan K. Paatal Lok: Deconstruction of a Nation through Subaltern Voices. *Economic and Political Weekly*.56(10).2021.
- Barman S. (4th Semester, MAMCJ) story titled “Gud Tidings: Migrant families from Bihar add the sweetness of jaggery to Bhogali Bihu in Assam”.*Gaon Connection*. 2021
- Barman S. (4th Semester, MAMCJ) story titled “Sinking hope: Migrant vendors shifted to Kolkata’s floating market in Patuli to make way for a highway rue loss of livelihood”.*Gaon Connection*. 2021
- Barman S. (4th Semester, MAMCJ) story titled “Assam Election 2021: The story of Assam’s tea workers and broken election promises”.*Gaon Connection*. 2021
- Barman S. (4th Semester, MAMCJ) story titled “From Scheduled Tribe status to battle over ‘D voter’ tag, Assam’s Gorkhas give voice to longstanding demands”.*Firstpost*. 2021

- Kabra A. (4th Semester, MAMCJ) article titled “Mumma’s Baby, Papa’s Maybe”. *The Sentinel*. 2021
- Kabra A. (4th Semester, MAMCJ) article titled “Remembering the legendary women from Doisingari”. *The Hills Times*. 2021
- Kabra A. (4th Semester, MAMCJ) story titled “Assam Assembly Election 2021: From financial inclusion to spurring entrepreneurship, SHGs are driving development”. *Firstpost*. 2021
- Kabra A. (4th Semester, MAMCJ) story titled “Assam Assembly Election 2021: Women healthcare workers rue meagre salary and lack of facilities, say let down by successive govts”. *Firstpost*. 2021.
- Bordoloi M. (4th Semester, MAMCJ) story titled “Assam Assembly Election 2021: Eyeing agripreneurship to secure future, youths seek govt backing for budding sector”. *FirstPost*. 2021
- Bordoloi M. (4th Semester, MAMCJ) story titled , “Entrepreneurship gaining pace among Assam youth, but lack of support makes choice difficult”. *Firstpost*. 2021
- Thapa R. (4th semester, MAMCJ) feature titled “Time to Strengthen India-Nepal Relations”. *The Hills Times Newspaper*. 2021.
- Timsina N. (2nd Semester, MCJ) article titled “Meme fest on track”. *The Assam Tribune*. 2021
- Chatterjee S. (2nd Semester, MCJ) article titled, “Bleak Scenario”. *The Assam Tribune*. 2021
- Pathak D. (2nd Semester, MCJ) article titled “Keeping up with the K- economy”. *Wiser world*. Delhi. 2021
- Pathak D. (2nd Semester, MCJ) article titled “Anime taking over the world: Japan’s soft power”. *Wiser world*. Delhi. 2021
- Pathak D. (2nd Semester, MCJ) article named “Brixit: Britain’s divorce from European union”. *Wiser world*. Delhi. 2021
- Bhuyan K. (2nd Semester, MCJ) article titled “Assamese Cinema Rebounds”. *The Assam Tribune*. 2021
- Bhuyan K. (2nd Semester, MCJ) film review titled “Daai – The World of an Artist”. *MagicalAssam*. 2021

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title of the paper	Organized by	Date/Period, year	Place/institute/venue
A. Borah	Creating Spaces for Children’s Voices: Media Education as a way Forward	International Web-Conventi on Hundred Years of Media Education in South Asia	19-20 December 2020	International Web-Convention Hundred Years of Media Education in South Asia (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
A. Bora	Refresher course for University / College faculty members	19 October 2020	Teaching Learning Centre (TLC) of Tezpur University (Online)

	Crafting the contours of Mass Media for new India: A global perspective	2 November 2020	Dhenkanal (Online)
A. Bora	International symposium on “Evolution of Indian Films over the ages”	20 November 2020	Dept. of History and political Science, JN College, Kuanpal, Cuttack, Odisha (Online)
	National Press Day	16 November 2020	District Library auditorium, Tezpur
	International seminar on “India’s media education: An introspection on quality”	19 December 2020	International Institute of Journalism of EW Scripps School of Journalism of Ohio University, USA and Dr Anamika Ray Memorial Trust (ARMT)(Online)
	International seminar on “Communication research: In search of parameters for glocalization”	20 December 2020	International Institute of Journalism of EW Scripps School of Journalism of Ohio University, USA and Dr Anamika Ray Memorial Trust (ARMT)(Online)
	Faculty Development Programme for University / College teachers	28-29 December 2020	Teaching Learning Centre (TLC) of Tezpur University (Online)
	Radio talk	29 January 2021	All India Radio Guwahati Centre
A. Borah	International conference on Media and children	28 May 2020	Institute of Media Studies, Utkal University(Online)
	Refresher / Training of Executives	18 February 2021	North Eastern Regional Load Dispatch Centre (NERLDC), Power System Operation Corporation Limited (POSOCO), Shillong (Online)
	Refresher / Training of Executives	6 March 2021	National Thermal Power Corporation (NTPC), Ramagundam, Telengana (Online)
J. Chakraborty	Workshop on “Risk Communication on Disaster Management and Crisis Communication”	9 July 2020	Press Information Bureau, Guwahati (Online)

	International webinar on “Development Communication to Communication for Social Change: Contextualizing the changing paradigms”	13 May 2020	Institute of Media Studies, Utkal University, Odisha (Online)
	International webinar on “Communication Technology and Gandhian Philosophy for Human-e Development”	31 August 2020	Tezpur University (Online)
	Webinar on “Communicating Khadi: Gandhi and his symbolism”	11 September 2020	Press Information Bureau, Guwahati (Online)
	International webinar on “Gandhian Philosophy for Endearing ICT centric SGD imperatives in Indian Context”	21-22 November 2020	Institute of Media Studies, Utkal University, Odisha (Online)
	International seminar on “Brand Premiumization”	22 September 2020	Department of Journalism and Mass Communication, Tripura University (Online)
	Assam state-level National Press Day lecture, 2020	16 November 2020	Directorate of Information and Public Relations, Guwahati
	Webinar on “Communicating Climate Change in Developing Societies: The Indian Challenge”	12 January 2021	Press Club, Kolkata (Online)
J Deka	Webinar on “ICT for Development: Socio-cultural Perspective of E-learning Society”	3 June 2020	Institute of Media Studies, Utkal University (Online)
M Deori	Photography workshop for defense personnel	5 February 2021	HQ 4 Corps, Tezpur
P. J.Daimari	Photography workshop for defense personnel	4 February 2021	HQ 4 Corps, Tezpur
S. K. Behera	Research methodology workshop on “Tools of Data Collection: Questionnaire Method”	24 April 2020	Institute of Media Studies, Utkal University (Online)
	Webinar on “Media Response to Crises”	21 December 2020	Press Club, Kolkata (Online)
	Webinar on “Covid-19:	30-31 March 2021	Department of J&MC,

	Media Discourse, Infodemic and Misinfodemic”		Berhampur University Odisha (Online)
	Research Methodology workshop	3-5 November 2020	School of Media Studies, Central University of Kashmir, Srinagar (Online)
	International webinar on “Communication for Development Global to Local”	21 November 2020	Institute for Media Studies and Utkal University, Bhubaneswar (Online)
	International e-conference on mass media	2 November 2020	Department of Mass Communication, Rajiv Gandhi University, Arunachal Pradesh (Online)
	Workshop on New Education Policy 2020	13 August 2020	Press Information Bureau Guwahati (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Webinar on Challenges and Opportunities for media students in the time of COVID 19	26 July 2020
Webinar on Mahatma Gandhi: Making of History and Contemporary	15 August 2020
Day-long session on career prospects	29 October 2020
Online exclusive session on Prevention of Sexual Harassment at Workplace	30 October 2020
Webinar on NGOs in Development Debate	2 December 2020
Online workshop on Fake news and online news verification	10 December 2020
Online workshop Factshala	19 December 2020
Online lectures and workshop on Puppetry	23, 28-29 December 2020
International Webinar SDG Sensitive Risk Communication and Community Engagement (RCCE) Responses to Covid-19	14-17 December 2020
Workshop (blended mode) on COVID-19: Promotion of Health and Well-being of students of North East region	4-5 January 2021
Workshop on Pursuit of Wellness	6-8 January 2021
Workshop on Career opportunities in Mass Communication	9 -10 January 2021
Online workshop C Drive with Sam Rufus	28-30 January 2021
Online lecture series, Digi Dialogues	9-12 February 2021

Lecture series on Digital Technologies: Mediation and Inequities	18-19 February 2021
Webinar on Media reporting on children with vulnerabilities: Perspectives from the JJ Act and POCSO Act including reporting of cases under The Mental Healthcare Act, 2017	10 March 2021

DISTINGUISHED VISITORS

- Prof. Sibnath Deb, Director, RGNIYD.
- Prof. S.K. Deuri, Director, LGBRIMH.
- Prof. Sonia P. Deuri, Head, Department of Psychiatric Social Work, LGBRIMH.
- Prof. Vasanti Rajendran, Head of training at RGNIYD.
- Dr. Nanda Kishore Kannuri, Additional Professor, Indian Institute of Public Health, Hyderabad.
- Dr. Jai Ranjan Ram, Child and Adolescent Psychiatrist.
- Mr Bhaskar Hazarika, Eminent Film Director.
- Mr Amrit Pritam Dutta, Renowned Sound Recording Expert.
- Mr Sushanta Talukdar, editor of www.NEZINE.com.

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Research Scholars/Students

- Abhishek Kabra of MA MCJ 3rd Semester and Himakshi Thakuria of 4th Semester bagged the title of Best Debater and Second-best debater respectively, in the Progran 2.0 at Tezpur University which was sponsored by Oil India Limited.
- Abhishek Kabra (4th semester, MAMCJ) was awarded first prize in a poetry recitation competition on the theme 'Stri' organized by the Chandraprabha Saikiani Centre for Women Studies, Tezpur University on 11 March 2021
- Abhishek Kabra (4th semester, MAMCJ) was awarded Best Debater at 5th Biennial Narayan Chandra Dutta Memorial All Assam Inter College Debating Competition organised by Furkating College on 22nd January, 2021.
- Abhishek Kabra (4th semester, MAMCJ) was invited to present his views at the "Online Comprehensive discussion and analysis of Draft National Youth Policy 2021 with stakeholders" organised by Rajiv Gandhi National Institute of Youth Development, Tamil Nadu (RGNIYD) on 31st March, 2021.
- Anubhuti Dutta received special mention in the photography competition 'Vivid Snaps' organised by CultRang'21, the annual cultural fest of IIT Goa.
- Abhilash Bapanasha, a student of the fourth semester MA MCJ bagged second prize in the Promising Anchor category in "Yuva Media Manthan - Young Media Innovation Award, 2020."
- Chandan Kumar Nath, a first semester student of MA-C4D programme of the Department of MCJ has made his way to the Assam Book of Records for publishing the greatest number of articles and letters (326 articles in three languages) within a span of one year.
- Chandrika Srutikaar (2nd semester, MAMCJ) was awarded second prize in a poetry recitation competition on the theme 'Stri' organized by the Chandraprabha Saikiani Centre for Women Studies, Tezpur University on 11 March 2021
- Dina Abu Jarad of MA MCJ 3rd Semester received 3rd prize in the Citizen Journalism Contest organised by The Assam Tribune in association with Headway Group.
- Harshwardhani Sharma, research scholar in the Dept. of MCJ-TU completed a 14 month tenure at Tallinn University (from November 2019-January 2021), Estonia as a visiting doctoral

student under the Dora Plus mobility grant funded by the European Regional Development Fund.

- Lohita Raulo, research scholar in the Dept. of MCJ-TU received a grant of Rs. 50,000/- for a Project titled 'Assessing Media Information Literacy among Social Media Users to combat 'Fake News': A case study of Ganjam District, Odisha" under Research and Innovation Grant, Tezpur University.
- Neeki Sharma has received certificate of appreciation for performing as a singer in open mic evening 2021 organised by the team "LUST IN WORDS".
- Manaswini Mahanta, research scholar in the Dept. of MCJ-TU participated as an invited speaker at a seminar on "Age of Social Media and Creative writing" organised by Assam Prakashan Parishad on 4 January, 2021.
- Manaswini Mahanta, research scholar in the Dept. of MCJ-TU contributed as the research fellow for a documentary project Baruar Xongxar (House of Baruas) by Utpal Borpujari.
- Parthona Phukan and Arpita Deb of first semester M.A in MCJ have won the 2nd prize in the Team category and Arpita Deb won the 2nd prize in Individual Best Debater category in the Combat of the Intellectuals by IIC Tezpur University.
- Simanta Barman of MA MCJ 3rd Semester bagged third prize at SBI NumeroYono Quiz held on 25th February 2020 at ITA, Machkhuwa, Guwahati.
- Simanta Barman translated the Election Safety Guide developed by the Committee to Protect Journalists (CPJ) from English to Assamese for the 2021 Assembly Elections in Assam.
- Subham Goswami secured fourth position in the "QREKA: The Fresher's Quiz" (Intra Tezpur University) organised by 'Adda Quiz', Tezpur University on 26 April, 2021.
- Subhajit Paul, research scholar in the Dept. of MCJ-TU received a grant of Rs. 50,000/- for a Project titled "Religious Assertion and Media Polarization in Assam: A Case study of the English Print Media in Assam" under Research and Innovation Grant, Tezpur University.
- Richa Chattapadhyay, research scholar in the Dept. of MCJ-TU received a grant of Rs. 50,000/- for a Project titled 'Immateriality' in Material Culture: An Ethnographic Study on the Monpa tribe of Arunachal Pradesh" under Research and Innovation Grant, Tezpur University.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- The Department observed National Press Day (NPD) via online mode on 16 November 2020 on the Press Council of India (PCI) prescribed theme - Role of media during the covid-19 pandemic and its impact of media. Mr A.S. Paneerselvan, Readers' Editor of The Hindu (Chennai), and Ammu Joseph, Independent Journalist and Author (Bengaluru) resourced the session. About 100 enthusiastic participants including department's students, practicing media professionals, media educators etc. were present throughout the discussion.
- Department of MCJ co-organizes "YUVA MANN MEET", a Wellness Festival 2020 YUVA MANN MEET, a virtual Wellness Festival 2020 was organized by Youth Wellness HUB, LGBRIHM, Tezpur in collaborations with Green HUB, Tezpur and Department of Mass Communication and Journalism on 5-6 December 2020 via Zoom platform.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET:

NET: 02

NOTABLE PLACEMENTS

Name	Designation	Organization
Amrita Pritam Borchetia	DevelopmentApprentice	Pradan
Chinmoyee Deka	DevelopmentApprentice	Pradan
Happy Das	DevelopmentApprentice	Pradan

THE FACULTY MEMBERSAND STAFF**Professors**

Sunil Kanta Behera, Ph.D. (Berhampur University, Berhampur)

Professor of Eminence

Specialization/Areas of interest: Communication Theory and Research, Gender and Media

Email: sunitkb@tezu.ernet.in

Abhijit Bora, Ph.D. (Gauhati University)

Professor

Specialization/Areas of interest: Radio and Development Communication

Email: abhijitb@tezu.ernet.in

Joya Chakraborty, Ph.D. (University of Hyderabad)

Professor and Head

Specialization/Areas of interest: ICT for Development, Development Communication, Women and Media; Traditional Media.

Email: jc@tezu.ernet.in, hod_mcj@tezu.ernet.in

Associate Professors

P. Anbarasan, Ph.D. (JNU)

Specialization/Areas of interest: Media Studies, Cultural and Film Studies

Email: anbu@tezu.ernet.in

Uttam Kr. Pegu, Ph.D. (Jamia Milia Islamia)

Specialization/Areas of interest: ICT Implications on Society, Science Communication, Film Studies, Media Analysis

Email: uttamkp@tezu.ernet.in

Assistant Professors

Perosh Jimmy Daimari, Ph.D. (Tezpur University)

Specialization/Areas of interest: Film studies, photography

Email: daimari@tezu.ernet.in

Kapou Malakar, Ph.D. (Tezpur University)

Specialization/Areas of interest: Media History, Political Studies, International Studies, Digital Media, Convergent Journalism

Email: kapou@tezu.ernet.in

Anjuman Borah, Ph.D. (Tezpur University)

Specialization/Areas of interest: Media and Children, Children's Participation, Participatory Communication, Advertising and Public Relations

Email: anjuman@tezu.ernet.in

Junali Deka, Ph.D. (Assam University)

Specialization/Areas of interest: Digital media and society, cultural studies

Email: junalid@tezu.ernet.in

Manoj Deori, Ph.D. (Berhampur University, Berhampur)

Specialization/Areas of interest: New Media Journalism, Multimedia Production, Media and Disaster Management, E-learning

Email: manojdeori@tezu.ernet.in

Technical staff

Ratul Chandra Nath, Ph.D., Tezpur University

Technical Officer

Email: ratul@tezu.ernet.in

Chanchal Singha, BCA, KKHSOU

Senior Technical Assistant

Email: chansan@tezu.ernet.in

Office staff

Mr. Bijoy Mech

LDC

Email: bijoy@tezu.ernet.in

Mr. Bubul Das

MTS

DEPARTMENT OF SOCIAL WORK

THE DEPARTMENT

The Department of Social Work was established in the year 2014 . The mission of the Department has been to train aspiring social workers with the right perspectives, skills , knowledge and professional conduct. The focus of the programmes offered by the Department is to enable young trainees to work efficiently towards enhancing the holistic well-being of the marginalized, vulnerable and the oppressed. Through its intensive field work practicum, the Department continuously emphasizes on the blending of theory into practice. The core values of social justice, dignity, importance of human relations, integrity and competence are embraced and imparted through its curriculum to the social work trainees.

Academic Programmes and Student intake

Programme	Intake
M.A. Social Work	22
Ph.D.	Variable, 01 in 2020-21

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Substance Abuse and Suicidal Behavior among College Students in North East India (on going)	ICMR	₹28.24 Lakhs	18 Months (2021-2022)	A. Saha	
Nasha Mukta Bharat Abhiyaan: A Step to Build Abstemious Society Through Community Intervention and Promoting Healthy Habits (on going)	Ministry of Social Justice and Empowerment Government of India	₹ 18.95 Lakhs	10 months 2021-2022	A. Saha	
State Nutrition and Community Action Resource (NCARe) Centre (on going)	UNICEF, Assam	₹ 44.01 Lakhs	March 2020 – February 2021	C. K. Sharma, Rajesh K & N. Sharma	POSHAN, Abhiyaan , Assam

Journal Publications [in alphabetic order]

- Banik P. Implications of Social Work and Women's livelihood in India. *The Asian Man*. 14(1). 2020.
- Barooah S. Exclusive Commons: The Erosion of Women's Agency in North-East India. *Economic and Political Weekly*. LVI.9. 2021.
- Saha A. Psychiatric Social Work Intervention and Social Functioning for Person with BPAD: A Randomized Control Trial. *Journal of Minerva Psichiatrica*. 61(3). 2020.

Other Publications

- S. Barooah. 'Alternate Abilities and Queerness', Morung Express, December 4, 2020.
- S. Barooah. 'Ageism infused Assam', The Assam Times. January, 2021.
- S. Barooah. '#choosetochallenge', Nagaland Page, March 8, 2021.
- S. Barooah. 'Farmer's Protest from the Gender Diverse Eyes: Monocultures to Pluriversity' The Leaflet, February, 2021.
- S. Barooah. 'Gender Minority: Seeds of Inequality', The Thumbprint Magazine, February 7, 2021.
- S. Barooah. 'Pawns of Patriarchy', The Thumbprint Magazine, March 8, 2021.
- S. Barooah. 'Pride for All', The Assam Tribune, March 26, 2021
- S. Barooah. 'Urban invisibility of Gendered Livelihoods', The Shillong Times, The Arunachal Times, The Sentinel and in the Assam Times, December, 2020.
- S. Barooah. 'Women leading the way,' The Shillong Times, March 22, 2021

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w'ps/sym.	Organized by	Date/Period, year	Place/institute/venue
N. Sharma	Faculty Development Programme on Advanced Concepts for Developing MOOCS	Teaching Learning Centre, Ramanujan College, University of Delhi	2 - 17 July 2020	Ramanujan College, New Delhi, (Online)
R. Kalarivayil	Faculty Development Programme on Managing Online Classes and co-creating MOOCs	Teaching Learning Centre, Ramanujan College, University of Delhi	20 April - 06 May 2020	Ramanujan College, New Delhi, (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
C. K. Sharma	National Webinar on Pedagogical and Technological Challenges of Online Education in Social Science and MSW Course in Particular in the Post-Covid Context organised by North Eastern Institute of Social Science Research (NEISSR), Dimapur, Nagaland, & Jindal School of International Affairs (JSIA), Jindal Global University, Sonapat, Har- yana,	23 November 2020	North-Eastern Institute of Social Science Research (NEISSR), Dimapur, Nagaland (Online)
N. Sharma	Delivered a talk on Child Sexual Abuse in the Early Childhood Education Training Program	13 December 2020	ECDF, Guwahati
	Online workshop on Smart villages by intervention and visible solutions organised by Bineshwar Brahma Engineering College and University of Melbourne	17 September 2020	Smart Village Lab, Bineshwar Brahma Engineering College, (Online)

	E-Conference on Gender during Covid 19: Perspectives from North-East India	25-27 August 2020	Indian Association for Women Studies, Guwahati (Online)
	Delivered a talk on Moving Beyond Covid 19: Sustaining simple lifestyles organized by All India Women's Conference	20 August 2020	All India Women's Conference, South Zone (Online)
	Resource Person on the session Gender Issues in Social Work in Developing Countries in the Online Internship Training Programme organised by NERIWALM, Assam	13 August 2020	NERIWALM, Assam, (Online)
	Talk on "Minimalist Living : A Step toward Nature Conservation" an webinar on the theme "Living with Nature: The Ultimate Solution" organized on World Nature Conservation Day	28 July 2020	Action Aid (Online)
S Barooah	Speaker at the panel discussion on Grassroot Experiences Challenges at the 8 th Indian Social Work Congress.	28 February 2021	Viswa Bharti, Shantiniketan, West Bengal (Online)
	Talk on International Women's Day	8 March 2021	Royal Global University, Guwahati
	Talk on Climate Justice and Gender Justice, on online webinar on Building Solidarity with Youth, Women and Indigenous Communities on Climate Crisis	27 December 2020	Organised by Living Farms, Grain and Rosa Luxemburg Stiftung, South Asia, (Online)
	Resource Person on the session, 'Queer Ecology: Abuse, Justice and Assertion in Post Structural Times,' at Gauhati University	16 December 2020.	UGC Refresher course for University Professors and college teachers at Gauhati University (Online)
	Observer on Cultural Diversity presentations from 3 countries of Germany, Taiwan and India.	9 December, 2020	Assam Don Bosco University, Sonapur, Assam (Online)
	Talk on 'Women, Ecology and Livelihoods: Are they commons?' at Centre for Ecology, Environment and Sustainable Development	2 December, 2020.	TISS, Guwahati (online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Two Day Workshop on Practice of Structural Social Work in Indian Context	18-19 March 2021

Online Workshop on Qualitative Research Methodology for Social Work and Quality Research Communication	22-25 March 2021
Four days workshop on Development Leadership	6-7 March and 20-21 March 2021

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- The students of the Department have joined a larger network of social work students and practitioners in the North East known by the name "All Hands Meet". The group has been contributing significantly to help covid affected people by providing verified leads on various covid related services such as supply of oxygen cylinders, information on hospital beds, food delivery, supply of crucial medicines, plasma etc. The students of the Department have been actively volunteering and involving intensively in all the tasks.
- The State Nutrition and Community Action Resource Centre has carried out monitoring studies on the nutrition services delivery system and submitted the findings with the Ministry of Social Welfare. Based on the findings the ministry has issued directives to all districts for efficient delivery of the services.

NOTABLE PLACEMENTS [2020-21, Report period]

Name	Designation	Organization
Ms. Mantu Das	Organisational Fellow	Drishti Foundation
Ms. Jyotishmita Gogoi	Executive Trainee	SeSTA
Ms. Chayanika Baruah	Executive	Fort Donor and Gramin Vikas Trust
Ms. Dibhya Sharma	Social Worker	181 Women Helpline, Assam Office, Wireless, Dispur.

THE FACULTY MEMBERS AND STAFF

Professors

Chandan Kumar Sharma, Ph.D. (University of Delhi)

Specialization/Research area: Development; Environment; Urbanisation; Agrarian Structure; Social Movements; Ethnicity; Migration; Culture; Society and Politics of Northeastern India.

Email: chandan@tezu.ernet.in

Assistant Professors

Apurba Saha, Ph.D. (NIMHANS)

Specialization/Research area: Social Work & Mental Health, Psychosocial Care in Disaster Management, Street Children, and Application of Social Work Methods.

Email id: apurbasaha@tezu.ernet.in

Veda Yumnam, Ph.D. (JNU)

Specialization/Research area: Social Determinants of Health, Disaster Management, Nutrition, Social Epidemiology of HIV/AIDS, Health Systems Research.

Email id: vedamsw@tezu.ernet.in

Rajesh Kalarivayil, Ph.D. (JNU)

Specialization/Research area: Biomedical Governance, Innovation Studies, Science and Technology in Rural Development.

Email id: rajeshk@tezu.ernet.in

Namami Sharma, Ph.D. (University of Delhi)

Specialization/Research area: Ecology and Social Work, Community based institutions, natural resource management and governance, Community based nature conservation.

Email id: namamis@tezu.ernet.in

Prerana Banik, M.Phil (TISS, Mumbai)

Specialization/Research area :Food security, Gender and livelihood, Labour rights, Inclusive policies and development, Marginalised group and social development

Email id: banikpb@tezu.ernet.in

Guest Faculty

Samhita Barooah, Ph.D. (TISS, Guwahati)

Specialization/Research area: Performing arts in social work, Queer Theory and Social Deviance, Ecology of commons and Queerness, gender diversity and social work, collectives and democracies

Email id: samhitaworld@gmail.com

Office staff

Ms. Kiran Mahalia

Email id: kiran@tezu.ernet.in

Mr. Gunadhar Borah

Email id: guna@tezu.ernet.in

DEPARTMENT OF SOCIOLOGY

THE DEPARTMENT

The Department of Sociology at Tezpur University was established in 2006 with a Masters programme. Subsequently, it launched a Ph.D. programme in 2008. The Department is dedicated toward creating competent and socially sensitive graduates through rigorous teaching/training programmes and extension activities.

The curriculum lays emphasis on the teaching and learning of general concerns of sociology as well as the issues of sociological significance in north-eastern India which constitute a special focus of the teaching and research of the Department. A combination of participatory, experiential and creative pedagogy is used for transacting the curricula with a view to fostering dialogue, mutual learning and critical reflection. The pedagogical practices also utilise an inter-disciplinary framework combining classical approaches in conjunction with emerging areas of research.

Academic Programmes and Student intake

Programme	Intake
M. A. in Sociology	32
Ph.D. in Sociology	Variable, 10 in 2020-21

Major Facilities and Equipment Available

Smart classrooms

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
Vulnerability Analysis of Marginalised Communities in Riverine Islands of Assam	UNICEF, Guwahati.	₹ 5.15 Lakhs	2 Years (July 2019 - December 2020)	A. K. Das
Evidence Generation on Social Protection Schemes to Support Policy Action and Monitoring Mechanisms for Vulnerable and Marginalised Communities of Assam	UNICEF, Guwahati.	₹ 18 lakh	2 Years (2020-2021)	A. K. Das
Inequality and inclusion in Primary Health Care System in India: Comparative analysis of Kerala and Assam	Indian Council of Medical Research, New Delhi.	₹36.4 Lakhs	3 Years (2018-2020)	S. S. Sumesh
Forest and Forest Dwellers of Assam: Searching for a Sustainable Relationship	ICSSR-IMPRESS Project	₹ 8 Lakhs	3 Years (October 2019 - September 2021)	I. Sarma & C. K. Sharma

PUBLICATIONS

Journal Publications

- Borah O. & Das S. Paid and unpaid work during the Covid-19 pandemic: A Study of the Gendered Division of Domestic Responsibilities during Lockdown. *Journal of Gender Studies*. 30(4). 2020.
- Deka R. & Theunuo T. Colonial Rule and Agrarian Transformation in Naga Hills: A Socio-Economic view of Angami Society. *Social Change and Development*. 17(2). 2020.
- Das S. & Borah O. Challenges of Manufacturing Motherhood: Caregivers in the Neo-liberal Economy. *Explorations. E-Journal of Indian Sociological Society*. 4(2). 2020.
- Ray S. The Virality of Pandemics: Reassembling the Social in the Anthropocene. *Culture & Society in South Asia*. 7(1).2021.
- Sumesh S. S. & Gogoi N. A Journey Beyond Colonial History: Coolies in the Making of an Adivasi identity in Assam. *Labor History*. 62(2).2021.

Edited Books

- C. K. Sharma & R. Banerjee (Ed.). Fixed Borders, Fluid Boundaries: Identity, Resources and Mobility in North East India. Routledge, New Delhi,2020.
- S. Jha, D. N. Pathak & A. K. Das (Ed.). Neighborhoods in Urban India: In Between Home and the City, London, Bloomsbury,2021.

Book Chapters

- A. K Das. Governance and Government. In A. Farazmand (Ed.). Global Encyclopedia of Public Administration. Public Policy and Governance, New York, 2020.
- C. K. Sharma. Contextualizing Social Development in Northeast India. In A. Bora, A. Pankaj & A. Bora (Ed.). Social Sector Development in North East India, Routledge, New Delhi, 2020.
- C. K. Sharma. Social and Institutional Engagements in a Periphery: Reflections on a Personal Journey. In A. P. Tandon, G.D. Tripathy & R. Bhargav (Ed.). Social Scientist in South Asia: Personal Narratives, Social Forces and Negotiations. Routledge, New Delhi, 2020.
- C. K. Sharma & R. Bannerjee. 'Periphery Calling: Layers of Divergence" (Introduction). In C.K Sharma & R. Banerjee (Ed.). Fixed Borders, Fluid Boundaries: Identity, Resources and Mobility in North East India. Routledge, New Delhi, 2020.
- C. K. Sharma. Building "India's Future Powerhouse": Discourses of 'Development' and Popular Resistance in Northeast India. In M. Rao (Ed.). Reframing the Environment: Resources, Risk & Resistance in Neoliberal India. Routledge, New Delhi, 2020.
- N. Goswami, Contextualizing Educational Attainment in Assam: Reflecting on Gender Gap. In A. L. Bora, A. Pankaj and A. Bora (Ed.). Social Sector Development in North East India. Routledge, New Delhi, 2021.

Other Publications

- C. K. Sharma. Unabingsha Satikar Asomor Oupanibeshik Arthaniti aru Phulaguri Krishak Bidroh' (The Colonial Economy of Nineteenth Century Assam and Phulaguri Peasant Upsurge). Prakash Publication Board, Govt. of Assam, 2021.

CONSULTANCY

Consultants	Title/Nature of the consultancy work	Client	Amount
A. K. Das	Enhancing the Coverage of Social Protection Schemes through Evidence Generation, Capacity Building, and Budgeting for Children in Assam	UNICEF, Guwahati	₹ 21.04 Lakhs
	Investing in Children: Understanding Vulnerability of Children in Assam amid COVID-19	UNICEF, Guwahati	₹ 5.58 Lakhs
	Designing and Production of Knowledge Inventory for Capacity Building Programmes	UNICEF, Guwahati	₹ 5.05 Lakhs

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, Year	Place/Institute /Venue
C. K. Sharma	Development and the Environment in the Himalayas (Attended as Chairperson)	Dept. of International Relations & Governance Studies, Shiv Nadar University, Gautam Buddha Nagar, UP, with support from the Konrad-Adenauer-Stiftung, India (KAS),	27-28 November 2020	Shiv Nadar University, Gautam Buddha Nagar, UP (Online)
	Gendered Inequalities and Covid 19: Survival Strategies for Women (Attended as Chairperson)	Chandraprabha Saikiani Centre for Women Studies, TU	17 June 2020	Tezpur University (Online)
N. Goswami	Workshop on Leadership Development Programme	HRDC Sagar University	18 - 25 September 2020	Sagar University, M.P. (Online)
	Covid 19 and the Indian Political Landscape: Reexamining the Indian Democratic System Online Symposium	Department of Political Science, Vasanta College for Women, KFI, Rajghat Fort, Varanasi	19 -20 May 2020	Vasanta College for Women, KFI Varanasi, U.P. (Online)

P. Hagjer	North East Regional E-Conference on Gender during Covid: Perspectives from North east India	Indian Association of Women's Studies	25-27 August 2020	IAWS, New Delhi (Online)
R. Deka	Current Literary Trends, Practices and Status of Assamese Literature	Sahitya Akademi In collaboration with the Department of Assamese, T.U.	22 March 2021	Tezpur University (Online)
S. Das	North East Regional E-Conference on Gender during Covid: Perspectives from North east India	Indian Association of Women's Studies	25-27 August 2020	IAWS, New Delhi (Online)
S. Ray	Online FDP on Development of E-Module with Four Quadrant Approach	Teaching & Learning Centre, Tezpur University	11-21 December 2020	Tezpur University (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
C. K. Sharma	National Seminar on Development of Weaker Sections in Northeast India: Issues and Challenges	19 March 2021	Tingkhong College (Dibrugarh University)
	National Webinar on "Impact of Covid 19 on Travel and Tourism Sector of Assam".	4 July 2020	CKB College (Dibrugarh University), Teok, (Online)
	National Webinar on "Women's Rights and Covid 19 Pandemic: Issues and Challenges".	8 August 2020	CKB Commerce College, Jorhat (Dibrugarh University) (Online)
	International Webinar on "Mahatma Gandhi: Reflections from beyond the Past and into the Future".	31 August 2020	Tezpur University & Queens University, Belfast (Online)
	Webinar on Women Migrant Workers: Issues and Challenges During Covid19 Pandemic and Post Pandemic Situation,	26 September 2020	Krishna Kanta Handiqui State Open University, Guwahati, in Collaboration with the National Commission for Women, New Delhi. (Online)
	State of Rivers in Assam: Challenges of Sustainable Management for Ecological and Human Well-Being	27 September 2020	Aaranyak in collaboration with State Innovation and Transformation Ayog (SITA), Government of Assam. (Online)

	National Webinar on Pedagogical and Technological Challenges of Online Education in Social Science and MSW Course in Particular in the Post-Covid Context.	23 November 2020.	North Eastern Institute of Social Science Research (NEISSR), Dimapur, Nagaland, & Jindal School of International Affairs (JSIA), Jindal Global University, Sonapat, Haryana. (Online)
	Issues of Tribal Development in India Refresher Course in Development Studies, UGC-HRDC.	28 December 2020.	University of Burdwan, West Bengal.(Online)
	National Webinar on Society, Individual and Inequality, Dept. of Sociology and Internal Quality Assurance Cell.	6 January 2021	Sidho-Kanho-Birsha University, West Bengal (Online)
	Tribes and the Issue of their Development in India Induction Programme for Faculty members.	23 February 2021	HRDC-Jawaharlal Nehru University, New Delhi. (Online)
	Importance of conserving and developing forest village: a social, economic & cultural perspective Workshop on Nature Studies and Conservation.	9 March 2021.	Nameri National Park. (Online)
P. Hagjer	Understanding Society in times of pandemic: A look into Durkheim's Sociology"	26 August 2020	Department of Sociology, Raha College Nagaon, (Online)
R. Deka	Reflecting on India's Achievements through the Lens of her Past Webinar on "75 years of Independence: Reflecting the Glorious Achievements of India".	12 March 2021.	Tezpur University (Online)
	Significance of Sociology as an Academic Discipline National Webinar on "Sociology as a Discipline: Importance and Recent Development".	15 July 2020.	Kakojan College, Jorhat. (Online)
	Social realism, class conflict and social progress in the songs of Dr. Bhupen Hazarika	26 July 2020	web magazine nezine.com. (Online)
S. Das	Nature of Agriculture and Livelihood in Northeast India	29-30 December 2020	CPPG, Tezpur University and RGNIYD (Online)

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

UGC-SAP (DRS I) (2016-2021) Department of Sociology

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET

NET-JRF: 04

NOTABLE PLACEMENTS

Name	Designation	Organization
Purabi Bhagawati	Assistant Professor	Government Model College, Kaziranga, Assam
Priyanku Hazarika	Assistant Professor	Govt. Model College, Karbi Anglong, Assam
Akhyai Jyoti Mahanta	Assistant Professor	Bir Raghav Moran Government Model College, Tinsukia, Assam dooma
Jagritee Ghosh	Assistant Professor	Royal Global University, Guwahati, Assam

THE FACULTY MEMBERS AND STAFF**Professors**

Chandan Kumar Sharma, Ph.D. (University of Delhi)

Specialization/Area of Interest: Development, Environment, Social Movements, Ethnicity, Migration, Culture, Society and Politics of Northeastern India.

E-mail: chandan@tezu.ernet.in

Rabin Deka, Ph.D. (Dibrugarh University)

Specialization/Area of Interest: Sociological Theories, Sociology of Movement, Agrarian Sociology. E-mail: rdeka@tezu.ernet.in

Kedilezo Kikhi, Ph.D. (North Eastern Hill University)

Specialization/Area of Interest: Research Methodology, Gender and Society, Sociology of Northeast India E-mail: kedi@tezu.ernet.in / kedithejakikhi@yahoo.co.in**Associate Professors**

Amiya Kumar Das, Ph.D. (Tezpur University)

Specialization/Area of Interest: Sociology of Development, Research Methodology in Social Sciences, Sociology of Health and Illness, Sociology of Governance

E-mail: amiyadas@tezu.ernet.in / amiyadas@gmail.com

Assistant Professors

Sumesh S.S., Ph.D. (University of Kerala)

Specialization/Area of Interest: Research Methods, Social Stigma, Social Exclusion, Environment and Movements

E-mail: sumesh@tezu.ernet.in/ sumeshss@gmail.com

Nirmali Goswami, Ph.D. (IIT Kanpur)

Specialization/Area of Interest: Sociology of Education, Education Policy of India, Identity Politics, Multiculturalism, Sociology of Language

E-mail: nirmalig@tezu.ernet.in / nirmalig@gmail.com

Sarmistha Das, Ph.D. (Tezpur University)
Specialization/Area of Interest: Agrarian Studies, Sociology of Family,
Marriage and Kinship
E-mail: sarmistha@tezu.ernet.in

Subhadeepta Ray, Ph.D. (University of Delhi)
Specialization/Area of Interest: Sociology of Science, Sociology of Anthropocene, Social Theory
E-mail: sray@tezu.ernet.in/ subhadeepta@gmail.com

A. S. Shimreiwung, Ph.D. (Jawaharlal Nehru University)
Specialization/Area of Interest: Sociology of Religion, Culture and Art, Tribal Studies, Orality and
Colonial Photography.
E-mail: shim@tezu.ernet.in / shimreiwung@gmail.com

Pamidi Hagjer, Ph.D. (Guwahati University)
Specialization/Area of Interest: Ritual Studies, Kinship,
Sociological Theories.
E-mail: pamidi@tezu.ernet.in / pamihagjer@gmail.com

Office staff

Amarjyoti Bharali
UDC Clerk

Jogen Das
MTS

CENTRE FOR ASSAMESE STUDIES

THE CENTRE

The Centre for Assamese Studies of Tezpur University completed nine years on 7 June 2020. The prime aim of the Centre is to undertake and foster intensive and innovative study and research in Assamese Language, Literature and Culture in their varied dimensions adopting a wide perspective and an all-encompassing worldview.

Academic Programmes and Student intake

Programme	Intake
Ph.D.	Variable, 02 in 2020-21

PUBLICATIONS

Journal Publications

- Dutta J. & Nath D. Sankatkaleen Sahitya aru Adhyayanar Prasangikota (Literature at the Time of Crisis and the Relevance of Reading Literature). *Satsari*. 16(2).2020.

Other Publications

- Dutta J. A short story. Biju Piyaror Hanhi aru Swadhinatar Galpa. (Biju Piyar's Smile and the Story of Independence)" in *Prakash* (ISSN 2279-0683). Third Phase: Vol 200, Pp 55-58, 2020.
- Dutta, J. trans. Siror Babe Ejopa Halodhiya Sonaru (Laburnam for My Head by Temsula Ao.). *Satsari*. 16(8). Pp 111-119. 2021.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title of the Conference/Seminar	Organized by	Date/Period, year	Place/institute/venue
J. Dutta	Assamese Literature in Translation: Theory and Practice	Department of Modern Indian Languages and Literary Studies, University of Delhi	27-28 November 2020	University of Delhi (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
J. Dutta	Web Talk on Bharatiya Sahitya aru Anubadar Prasangikata (Indian Literature, Relevance of Translation)	8 September 2020	Grantha and Cinta Prabah Group and Asam Book Trust (Online).

THE FACULTY MEMBERS AND STAFF

Professors

Prasanta Kumar Das, Ph.D. (Gauhati University)

Head i/c, Centre for Assamese Studies

Specialization/Areas of Interest: Indian Writing in English, American Literature.

E-mail: prsntdas@tezu.ernet.in

Assistant Professor

Juri Dutta, Ph.D. (Rajiv Gandhi University, Arunachal Pradesh)

Specialization/Areas of Interest: Regional Literatures of India, Translation Studies and Comparative Literature.

E-mail: juri@tezu.ernet.in

Office staff

Chandra Sekhar Roy

Office Assistant

Email: chaser7@tezu.ernet.in

Maloti Boro

MTS

CENTRE FOR ENDANGERED LANGUAGES

THE CENTRE

The University has been awarded the Centre for Endangered Languages by the Ministry of Human Resource Development in 2014 .

This is the Nodal Centre for the consortium of North-East India comprising Tezpur University, Rajiv Gandhi University, Arunachal Pradesh and Sikkim University, Sikkim.

The Centre is attached to the Department of English. The Centre also offers two CBCS courses during each semester (Academic session):

- i) LE223 : Language Society and Endangerment
- ii) LE224: Language Policy, Education and Language Revitalization

Major Facilities

Phonetic Lab (With 20 seat capacity)
 Documentation Lab (Recording and Editing Suite)
 Multipurpose Hall
 3 Classrooms with Smart board and Projector facilities

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

The faculty, research associates and field assistants of the Centre have been divided into seven (7) groups for collection of data from the endangered languages being studied at the Center at the moment. Till date six (06) field works have been conducted by the groups and One Awareness Programme at the field for the community members. All the seven groups were sent to the field namely; Manipur, Nagaland and Dima Hasao Areas of Assam for collection of data. Informants of the seven endangered languages have been invited to the Centre for verification of the data collected by the staff during the fieldwork. The table below shows the details of language and areas of study:

State	Groups	Areas	Chosen Endangered Language
Assam	1	Dima Hasao Area	Biате
	2	Dima Hasao Area	Khelma
	3	Dima Hasao Area	Hrangkhol
Manipur	4	Senapati District	Onaeme
	5	Kangpokpi district	Purum
Nagaland	6	Tuensang district	Yimchunger
	7	Tening Peren district	Liangmai

Ongoing activities of the Centre:

1. Metadata of the seven languages Biате, Hrangkhol, Khelma, Onaeme, Purum, Liangmai, and Yimchunger are in process.
2. The grammatical sketch is ready.
3. The Dictionary of Biате, Khelma, Hrangkhol, Onaeme, Purum, Liangmai, and Yimchunger is in process. Around 2500 words from each of the seven languages are ready for the Dictionary. These words were collected during fieldwork as well as extracted from the data collected from the 7 languages.

4. The three books on the Phonology, Morphology, and Syntax on Biäte, Hrangkhoh, Khelma (Assam), Purum, Onaeme (Manipur), Liangmai, and Yimchunger (Nagaland) are published in the month of March 2021.
5. Learner's Book of the Yimchunger Language which could not be printed earlier as two of the staff working in this language had resigned, the book was published March 2021.
6. The CFEL staff and faculties along with the faculties of the Linguistics Wing of Department of English are preparing three Tri-lingual dictionaries of the seven endangered languages. These dictionaries will provide basic phonological, lexical, and grammatical features of Biäte, Hrangkhoh, Khelma, Onaeme, Purum, Liangmai, and Yimchunger. Lexique Pro 8 software is being used in preparing the dictionaries.

Metadata of the Seven languages in brief:

Name of the Language	Types of Metadata	Period	Number of files	Descriptions	Remarks
Biäte	Recordings	2016 to 2020	7	It includes information about audio-recordings related to the word list, narratives, and video recordings, etc.	The metadata will be further updated, appended, or edited as per requirements.
	Files related to analysis	„	1	Information about files for data analysis using PRAAT software for the establishment of tone and the phonemes present in the language	
	Documents	„	1	Information about books and articles published, field notes, collected word lists, and sentence lists, etc.	
	Photos	„	1	Information about the photos related to field works.	
Hrangkhoh	Recordings	2017 to 2020	4	It includes information about audio-recordings related to word lists, narratives, and video recordings of weaving utensils and practices, lullaby, etc.	The metadata will be further updated, appended, or edited as per requirements.
	Files related to analysis	„	1	Information about files for data analysis using software applications like PRAAT, ELAN, FLEX, etc.	
	Documents	„	4	Information about books and articles published, field notes, etc.	

	Photos	„	2	Information about the photos related to field works.	
Onaeme	Recordings	2016 to 2020	9	It includes information about audio-recordings related to word lists, narratives, and video recordings of pottery, lullaby, etc.	The metadata will be further updated, appended, or edited as per requirements.
	Files related to analysis	„	1	Information about files for data analysis using software applications like PRAAT, ELAN, FLEX, etc.	
	Documents	„	1	Information about books and articles published, field notes, etc.	
	Photos	„	1	Information about the photos related to field works.	
Purum	Recordings	2016 to 2020	7	It includes information about audio-recordings related to word lists, sentences, narratives, stories, songs, and lullaby and video recordings of weaving, etc.	The metadata will be further updated, appended, or edited as per requirements.
	Files related to analysis	2016 to 2020	1	Information about files for data analysis and segmentation of wordlist and tone, songs, narratives, stories, lullaby, etc. using software applications like PRAAT & ELAN 5.9	
	Documents	2016 to 2020	1	Information about books and articles published, field notes, etc.	
	Photos	2016 to 2020	1	Information about the photos related to field works.	
Yimchunger	Recordings	2016 to 2020	5	It includes information about audio-recordings related to the word list, narratives, photos, and video recordings of pottery, lullaby, etc.	The metadata will be further updated, appended, or edited as per requirements.

	Files related to analysis	"	1	Information about files for data analysis using software applications like PRAAT, ELAN, FLEX, etc.	
	Documents	"	9	Information about wordlist, sentences, etc.	
	Photos	"	1	Information about the photos related to field works.	

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
UGC Scheme "Establishment of Centre for Endangered Languages"	UGC	6,00,00,000.00	3 years 2015-2018 (Being extended upto 31.03.22)	M. Barbora	Nil
Documentation and Revitalization of Netnyi, Khongdei and Zyphe three endangered languages of the North East India	NEC, Shillong, Govt. of India	7,91,000.00	3 years (2020-2023)	M. Barbora	Nil

PUBLICATIONS

Journal Publications

- Barbora M. Linguistic Diversity: Impact on Lesser Known Languages of North East India. *GUINEIS Journal*. Vol-VI. 2020.
- Longmailai M., Langthasa A., Saikia U., Baruah R., & Tanti B. Western Rengma (Karbi Anglong, India). *Language Snapshot, Language Documentation and Description*. Vol-17, pp 82-86, ISSN: 17406234. 2020
Online Versuib: <http://www..elpublishing.org/PID/184>

- Pal A., Gope A., Athar A. S., & Iannacchione G. S. A comparative study of the drying evolution and dried morphology of two globular protein and de-ionized water Solutions. *RSC Advances*. 10(29).pp. 16906-16916. <https://doi.org/10.1039/D0RA01748E>. 2020
- Raguibou I.D. Causatives in Liangmai. *Himalayan Linguistics*. Volume 1 (1) ISSN 1544-7502. 2020.
- Sarangthem B. The function of the suffix-le as declarative marker in Maram. *Himalayan Linguistics*. Vol-19(2).pp 94-103, ISSN: 1544-7502. 2020

Books

- Widinibou. Aliu naih Pawan. Vol.II. Liangmai Foundation. Baju Associate Multicolor Offset Press. Guwahati. 2020.

Book Chapters

- H. K. Devi, G. Raghav, B. Sarangthem & L.S. Singh. Morphotactics of Manipuri Verbs: A Finite State Approach. In Saha A., Kar N., Deb S (eds). *Advances in Computational Intelligence, Security and Internet of Things*. ICCISIoT 2019. Communications in Computer and Information Science, Vol 1192, Springer, Singapore, 2020.
- M. Sabnam, & A. K. Nath. Expressives in Bodo. In *Queries in the Structure of Language*. Tariq Khan, Central Institute of Indian Languages, Mysuru. 2020.

Other Publications

- Nath A. K. Xongkotot Ishwaror Bakdhara aru Poribortito Prathomikota' (Endangered discourse on God and the changing Priorities) Editorial page of the *Amar Asom*, a popular Assamese daily, 02 June, 2020

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute /venue
B. Sarangthem	Virtual Conference on "the 9th Endangered and Lesser Known Languages (ELKL 9)"	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20 - 21 February 2021	Tezpur (Online)
B. Sarangthem	International Workshop on "Developing an Orthography: Issues and Challenges"	Centre for Endangered Languages (CFEL), Tezpur University	19 February 2021	Tezpur (Online)
B. Sarangthem	Virtual	Royal University	10-12	Tezpur

	International Conference on “Multiple dimensions of South Asian Literary Imagination: Classic to contemporary”	of Bhutan, Yonphula Centenary college, Bhutan	September 2020.	(Online)
	International Webinar on “Languages of North east India”	Centre for Naga Tribal Language Studies (CNTLS) Nagaland University, Kohima Campus	26, 27, 30 July, 3 and 8 August 2020	Tezpur (Online)
D. Borah	Theme “Syntax-Semantics: Theoretical Insights and Applications for Indian Languages” Lecture on “Generative Lexicon: where lexicon meets Syntax and Semantics”	CALTS’ WebTalk Series-1 (talk-4)	5 August 2020	Tezpur (Online)
	International Webinar on “Languages of North east India”	Centre for Naga Tribal Language Studies (CNTLS) Nagaland University Kohima Campus	26, 27, 30 July, 3 and 8 August, 2020	Tezpur (Online)
	Theme “Syntax-Semantics: Theoretical Insights and Applications for Indian Languages” Lecture on “Sentence Novelty and Recursion”	CALTS’ WebTalk Series-1	22 July 2020	Tezpur (Online)
D. Borah	Theme “Syntax-Semantics: Theoretical Insights	CALTS’ WebTalk Series-1	29 July 2020	Tezpur (Online)

	and Applications for Indian Languages” Lecture on Postsyntactic Movements in Mundari			
E. M. Meitei	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20-21 February 2021	Tezpur (Online)
	International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University, Assam	19 February 2021	Tezpur (Online)
G. Pegu	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20-21 February 2021	Tezpur (Online)
	International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University, Assam	19 February 2021	Tezpur (Online)
G.K. Borah	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for	20-22 February 2021	Tezpur (Online)

		Endangered and Lesser known Languages (SEL), Lucknow		
H. S. Singh	Three-Days International Webinar on “Indian Languages”	Department of Linguistics, Assam University, Silchar in collaboration with Tibeto-Burman Linguistics Association of Northeast India (TiBLANEI)	18 - 20 March 2021	Tezpur (Online)
	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20-21 February 2021	Tezpur (Online)
	International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University, Assam	19 February 2021	Tezpur (Online)
I. D. Raguibou	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20-21 February 2021	Tezpur (Online)
	International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University, Assam	19 February 2021	Tezpur (Online)

M. Barbora	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20 - 22 February 2021	Tezpur (Online)
	International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University, Assam	19 February 2021	Tezpur (Online)
P. R. Bhattacharyya	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20 - 22 February 2021	Tezpur (Online)
	One-Day International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University Assam	19 February 2021	Tezpur (Online)
R. Boruah	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20 - 21 February 2021	Tezpur (Online)

R. Boruah	International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University, Assam	19 February 2021	Tezpur (Online)
R. R. Boro	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20 - 21 February, 2021	Tezpur (Online)
	International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University, Assam	19 February 2021	Tezpur (Online)
R Saikia	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20 - 21 February 2021	Tezpur (Online)
	One-Day International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University Assam	19 February 2021	Tezpur (Online)
	Online Talk series on “Assamese Language and Linguistics Talk on: Introducing Mediaeval Assamese”	Department of Assamese, Tezpur University, Assam	23 August 2020	Tezpur (Online)

R Saikia	International Virtual Conference on “Language teaching beyond the Classroom: Issues and perspectives, LATEBECIP 2020”	Centre for Linguistics, JNU, New Delhi	21-22 August 2020	Tezpur (Online)
	International Webinar on “Challenges of Linguistic and Cultural Researchers during and Post-Covid crisis”	CIT Kokrajhar	7 August 2020	Tezpur (Online)
	CALTS Web Talk 1.4 Talk on “Generative Lexicon: where lexicon meets Syntax and Semantics”	University of Hyderabad, Hyderabad	5 August 2020	Tezpur (Online)
	Online Talk Series, Linguistics for Life Episode 3 Talk on “Dealing with variation and change in languages”	IIT Kharagpur	3 August 2020	Tezpur (Online)
	Online Talk Series, Linguistics for Life Episode 3 Talk on “How language science touches our lives”	IIT Kharagpur	2 August 2020	Tezpur (Online)
	Virtual International Webinar on “Languages of North East India”	Centre for Naga Tribal Language Studies (CNTLS) Nagaland University, Kohima Campus	26, 27, 30 July, 3 and 8 August 2020	Tezpur (Online)

Widinibou	International Webinar on “Indian Languages”	Department of Linguistics Assam University, Silchar in Collaboration with Tibeto-Burman Linguistics Association of North East India	18 - 20 March 2021	Tezpur (Online)
	International Linguistics Symposium on “Recent Theories in Linguistics and their Application”	Department of Linguistics, Central University of Rajasthan	17 March 2021	Tezpur (Online)
	Virtual Conference on “the 9th Endangered and Lesser Known Languages (ELKL 9)”	Centre for Endangered Languages (CFEL) Tezpur University, Assam in collaboration with Society for Endangered and Lesser known Languages (SEL), Lucknow	20 - 22 February 2021	Tezpur (Online)
	One-Day International Workshop on “Developing an Orthography: Issues and Challenges”	Centre for Endangered Languages (CFEL) Tezpur University Assam	19 February 2021	Tezpur (Online)
	Two Day National Online Seminar on “Endangered Languages of North East India”	Centre for Endangered Languages (CFEL), Arunachal Institute of Tribal Studies (AITS), Rajiv Gandhi University (RGU), Arunachal Pradesh, India	15-16 June 2020.	Tezpur (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
B. Sarangthem	Invited talk on "Expressives in Meiteilon	9 January 2021	Tibeto-Burman Linguistics Association of North East India (TiBLANEI)
M. Barbora	Invited talk on "Linguistic Diversity: Impact on Lesser known Languages of Northeast India"	7 November 2020	Tibeto-Burman Linguistics Association of North East India TiBLANEI
Widinibou	Online talk on 'The Necessity of Grammatical Structure of Liangmai'	27 February 2021	Liangmai Foundation (LF)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
One-Day International Workshop on Developing an Orthography: Issues and Challenges	19 February 2021
9 th Endangered and Lesser Known Languages (ELKL 9): Virtual Conference	20 - 22 February 2021

OTHER IMPORTANT ACTIVITIES

- i) The 3rd Advisory Committee meeting of CFEL, TU was held on 15 September 2020
- ii) The Cluster Meeting of the North East Cluster of the Centre for Endangered Languages, comprising of Rajiv Gandhi University, Arunachal Pradesh, Sikkim University, Sikkim and Tezpur University, Tezpur was held on 3 November 2020
- iii) UGC Mid-Term Monitoring Committee Meeting was held on 5 March 2021

THE FACULTY MEMBERS AND STAFF

Madhumita Barbora, Ph.D. (Tezpur University)
Specialization/Areas of Interest: Syntax, Field Linguistics: Documentation of Tibeto-Burman languages of North East India and Applied Linguistics
 E-mail: mmb@tezu.ernet.in
 Coordinator, CFEL & Professor, Dept. of English

Faculty members of the Department of English associated with the Centre

Professors

G. K. Borah, Ph.D (NTNU, Trondheim, Norway)

Specialization/Areas of interest: Linguistics (General and Cognitive), Philosophy of Language

E-mail: gkb@tezu.ernet.in

Assistant Professors

A. K. Nath, Ph. D (JNU)

Specialization/Areas of interest: Language Typology, Morphology, Language Endangerment, Multilingualism, Sociolinguistics.

E-mail: akn@tezu.ernet.in

A. Gope, Ph. D (IIT, Gauhati)

Specialization/Areas of interest: Acoustic Phonetics with special interest in Tone, Psychoacoustics, Computational Linguistics, International Phonology and Language Documentation.

E-mail: amalesh@tezu.ernet.in

Bipasha Patgiri, M.Phil (JNU)

Specialization/Areas of interest: Phonetics, Phonology, Historical Linguistics, Dialectology and Language Typology

E-mail: bipasha@tezu.ernet.in

Assistant Professors of CFEL

Bobita Sarangthem, PhD (Manipur University)

Specialization: Descriptive Linguistics, Sociolinguistics, Phonetics and Phonology, Field Linguistics (Endangered Languages)

E-mail: bobsara@tezu.ernet.in

Monali Longmailai, PhD (NEHU)

Specialization: Descriptive Linguistics, Morpho-Syntax, Field Linguistics and Language Documentation

E-mail: monali@tezu.ernet.in

Dr. Monali Longmailai resigned from her post on 31.07.2020 to join as Assistant Professor at Assam University, Silchar

Research Associates

Pushpa Renu Bhattacharyya, PhD (Gauhati University)

Specialization: Descriptive Linguistics and Socio-linguistics

E-mail: pushparb@tezu.ernet.in

Widinibou, PhD (Assam University, Silchar)

Specialization: Phonology and Tibeto-Burman languages

E-mail: widinibou@gmail.com

E.M. Meitei, Ph.D (Manipur University)

Specialization: Phonology, Morphology, Field Linguistics, syntax and socio-linguistics

E-mail: manielangbam8@gmail.com

I.D. Raguibou, Ph.D (Assam University, Silchar)
Specialization: Phonology and Comparative Study
E-mail: daimairagui@yahoo.com

Field Assistants

D. Borah, MA in Linguistics and Language Technology (Tezpur University)
E-mail: dinkur123@gmail.com

R.R. Boro, MA in Linguistics and Language Technology (Tezpur University)
E-mail: raju246@tezu.ernet.in

Rima Saikia, MA in Linguistics and Language Technology (Tezpur University)
E-mail: rimasaikia422@gmail.com

Radhika Boruah, MA in Linguistics and Language Technology (Tezpur University)
E-mail: radhikaboruah6@gmail.com

Mayashri Das, MA in Linguistics and Language Technology (Tezpur University)
E-mail: mayadas086@gmail.com

Ms. Mayashri Das resigned on 14 December 2020 to join as Assistant Professor at Sivsagar Girls College, Sivsagar, Assam

Huiningshumbam Surchandra Singh, Ph.D, Manipur University
E-mail: boinao86@gmail.com

Gunjan Pegu, MA in Linguistics and English Language Teaching (Gauhati University)
E-mail: gunjankopegu@gmail.com

Sagarika Saikia, MA in Linguistics and Language Technology (Tezpur University)
E-mail: saga248.ss@gmail.com

Ms. Saagrika Saikia resigned on 28 February 2021 to join as Warden at National School of Design, Jorhat

Technical staff

Trilok Narzari, MSc-CS (SHIATS)
Technical Assistant
E-mail: trilok@tezu.ernet.in

Office staff

Dipali Sona Nayak, B. Com (Gauhati University)
Upper Division Clerk
E-mail: dipasn@tezu.ernet.in

CHANDRAPRABHA SAIKIANI CENTRE FOR WOMEN STUDIES

The Centre for Women Studies was established in the year 2009. The Centre has earned a name for conducting gender related activities in the region. Awareness, Sensitization and Motivation programmes are transacted at regular intervals. A project sponsored by Indian Council for Historical Research was credited to Centre's account in 2021. A DST project GATI was approved by Ministry of Science and Technology in 2021.

Academic Programmes and Student intake

Programme	Intake
P.G. Diploma	04
Ph.D.	Variable, 03 in 2020-21

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
M. Goswami	<p>Women in Economic Sector in Assam</p> <p>Women have occupied an important space in the market. Case studies incorporated in the project. Agriculture in North East India is the part and parcel of life rather than earning source. It is deep rooted in the culture of the people of the region. The women play a very significant role in agriculture of North East India. Agriculture for the women of North East India is means of life. The amount of small and medium-sized companies and business run by women is increasing.</p>
M. Goswami	<p>Effectiveness of Sexual Harassment of Women at Workplace (Prevention, Prohibition, Redressal) Act 2013 and rules</p> <p>Sexual harassment at work place has become a common issue in all the sectors of working place in the contemporary society. With the globalization phenomenon and changing economic scenario the work force of women has increased and also the sexual harassment of women at work place there under. The transparency between the committee members and the complainant is rare. The issue of effectiveness of the legislation lies on the will of the employers and insensitive functioning of the committee. The findings emphasized on just and humane conditions for work.</p>

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
Lives of the Ritual Priestesses of Assam: A Study with Special Reference to the Institution of Doudini in the Bodo Society.	Indian Council of Historical Research	₹ 2.5 Lakhs	2 Years (2021-2023)	I. Daimary & M. Goswami

DST sponsored Project entitled " Gender Advancement for Transforming Institutions (GATI), New Delhi	Ministry of Science and Technology, New Delhi.	₹ 8 Lakhs	18 months	Nodal Officer M. Goswami
---	--	-----------	-----------	-----------------------------

PUBLICATIONS

Books

- M. Goswami. Chandraprabha Saikiani: A Force in History. DVS Publication, Guwahati, 2020.

Book Chapters

- M. Goswami & M. Mahanta. Globalization as a Threat: Narratives of Women Weavers. In M. Barua (Ed.). Women and Urbanity: Cultural Memory of North-East India. Tezpur University, Napaam, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
I. Daimary	Gender during Covid 19 Perspectives from North East India	IAWS (Indian Association for Women Studies)	25-27 October 2020	IAWS, New Delhi (Online)
M. Goswami	Human Trafficking: Addressing the most vulnerable	Department of Women Studies, Goa University.	14 October 2020	Goa University (Online)
	Opportunities of Funding under TDUPW Scheme of DSIR	Department of Scientific and Industrial Research, New Delhi.	27 November 2020	DSIR Delhi (Online)
M. Mahanta	Health & Wellbeing during COVID-19	Centre for Women Studies, Hamidia Girls Degree College, Constituent College of University of Allahabad.	20 July 2020	Allahabad (Online)
	One Month Certificate Programme on Psychological Counselling in a Gender Perspective	Family Adolescent Counselling Centre, Department of Women's Studies, Bharathidasan University, Khajamalai Campus, Tiruchirappalli in collaboration with University Grants Commission, New Delhi.	21 September - 21 October 2020	Tiruchirappalli (Online)
	5 Days Online Faculty Development Programme on Impact of Covid-19 on Women: Family, Health, Education and Employment	Kuvempu University, Jnanasahyadri, Shankaraghatta.	17 - 21 August 2020	Kuvempu University (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
A. Baishya	Cyber Security and Youth	12 March 2021	Chandraprabha Saikiani Centre for Women Studies Tezpur University in Collaboration with Women Cell, Tetso College, Dimapur. (Online)
M. Goswami	International conference on Strategic Responses towards Promoting Sustainable Gender Equality: Experiences from the Outbreak of COVID-19	23 November 2020	Assam downtown University Assam, in collaboration with Kelem Medha Research and Book Review, Department of Rural Development and Agricultural Extension Dessie Campus 1145, Ethiopia. (Online)
	Universal Human values and Gender Equality	16 November 2020	B. Tech. School of Engineering, Tezpur University. (Online)
	The Challenge of Survival: Uncertainties and Support Structures in a programme on National Virtual Convention on Women's Studies Centres Current Concerns and Challenges: Way Forward	20 February 2021	Indian Association for Women's Studies, Delhi. (Online)
	Women and Leadership Roles	8 March 2021	Assam State Livelihood Mission, Cluster level federation in collaboration with Matri Sangha, Suryamukhi Samiti, Panchami Samiti, Navarun Samiti, Balipara.
	Women and Leadership Roles	8 March 2021	Ei Xomoi (Audio visual magazine). (Online)
	Panellist on the occasion of International Women's Day. "Empowering Women in Science"	8 March 2021	DST-IASST, Guwahati. (Online)

M. Mahanta	Core Paper in MA 4th Semester program on Women and Health 'Gender Dimensions of Mental Health and Wellbeing'	5 August 2020	Department of Women Studies, Gauhati University. (Online)
	International Girl Child Day	11 Oct 2020	Department of Women Studies, Bharatidarshan University. (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Cyber Security and Youth	12 March 2021
Entrepreneurship: A Way Ahead, (Interrogating Questions of Women's work and livelihood)	21 July 2020
Gendered Inequalities and Covid-19: Survival Strategies for Women	17 June 2020
Feminist Anthropological Research and Writing Methodology	15 July 2020
Mental Health Crisis during Covid-19 Pandemic: A Gender Dimension	30 June 2020
Women and Health Inequalities: An Action Approach during Covid 19 Crisis	24 June 2020
Intervention to Tackle Sexual Assault Against Women	9 October 2020
Women Entrepreneurs: Confronting Future Challenges	8 March 2021
Sharing Experiences from the Field: A Research Scholars Initiative	9 March 2021
LGBTQ Movement in Assam	15 March 2021
Women and Leadership in Contemporary Times	16 March 2021

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

Outreach programme organized:

- The Centre organised Food Fight campaign during Covid-19 in the month of July 2020 in collaboration with The EAST (a grassroots philanthropic organization at Tezpur. The economy of this world is heading towards recession due to lockdown. All the cities, towns, transport remained closed and even the people could not move around. A very tough time for all the governments, organizations of the countries. The campaign in collaboration with The EAST started responding to the most vulnerable section like the daily wagers, elderly women, single women, domestic helpers, scheduled caste and other tribes of Assam by distributing dry ration to the needy people. Initially the distribution was started with 35 families from 8th April 2020 slowly increasing with the raise of phone calls from the needy women.
- Organized poster making competition on 10th March, 2021 on the theme: Women as frontline workers during covid 19 world. It was organized in the women's week 2021.
- Organized poetry recitation competition on theme: Stri. It was organized on 11th March 2021 in the women's week, 2021.

THE FACULTY MEMBERS AND STAFF

Associate Professor

Madhurima Goswami, Ph.D. (Tezpur University)

Specialization/Research area: Gender Studies, Critical Theory, Performance Studies and Sanskrit Literature

Email: mgs@tezu.ernet.in

Assistant Professor

Mousumi Mahanta, Ph.D. (Tezpur University)

Specialization/Research area: Gender and Mental Health, Women's Studies, Sociology of Health, Mental Illness, Feminist Research Methodology, Anthropology and Cultural Studies.

Email: mousumi@tezu.ernet.in

Professional Assistant

Abhijit Baishya, MCA (Tezpur University)

Specialization/Research area: Web and Graphic Designing.

Email: abhi@tezu.ernet.in

Date Entry Operator

Pranjal Kumar Sarma, B.A. (Gauhati University)

Email: pranjal@tezu.ernet.in

Research Associate

Dr. Ivy Daimary, Ph.D. (Tezpur University)

Specialization/Research area: Women and Folklore, Women and Media, Cultural Studies, Women Studies

Email: ivy2@tezu.ernet.in

Maloti Boro

MTS

DR. AMBEDKAR CHAIR

Dr. Ambedkar Chair, Tezpur University was established by Dr. Ambedkar Foundation (DAF), Ministry of Social Justice and Empowerment (SJ&E), New Delhi in the year 2016, to serve as core centre for northeast India furthering ideas and philosophy of Dr. B.R. Ambedkar and emancipation of the disadvantaged sections. The thrust area of the Chair is to conduct research on issues related to disadvantaged communities in the context of northeast India with particular emphasis on their marginalisation, development, and participation. The Chair is functioning with the following objectives:

- a) Teaching and research
- b) Building a library
- c) Conducting research projects
- d) Organising public lectures
- e) Conducting awareness and skill development programmes

Dr Ambedkar Chair has also introduced open elective courses at post-graduate and doctoral level w.e.f. autumn semester, 2018.

- a) Philosophy of B.R. Ambedkar & Its Contemporary Relevance (PhD)
- b) B.R. Ambedkar & Constitution of India (PG)

Major Facilities and Equipment Available

Library:

As per mandate, Dr. Ambedkar Chair maintains a library with books on relevant literatures. The Chair has a collection of all the volumes of writings & speeches of Dr. B. R. Ambedkar (BAWS) and a reasonable collection of books on marginalized communities (Scheduled Caste, Scheduled Tribe, Dalit, Adivasi, women, religious minorities, etc.) and northeast.

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator/s	Salient Research Findings
D. R. Gautam & K. Kikhi	<p>An Evaluation of Schemes under Dr. Ambedkar Foundation in the context of Mizoram (DAF, MSJ&E, GOI - Project)</p> <p>From the study it was found that the awareness level of different schemes of Dr Ambedkar Foundation was low among the people in the state of Mizoram. Largely this is due to lack of any awareness initiatives and also due to limited scope for inclusion of the people of Mizoram as well as other north-eastern states for the reason of domination of scheduled tribe population in this region. This is due to the fact that different schemes (except two) were restricted to the people belonging to the scheduled caste community. In the wake of increasing migration and also for the commingling with the other parts of India, there appears a need for the revision of different schemes acknowledging disadvantaged status of scheduled tribe population vis-à-vis other sections of Indian society.</p>

D. R. Gautam & K. Kikhi	<p>An Evaluative Study of Skill Development Training Program in the state of Assam (NBCFDC, GOI - Project)</p> <p>The study has highlighted few points on the basis of empirical findings. These can be stated as:</p> <ol style="list-style-type: none"> Admission process was largely found to be swift Content of the training was satisfactory Strict adherence to the monitoring of attendance Huge social gain, albeit marginal economic gain Marginal reduction in unemployment and marginal enhancement in self-employment
-------------------------------	--

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
Annotated Bibliography on Scheduled Castes and Scheduled Tribes in Social Sciences	DAF, MSJ&E, GOI	₹ 3.75 Lakh	3 Years (2018-21)	D.R. Gautam & K. Kikhi

PUBLICATIONS

Journal Publications

- Kikhi K. The Naga Homeland Movement: Historical Trajectory and Contemporary Relevance, *Economic and Political Weekly (EPW)*. 55(23).2020.
- Kikhi K. Situating 'the Ruling Class' and 'the Social Masses' in Contemporary Naga Society: A Nuanced Perspective, *Man and Society: A Journal of North-East Studies*. XVI, 2020.

CONSULTANCY

Consultants	Title/Nature of the consultancy work	Client	Amount
D.R. Gautam & K. Kikhi	An evaluative study of skill development training programme in Assam	NBCFDC, GOI	₹4.24 Lakh

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period/Year	Place/Institute/Venue
K. Kikhi	Mixed Approach in Social Sciences'. National workshop on Research Methodology in Social Sciences: Integrating Quantitative and Qualitative Methods.	22-26 March 2021	Teaching Learning Centre (TLC), PMMMNMTT, Central University of Punjab
K. Kikhi	Northeast India: Political Institutions, State and Governance'. Refresher Course on Political Science (RC-Pol Sc).	4-17 March 2021	UGC - Human Resource Development Centre, University of North Bengal

K. Kikhi	Webinar on Research Priorities in Contemporary Nagaland.	6 February 2021	Sanskriti (North Eastern Institute of Cultural Research), Guwahati.
K. Kikhi	Panel Speaker. Panel Discussion on Contesting Narratives: Rethinking the Idea of India's North East (?)	23 January 2021	AtheNEum, New Delhi.
K. Kikhi	'Mixed Methods: Quantitative and Qualitative'. FDP (online) on Research Methodology.	7-11 December 2020	Indian Institute of Information Technology (IIIT), Dharwad, Karnataka
K. Kikhi	Panel Speaker. Webinar on National Education Policy 2020: Envisaging a New Nagaland.	10 August 2020	Nagaland College Principals' Association (NCPA) & IQAC, Japfü Christian College, Kigwema.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period/Year
Dr. Ambedkar Memorial Lecture Series (Sixth Lecture) on the theme Ambedkar's View of Nationalism delivered by Prof. Bhikhu Parekh, University of Hull, UK.	24 March 2021
Dr. Ambedkar Memorial Lecture Series (Fifth Lecture) on the theme The Indian Constitution: A Roadmap to Prabuddha Bharat delivered by Prof. N. Sukumar, Political Scientist, University of Delhi.	26 November 2020
Dr. Ambedkar Memorial Lecture Series (Fourth Lecture) on the theme Dr. B. R. Ambedkar: The Life of the Mind and a Life in Politics delivered by DR. Ananya Vajpeyi, Fellow, CSDS, Delhi.	7 August 2020

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- 129th Birth Anniversary Celebration of Dr. B. R. Ambedkar, Floral Tribute (April 14, 2020).
- 65th Mahaparinirvana Diwas of Dr. B. R. Ambedkar, Floral Tribute (December 6, 2020).

THE FACULTY MEMBERS AND STAFF

Professors

Kedilezo Kikhi, Ph.D. (NEHU)

Specialization/Research Area: Sociology of northeast India, Tribal Studies, Ethnic Movements

Email: kedi@tezu.ernet.in

Research Officer

D. R. Gautam, Ph.D. (NIEPA)

Specialization/Research Area: Social Exclusion and Higher Education

Email: dgautam@tezu.ernet.in

SCHOOL OF MANAGEMENT SCIENCES

Dean, School of Management Sciences

Department of Business Administration

Department of Commerce

Centre for Disaster Management

Tezpur University Intellectual Property Rights Cell

DEAN, SCHOOL OF MANAGEMENT SCIENCES

The period of 2020-21 had been very unprecedented and challenging for which no one was exactly prepared. However, the faculty and staff of the School of Management Sciences quickly adapted themselves to the needs of the new normal keeping in mind that the academic curriculum is not affected and students' career is not jeopardized.

The school is comprised of the departments of Commerce and Business Administration, a Centre for Disaster Management (CDM), and Intellectual Property Rights (IPR) Cell. The School offers Master's programmes in Business administration, Travel and Tourism Management, Commerce and Integrated M. Com. (5 years) as well as Bachelor's in Commerce (lateral exit), Ph. D., Certificate programme on Capital Market Management in collaboration with National Stock Exchange of India, P. G. Diploma in Human Resource Management (distance mode). All the Departments, Centres and Cells under this school are also offering open elective courses in their respective domains.

The faculty remained active in the teaching, learning and consultancy work and published 20 journal papers and 2 books; completed 3 reputed projects namely, UGC SAP DRS I, Development of Tourism Convenience Index for Major Tourism Destinations in the State of Assam (govt. of Assam), and Monitoring and Evaluation support to the districts of Assam for safely managed drinking water sponsored by UNICEF. Presently, there are 3 important ongoing projects namely, Post Project Evaluation of Shyama Prasad Mukherjee urban Mission in NE States, Odisha and Bihar; Reviving cultural artefact Gamosa through Intellectual Property Management in Assam; and Innovative supply chain, Forensic Accounting Education in India: Prospects and Problems.

During this period, 4 workshops and one FDP was conducted by the school apart from some online lectures for student engagement. The faculty participated in several skill enhancement workshops specially those related to honing their IT skills for online teaching and evaluation. The IPR Cell filed 3 Patents, Published 7 Patents, and 7 Patents were Granted during this period. 25 papers were presented in conferences by the faculty members with one faculty member Dr. B. Ghose of department of Commerce being awarded the Best paper award for his paper presented in an International Conference. During this period, 59 students (2020 and 2021 passing out batches) from the school received placement offers among which are those from reputed organizations like ITC, Hindustan Unilever, Tata Consultancy Services, Amul, SBI Life Insurance, Vodafone Idea etc.

PERSONAL OF THE OFFICE OF THE DEAN

Dean, School of Management Sciences
Prof. Paporu Baruah

DEPARTMENT OF BUSINESS ADMINISTRATION

THE DEPARTMENT

The Department of Business Administration started its academic programmes in January 1995. The flagship programme of the Department is its 2-year Master's degree in Business Administration. The Department has also introduced a new 2-year Master's degree in Tourism and Travel Management from 2016. Doctor of Philosophy is also offered by the department. The specialized areas include Human Resource Management, Financial Management, Marketing Management, Operations Management, and Information Technology.

The Faculty members of the Department are actively engaged in research and other academic activities, availing of overseas fellowships, and participating in national and international seminars and conferences. The Department has successfully completed UGC-SAP DRS-1. The Department has also been regularly organizing seminars, conferences, symposiums, and refresher courses. It has also been conducting MDPs/FDPs for the corporate executives and academics. The Department is rated A3 by AIMA in 2012. The students of the Department have been bagging various prizes by participating in extra-curricular activities organized in and outside the University. The Department has also ranked 16th in India Today B - School ranking 2018 of Govt. B School (Non IIM & IIT category), and rated "A" by Chronicle B-school survey 2019 and was placed among Top 10 B-school of the Eastern Region.

Academic Programmes and Student intake

Programme	Intake
MBA.	57
MTTM	19
Ph. D.	17 (admitted 16)
NCCMP (Professional Certificate Programme in Stock Markets - 6 months)	35 (admitted 23)

Major Facilities and Equipment Available

Facility	Yes/No	Number/ Capacity
a) Library	Yes	456
b) Internet facilities for staff and students	Yes	-
c) Total number of class rooms	06	186
d) Total number of class rooms with ICT	05	150
e) Board Room	01	30
f) MDP/ Discussion Room-I	01	20
g) Discussion Room-II	01	50
h) Computer Lab	01	32
i) Seminar Hall cum ICT Class Room	01	150
j) Student Lounge	01	40
k) Corporate Lounge / Interview Room	02	-

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
M. K. Sarma	10 major tourist destinations are assessed on availability and perceptions on tourism convenience using triangulation method through Tourist Survey, On site observation and Stakeholders' in-depth interviews. The destinations are evaluated based on the novel Tourism Convenience Index. The index is a two digit (with two digits after decimal) number within 01 to 10.
M. Dutta	<ul style="list-style-type: none"> • There is a research gap for an exhaustive ethnographic study of Gamosa. The project team thinks that little research is available in an organised manner to understand the challenges faced by the supply chain linkages and ethnographic study of Gamosa. Some initiatives are done to bring recognition of Gamosa artefact in terms of Intellectual Property Rights (IPR), but these agencies have lost their interest. • Capacity improvement is required in the documentation of the technology and tacit knowledge of Gamosa. Weavers are deviating from the original style of weaving therefore the authenticity of the Gamosa is losing. The project aims to collaborate with Assam State Museum, Directorate of Handloom & Textiles, and Srimanta Sankardev Kalakshetra Society of Assam. • There is a latent potential in Chariduar Revenue Circle of Sonitpur District, Assam to emerge as a Handloom Cluster. A special purpose vehicle Gamosa Project Management Authority is required to initiate the Gamosa Heritage Protection Bill. • The Project aims to restore the originality and authenticity at the production stage in terms of length, breadth, motif, design, and fabric quality. The project concludes the research gap for rebranding strategy for five differentiated versions of Gamosa.

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Monitoring and Evaluation support to the districts of Assam for safely managed drinking water	UNICEF	69,49,650/-	1 year (2019-2020)	Chandana Goswami (PI) H. Barpujary (Co-PI)	-
UGC SAP DRS II livelihood through Tourism	UGC	39,10,000/-	5 year (2018-2023)	Chandan Goswami	-
Reviving cultural artefact Gamosa	UGC	43,00,000/-	3 year (2020-2023)	M. Dutta	-

through Intellectual Property Management in Assam and Innovative supply chain					
Post Project Evaluation of SHYAMA PRASAD MUKHERJEE RURBAN Mission in NE States, Odisha and Bihar	Ministry of Rural Development, Government of India	73,97,720/-	1 year (2020-2021)	S. S. Sarkar (PI) Papori Baruah (Co-PI)	-

PUBLICATIONS

Journal Publications

- Adhikary B. & Das D. Out-of-Pocket Health Expenses in Rural Settings: An Empirical Study on Financing Pattern and Determinants in Assam, India. *IASSI Quarterly: Contributions to Indian Social Science*. 40(1). Jan-March. 2021.
- Bhatia R. & Baruah P. Exclusive talent management and its consequences: a review of literature. *Asian Journal of Business Ethics*. Springer. 2020.
- Das A. & Das D. Perception, Adoption and Pattern of Usage of FinTech Services by Bank Customers: Evidences from Hojai District of Assam. *Emerging Economy Studies*. 6(1). 2020.
- Dutta D. & Sarma M. K. Service Innovation Typologies and Applications in India: A Literature Review. *International Journal of Business Innovation and Research*. 22(3). IJBIR.2020.10019243. 2020.
- Dutta D. & Sarma M. K. Apps vs. Websites: End Users' Preference in a Continuously Innovating Digital World. *Pacific Business Review International*. 13-23. 2020.
- Dutta D. & Sarma M. K. Adoption of digital innovation: Formulating Adopter categories and levels of adoption in a digital sphere in an emerging economy. *International Journal of Innovation and Technology Management*. 17(8). 2050059-1 - 2050059-21. DOI: 10.1142/S0219877020500595. 2021.
- Gogoi K. & Baruah P. Goal Setting: Its Impact on Employee Outcome. *SCMS Journal of Indian Management*. 18 (1). January - March. 2021.
- Sarkar S. S. Impact Assessment of CSR under Companies Act 2013 in Assam – with respect to SDGs, Submitted to the National Foundation for Corporate Governance (NFCG). a PPP under the Ministry of Corporate Affairs. Government of India and accepted NFCG. 2021.

Conference Proceedings

- Ayengia T. Chetia J. & Baruah P. Revisiting Talent Management Practices in the context of a pandemic driven landscape: A qualitative investigation of Private Sector Organization. *International e-Conference on Changing Global Economic Landscape Challenges, Strategies and Business Resilience*. organized by the Department of Commerce, Christ University and Institute of Management Accountants, USA, 2021.
- Baruah P. & Sarma T.R. Hub and Spoke network design considerations for optimising dry port inland water port river infrastructure in North East India. *In the 4th Doctoral Consortium (SJM SOM)*. organised by IIT Bombay, Mumbai, 2020.

- Bhatia R. & Baruah P. National culture derives the intensity of organizational justice under exclusive talent management strategy: An integrative research. *International E- Conference on Advances in Business and Management*. Shaheed Bhagat Singh College, Department of Commerce, University of Delhi, India, 2021.
- Mehdi M. M. & Sarma T. R. Value Addition of Micro, Small and Medium Enterprises. *In the 6th Management Doctoral Colloquium at VGSOM*. Organised by IIT Kharagpur, West Bengal, February 5-6 2020.

Books

- Baruah R. & Baruah P. Teamwork in Telecom Sector: Notion Press, 2021.
- Mehdi M. M. & Sarma T. R. The Labour, Machine and Material as Sources of Value Addition for SMEs: An Empirical Evidence from India. Edited Books on Challenges and Opportunities for SMEs in Industry 4.0 by N. H. Ahmed, Q. Iqbal & H. A. Halim, IGI Global Publisher, 2020.

Other Publications

Sarkar S. S. Union Budget and Peoples' Welfare. Assam Tribune, P.6. February 09, 2021.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
K. Mahanta	5-day online faculty development programme for teachers in the domain of commerce/management on emerging business issues	Department of Commerce, Tezpur University	11-15 May 2020	Tezpur University, Assam
	Online workshop on innovation management and entrepreneurship development	Indian Institute of Information Technology, Allahabad	20 - 24 July 2020	Indian Institute of Information Technology, Allahabad
	National level webinar Enhancement of Writing Skill of Theses and Research papers: some tips	CKB commerce college	10 August 2020	CKB commerce college, Assam
	National level webinar on National Education Policy 2020: Its impact on management education	Department of Business Administration	22 August, 2020	Assam University, Silchar
	Online Workshop on Assessment and Evaluation conducted in Online Mode	Teaching Learning Centre, Tezpur University under PMMMNTT Scheme of	24 - 29 August 2020	Tezpur University, Assam

		Ministry of Education, Government of India		
	Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	TLC, Tezpur University under the prestigious PMMMNMTT Scheme, Ministry of Education, Govt. of India	08 - 22 October 2020	Tezpur University, Assam
Prayash Baruah	Online FDP for Teachers in the domain of commerce / management	Dept. of Commerce, Tezpur University	11-15 May 2020	Tezpur University, Assam
	International online course on "Educational Innovation in Corona Times Asian Region Countries	MeTC MASHAV Israel Government	June 2020	Israel Government
	Logistics Management in the Emergent North-East India: Strategic and Developmental Imperatives	Dr. APJ Abdul Kalam Centre for Policy Research and Analysis, IIM Shillong	11 July 2020	IIM, Shillong
T. R. Sarma	Faculty Development Programme on "Financial Management: Teaching and Research Perspective"	Indian Institute of Management, Indore	15-26 February 2021	Indian Institute of Management, Indore

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
Papori Baruah	Personality Development in the "Employability and Entrepreneurship skill development opportunities for the Youth of North East India" in the North East India level workshop	27 November 2020	Tezpur University, Assam
Prayash Baruah	Higher Education and Technology' Higher Education, Technology and Research Methodology	2 - 15 August 2020	Department of Social Work, Assam University

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Digital Workshop on Community- Based Tourism post COVID-19, An initiative under UGC-SAP	27 July 2020
Online workshop on “Young Leaders Development Program”	25 February 2021
Online seminar on “The Opportunities in the finance domain in General”	19 March 2021

DISTINGUISHED VISITORS

- Mr. Mrityunjoy Kr. Ram, FA, Fin Advisor Consulting Pvt. Ltd.
- Ms. Roshmi Borthakur, Executive Director, Amber Consulting

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS**Faculty members and Staff**

Award/honour	Awardee(s)	Awarded by	Month / Year
Best Online Courses of All Time	S. S. Sarkar	Classcentral.com UNDER THE SOCIAL SCIENCE CATEGORY	2020

Research Scholar/Student

Award/honour, Awardee(s), Awarded by (agency/organization/etc.)

Award/honour	Awardee(s)	Awarded by	Month / Year
MIT COVID 19 Challenge: Beat the Pandemic II	D. J. Gurung	Massachusetts Institute of Technology, Cambridge, United States	1 June 2020
MIT Covid-19 Challenge: India turning the tide	D. J. Gurung	Massachusetts Institute of Technology, Cambridge, United States	30 August 2020
New Best Seller Award	M. Mehdi	Ivey Publishing, Ivey Business School at Western University, Canada	2020 - 2021

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET

NET – JRF : 01

NET NFOBC JRF : 01

NOTABLE PLACEMENTS

Name	Designation	Organization
Kalyani Devi	Management Trainee	SBI life
Sanhati Goswami	Management Trainee	DHL Global.Forwarding

ParthaKishor Bora	Management Trainee	SBI life
Arunav Mili	HR Trainee	Jubilant Foodworks Limited
Hirakranjan Choudhury	Management Trainee	SBI Life
Pritom Kumar Rajkhowa	Executive Trainee	Hindustan Unilever Limited
Krishnika Kashyap	Management Trainee	SBI Life
Antonu Dutta	Logistics Trainee	ITC Ltd.
Partha Pratim Borah	Territory Sales In-charge	AMUL
Noyanika Buragohain	Client servicing executive	Kuhipaath Communications and Technology Pvt. Ltd.
Shabana Azmi Hussain	Business development trainee	Byju's
Tania Choudhury	Executive Trainee	Hindustan Unilever Limited
Jitakhshi Dutta Hazarika	Trainee Account Executive	Adfactors PR
Priyanka Das	Territory Sales manager	Vodafone Idea Limited
Supriya Das	Trainee Account Executive	Adfactors PR
Merupranta Saikia	Executive Trainee	Hindustan Unilever Limited
Madhurjya Sarma	Youth For India Fellow	SBI Foundation
Dipom Kumar Nath	Business Development Manager	Travelidea
Yuvraj Phukan	Team Leader Operation	Inox Leisure Ltd.
Subung Warner Phulari	Founder	Wildchilids Tours and Travels
Sashanka Sukla Boidya	Business Development Executive	Byjus
Subhadarsan Bhuyan	Enajori Travels	Co-founder

THE FACULTY MEMBERS AND STAFF

Professors

Chandana Goswami, Ph. D. (Gauhati University) FDP (IIMA)

Specializations/Areas of interest: Financial Management, General Management

Email: cg1@tezu.ernet.in

Chandan Goswami, Ph. D. (Tezpur University)

Specialization/Areas of interest: Marketing Management

Email: chand@tezu.ernet.in

Debabrata Das, Ph. D. (RGU), AIII (Mumbai)

Specializations/Areas of interest: Financial Management

Email: ddas09@tezu.ernet.in

Mrinmoy Kumar Sarma, Ph. D. (Tezpur University)

Specializations/Areas of interest: Marketing, Tourism Management

Email: mrinmoy@tezu.ernet.in

Papori Baruah, Ph. D. (Tezpur University)

Specialization/Areas of interest: Human Resource Management

Email: papori@tezu.ernet.in

Subhrangshu Sekhar Sarkar, Ph. D. (Tezpur University)

Specializations/Areas of interest: Financial Management, Accounting & Taxation

Email: subh@tezu.ernet.in

Associate Professors

Anjan Bhuyan, Ph. D. (Tezpur University)

Specialization/Areas of interest: Managerial Economics, Entrepreneurship Development

Email: anjanb@tezu.ernet.in

Arup Roy, Ph. D. (Tezpur University)

Specialization/Areas of interest: Financial Management

Email: arup@tezu.ernet.in

Tridib Ranjan Sarma, Ph. D. (Tezpur University)

Specialization/Areas of interest: System Management and Operation Management

Email: tridib@tezu.ernet.in

Assistant Professors

Heera Barpujary, Ph. D. (Tezpur University)

Specialization/Areas of interest: System Management and Knowledge Management

Email: heera@tezu.ernet.in

Kakali Mahanta, Ph. D. (Dibrugarh University)

Specialization/Areas of interest: Marketing, Human Resource Management

Email: kakali@tezu.ernet.in

Mridul Dutta, Ph. D. (Gauhati University)

Specialization/Areas of interest: Tourism

Email: mridul@tezu.ernet.in

Prayash Baruah, MBA. (SIU, Pune)

Specialization/Areas of interest: Supply Chain management, Logistics, Transportation

Email: prayashb@tezu.ernet.in

Runumi Das, Ph. D. (Gauhati University)

Specialization/Areas of interest: Marketing Management

Email: runumi@tezu.ernet.in

Adjunct Faculty

Amlan Bora MBA. (AIT)

Trade and Investment Commissioner, NBSO.

Specialization/Areas of interest: Brand Management

Guest Faculty

Niranjan Das, Ph. D. (NEHU)

Specialization/Areas of interest: Tourism, Community Livelihood

E-mail: niranjandas@tezu.ernet.in

Hiranya K. Nath, Ph. D.

Specialization/Areas of interest: Economics

Professor, Department of Economics and Intl. Business

Sam Houston State University, Huntsville, TX 77341-2118

Sandeep Jain

Specialization/Areas of interest: Entrepreneurship Development

Lead- Innovation Start Up and ED Cell

Lead FMB Suryadatta Group of Institutions

E-mail: Jain35@gmail.com

CS Amitava Banerjee

Specialization/Areas of interest: Business Law, Companies Act 2013

Email: amitbanerjee1979@gmail.com

Jitendra Ladha

Specialization/Areas of interest: Tally Specialist

Todi House, Main Road

Email: jitendraladha@hotmail.com

Indrajit Dutta

Specialization/Areas of interest: Hospitality Management

Assistant Professor, Royal Global University, Guwahati

Email: rondutta72@gmail.com

Technical staff

TarunJyoti Borah, M. Phil. (NOU)

Senior Technical Assistant

Email: taruntu@tezu.ernet.in

Kushal Roy, DETC (AEI)

Technical Assistant

Email: kushal@tezu.ernet.in

Office staff

Subham Paul, MTTM (Tezpur University)

Office Assistant

Email: subhamp@tezu.ernet.in

Suren Kumar Borah

MTS

DEPARTMENT OF COMMERCE

THE DEPARTMENT

The Department of Commerce is the second department established under the School of Management Sciences. It came into existence in the year 2013. It is relatively a new department compared to other departments of the University. The department has been offering 5 years Integrated Master of Commerce (M. Com.) programme since 2014. The Integrated M. Com. programme is offered with the options of lateral exit on successful completion of six semesters with B. Com. (Hons.) degree and lateral entry in the Seventh Semester (subject to fulfilment of eligibility criteria) for the M. Com. Degree. The thrust areas of the department are Accounting and Taxation, and Banking and Finance. The department is offering Doctor of Philosophy (Ph. D.) in Commerce from the academic session 2020-2021. Scholars joining the Ph. D. programme in the department need to compulsorily complete the coursework of 16 credits over the period of two academic semesters. The department aims to ensure that, the scholars completing the Ph. D. course from the department can establish them in the field of academics and can make qualitative and meaningful contribution to the existing body of knowledge. Apart from providing quality education, this department ensures that the youths can face the various competitive examinations and pursue various other courses. The Department aims to impart quality education to its students and inculcate research culture among them, so that they are equipped with necessary skills and knowledge needed for employment in corporate sectors and pursue research works.

Academic Programmes and Student intake

Programme	Intake
Integrated M. Com.	33
M. Com.	Variable, 17 in 2020-21
Ph. D.	Variable, 03 in 2020-21

Major Facilities and Equipment Available

- Interactive Pen Display
- Electronic Podium with Microphone and Speaker
- Student Response system

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Forensic Accounting Education in India: Prospects and Problems	ICSSR-IMPRESS	10,00,000/-	2 years (2020-2022)	R. K. Tiwari	-

PUBLICATIONS

Journal Publications

- Debnath J. & Tiwari R. K. Research and Teaching in Higher Education: The Trade Off. *Research and Reflections on Education*. 18 (2). 2020.
- Ghose B. & Kabra K. C. Does Growth Affect Firms' Leverage Adjustment Speed? A Study of Indian Firms. *Business Perspective and Research*. 8(2). 2020.
- Maji S. G. & Goswami M. Is the influence of intellectual capital on firm performance homogeneous? Evidence from India employing quantile regression model. *International Journal of Learning and Intellectual Capital*. 17(2). 2020.
- Maji S. G., De U. K. & Gunardi A. Simultaneous Association between Quality of Environmental Performance and Financial Performance: Evidence from select Asian Countries. *Indonesian Journal of Sustainability Accounting and Management*. 4(1). 2020.
- Maji S. G. & Hussain F. Technical efficiency, intellectual capital efficiency and bank performance in emerging markets: the case of India. *Journal of Advances in Management Research*. Online (EarlyCite). 2021.
- Maji S. G. & Hussain F. Technical efficiency, intellectual capital efficiency and bank performance in emerging markets: the case of India. *Journal of Advances in Management Research*. Online (EarlyCite). 2021.

Book Chapters

- B. Ghosh & B. Ghose. CSR activities of Numaligarh Refinery Ltd. (NRL): A case Study. In Dr. Horeswar Das. *Cognition: Multidisciplinary Research*. Unika Prakashan, Jorhat, Assam, 2021.
- R. K. Tiwari. Select Emerging Macroeconomic Issues. In Utpal Deka. *Macro Economics*. Registrar, Krishna Kanta Handiqui State Open University, Guwahati, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
B. Ghose	One Week Online Faculty Development Programme on LaTeX	Department of Information Technology, Mizoram University, Mizoram	29 June - 03 July 2020	Department of Information Technology, Mizoram University, Mizoram
	International Conference on Business Management and Education in the New Global Realities	JAIN University, Bangalore, Karnataka	22 December 2020	JAIN University, Bangalore, Karnataka
B. Ghose	National seminar on Local Governance and Management in North-East India	Mizoram University, Mizoram	14 - 15 January 2020	Mizoram University, Mizoram
	International Conference on	Management Development Institute	19 - 21 March 2021	Management Development

	Changing Business Paradigm, (ICCBP)	Mushidabad, West Bengal		Institute Mushidabad, West Bengal
D. J. Bharadwaz	Managing Online Classes & Co-Creating MOOCS: 2.0	Teaching Learning Centre, Ramanujan College, University of Delhi	18 May - 03 June 2020	Teaching Learning Centre, Ramanujan College, University of Delhi
	Open-Source Tools for Research	Teaching Learning Centre, Ramanujan College, University of Delhi	08 - 14 June 2020	Teaching Learning Centre, Ramanujan College, University of Delhi
	4-Week Induction/Orientation Programme for Faculty in Universities/Colleges/Institutes of Higher Education	Teaching Learning Centre, Ramanujan College, University of Delhi	26 June - 24 June 2020	Teaching Learning Centre, Ramanujan College, University of Delhi
	Online FDP on Development of E-Module with Four Quadrant Approach	Teaching Learning Centre, Tezpur University	11 - 21 December 2020	Teaching Learning Centre, Tezpur University
	5 Day (10 Hours) Online Faculty Development Programme for Teachers in the Domain of Commerce/Management	Department of Commerce, Tezpur University	11 - 15 May 2020	Department of Commerce, Tezpur University
	International Conference on Changing Business Paradigm, (ICCBP)	Management Development Institute Murshidabad, West Bengal	19 - 21 March 2021	Management Development Institute Murshidabad, West Bengal
	International E-Conference on Advances in Business and Management	Shaheed Bhagat Singh College, Department of Commerce, University of Delhi, India	4 - 6 March 2021	Shaheed Bhagat Singh College, Department of Commerce, University of Delhi, India
F. Hussain	The Bodhi Tree and SAFE Tools for Effective Online Teaching: A Hands-	Teaching Learning Centre (ICT), IIT Bombay	20 - 21 June 2020	IIT Bombay

	On Workshop (in online mode)			
	National Webinar on Doubling Farmer's Income and Nutritional Security: Role of Traditional and New High Value Crops in North East India	National Institute of Rural Development & Panchayati Raj at Guwahati, Assam	28 - 29 October 2020	NIRD, Guwahati
	21st International Business Horizon INBUSH ERA WORLD SUMMIT 2021	Amity University, Noida	17 - 19 February 2021	Amity University, Noida
	International Conference on Changing Business Paradigm, (ICCBP)	Management Development Institute Murshidabad, West Bengal	19 - 21 March 2021	Management Development Institute Murshidabad, West Bengal
M. Kumar	One Week Online Faculty Development Programme on LaTeX	Department of Information Technology, Mizoram University, Mizoram	29 June - 03 July 2020	Mizoram University, Mizoram
	4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education"	Teaching Learning Centre, Ramanujan College, University of Delhi	04 June - 01 July 2020	Ramanujan College, University of Delhi
S. G. Maji	ADMAA Online International Faculty Development Programme on "Building Research Skills for Career Development and Nation Building"	Amity Directorate of Management & Allied Areas (ADMAA), Noida	15 September 2020	Amity University, Noida
	Impact of Covid -19 on Cost Behavior in Hospitals	Amity Directorate of Management & Allied Areas (ADMAA), Noida	25 September 2020	Amity University, Noida
	21st International Business Horizon INBUSH ERA WORLD SUMMIT 2021	Amity University, Noida	17 - 19 February 2021	Amity University, Noida

	International Conference on Changing Business Paradigm, (ICCBP)	Management Development Institute Murshidabad, West Bengal	19 - 21 March 2021	Management Development Institute Murshidabad, West Bengal
--	---	---	--------------------	---

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
S. G. Maji	International Webinar On "Recent Researches in Accounting and Finance"	28 - 29 December 2020	Indian Accounting Association South Bengal Branch

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
5 Day (10 Hours) Online Faculty Development Programme for Teachers in the Domain of Commerce/Management	11 - 15 May 2020

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Faculty members and staff

B. Ghose won Best paper award for paper presented in International Conference on Changing Business Paradigm, Management Development Institute Murshidabad, West Bengal, 2021.

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET

NET : 03
NET JRF : 02

NOTABLE PLACEMENTS

Name	Designation	Organization
Bitopan Das	District Financial Management Specialist	Public Health Engineering Department, Assam
Stayajeet Bhuyan	Trade Apprentice	Guwahati Siliguri Pipeline Ltd. (IOCL)
Bhaswati Barman	Associate Analyst	XL Dynamics India Pvt. Ltd. Guwahati
Vishal Kumar Thakuria	Business Development Associate	Sapient Wealth Advisor & Brokers Pvt. Ltd. Guwahati
Aparajita Borthakur	Associate Analyst	XL Dynamics India Pvt. Ltd. Guwahati
Manish Saha	District Financial Management Specialist	Public Health Engineering Department, Assam
Saswati Borah	Associate Analyst	XL Dynamics India Pvt. Ltd. Guwahati
Gorima Sonowal	Associate Accounts Officer	Assam Power Distribution Company Limited

THE FACULTY MEMBERS AND STAFF

Associate Professor

Santi Gopal Maji, Ph. D. (University of Burdwan)

Specialization/Research area: Intellectual Capital, Corporate Sustainability and Sustainable Development, Risk Management, Corporate Governance

Email: sgmaji@tezu.ernet.in

Assistant Professors

Biswajit Ghose, Ph. D. (North-Eastern Hill University)

Specialization/Areas of Interest: Corporate Finance, Corporate Governance, Microfinance

Email: bghose@tezu.ernet.in

Dhritabrata Jyoti Bharadwaz, M. Phil. (Dibrugarh University)

Specialization/Areas of Interest: Accounting, Micro Finance and Risk Management

Email: bharadj@tezu.ernet.in

Farah Hussain, Ph. D. (Dibrugarh University)

Specialization/Areas of Interest: Econometrics, Mathematical Economics, Development Economics

Email: farah@tezu.ernet.in

Manish Kumar, Ph. D. (Delhi University)

Specialization/Areas of Interest: Corporate Finance and Accounting

Email: manish@tezu.ernet.in

Reshma Tiwari, Ph. D. (Gauhati University)

Specialization/Areas of Interest: Accounting, Auditing, Forensic Accounting

Email: reshma@tezu.ernet.in

Visiting Faculty

A. Chowdhury

Specialization/Areas of Interest: Soft Skills Trainer and Career Counseling

A. Banerjee, CS

Specialization/Areas of Interest: Corporate Governance & Company Act.

Shobhan Singh Khanka, Ph. D.

Specialization/Areas of Interest: Entrepreneurship

K. Ramesha, Ph. D.

Specialization/Areas of Interest: Banking and Finance

Jitendra Ladha

Specialization/Areas of Interest: Tally

Rishabh Goswami

Specialization/Areas of Interest: Accounting and Finance

Manoj Khaund

Specialization/Areas of Interest: Management & Marketing

Rupjyoti Saha

Specialization/Areas of Interest: Accounting & Finance

Ananya Sarmah
Specialization/Areas of Interest: Finance

Purnima Singh, Ph. D.
Specialization/Areas of Interest: Accounting and Finance

Office staff

Bijoy Kumar Domai
Office Assistant
Email: bdomai@tezu.ernet.in

Nipen Dutta
MTS
Email: nipend@tezu.ernet.in

CENTRE FOR DISASTER MANAGEMENT

THE CENTRE

Centre for Disaster Management was established in 1997 under the Central Sector Scheme of NDM Division, Ministry of Agriculture and Cooperation, Government of India. The scheme has subsequently been transferred to the Ministry of Home Affairs, Government of India during 2002. At present the Centre is functioning under Tezpur University. The main objectives of the Centre are to:

- Organise and conduct training programmes, conferences, and workshops on disaster management.
- Extend academic support to other organisations.
- Conduct regular / optional courses and research work on Disaster Management.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
D. Nath	Webinar on India Universities and Institutions Network for Disaster Risk Reduction (IUIIN-DRR) – PM's 10 point agenda on DRR	NIDM, New Delhi	16 September 2020	NIDM, New Delhi
	Faculty Development Programme: Teachers' Training on Disaster Risk Reduction and Resilience	NIDM, New Delhi	21– 25 September 2020	NIDM, New Delhi

OTHER IMPORTANT ACTIVITIES

COURSES / PROGRAMME CONDUCTED

- Open elective / skill enhancement course on Disaster Management for UG students.
- Open elective course on Disaster Management for PG students.
- Post Graduate Diploma in Environment and Disaster Management under CDOE, Tezpur University, in association with the Department of Environmental Science.

THE FACULTY MEMBERS AND STAFF

Assistant Professor

Dipak Nath, Ph. D. (Gauhati University)

Specialization/Areas of Interest: Nuclear Physics & Cosmic Radiation / Disaster Risk Assessment

Email: dipak@tezu.ernet.in

INTELLECTUAL PROPERTY RIGHTS CELL

THE CELL

The nation is at a crossroad with the new IP policy for achieving self-reliant India. The universities are important cradle of intellectual creation and innovation. Building a strong IP ecosystem that is accessible to researchers, faculties, students and also to grassroots innovators is a priority of Tezpur University. Formulation of IPR Policy of the University has been one of the significant steps towards creating and securing an IPR conscious ecosystem. The TUIPR Cell is sincerely involved in teaching IPRs at various levels for development of worthy human resource with added skills embedded with ethical values.

Department of Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry, Government of India, instituted the IPR Chair at Tezpur University in 2020. With the adoption of the National IPR Policy in the national fabric in 2016, various policies have been set forth for empowering more youth to get benefited from their innovations, generation of better employment opportunities based on execution and protection of intellectual outputs, and exploration of opportunities based on indigenous resources and traditions. In such a scenario, the TUIPR Cell along with the firm support from DPIIT IPR Chair is working hard for opening doors for IP based research, which will not only set the stage for the next level of opportunities from this region, but also record the contribution from Tezpur University towards this national movement.

PATENT: GRANTED OR APPLIED FOR DURING THE REPORTING PERIOD

Inventor(s)	Patent	Patent number/Application Number	National/International
A. Bhattacharjee, D. Kumar and L. S. Badwaik	Development of low fat baked snacks using de-oiled soya flour.	202031039202	Applied National Patent
K. K. Baruah	Protective face shield system with adaptability for bespectacled wearer for health care/medical purposes.	202031016837	Applied National Patent
P. Nath and D. Rabha	Methods and apparatus of multi-modal microscopic imaging on a smartphone and OLED display illumination.	202131010963	Applied National Patent
A. B. Das and H. Baishya	A continuous jaggery making machine.	201931012050	Published National Patent
P. Deb and M. Talukdar	Designed 2d graphitic sheet for viscous oil removal using magnet.	201831009592	Published National Patent
N. Karak, V. K. Das and S. Gogoi	Selective para-hydroxylation of	201731000104	Published National Patent

	substituted aromatic hydrocarbons using H ₂ O ₂ catalyzed by waterborne hyperbranched polyurethane/ carbon quantum dot nanocomposites.		
P. Deb and K. Saikia	Magnetic secondary nanostructure as contrast agent for magnetic resonance imaging.	201731009379	Published National Patent
D. Dutta, A. Saikia, Z. Kalita and S. Saikia	A saddle system for female bicycles adapted to counter forward slip of rider on saddle surface during sudden braking.	201831045154	Published National Patent
S. Pratihar, S. S. Bhattacharya, P. Das and K. Sarmah	Novel Soil Conditioners	343590	Granted National Patent
N. Karak, S. Barua and P. Chattapadhyaya	A synthetic hyperbranched epoxy surgical sealant and a process for preparation thereof.	345356	Granted National Patent
P. Deb and M. Gogoi	Multifunctional nanoparticles and methods for synthesis thereof.	351940	Granted National Patent
S. Sarma, B. Sarma, R. Chutia and P. P. Dutta	System for measuring and correction of alignment parameters camber and toe of wheel of a vehicle	357468	Granted National Patent
R. K. Baruah, A. Kumar, S. Dutta and S. Paul	Intelligent Helmet System.	362974	Granted National Patent

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
P. Deb	One Day Regional Workshop on Intellectual Property Right for Academic Excellence.	22 March 2021	Pandu College, Guwahati
J. Borbora Saikia	One Day Regional Workshop on Intellectual Property Right for Academic Excellence.	22 March 2021	Pandu College, Guwahati
K. Saikia	One Day Regional Workshop on Intellectual Property Right for Academic Excellence.	22 March 2021	Pandu College, Guwahati

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
One Day Regional Workshop on Intellectual Property Right for Academic Excellence at Pandu College, Guwahati	22 March, 2021

OTHER IMPORTANT ACTIVITIES OF THE CELL

- Open elective course on Intellectual Property Rights in Research and Beyond for Ph. D. students.
- Open elective course on Fundamentals of Intellectual Property Rights for UG students.
- The Cell has been awarded prestigious DPIIT IPR chair instituted by the Department for Promotion of Industrial and Internal Trade, Ministry of Commerce and Industry, Govt. of India on December, 2020.

THE FACULTY MEMBERS AND STAFF**Chair Professor**

P. Deb, Ph. D. (Jadavpur University)

Specialization/Areas of Interest: IPRs, Patents and Trade Secrets

E-mail: pdeb@tezu.ernet.in

Research Assistant

Juri Borbora Saikia, Ph. D. (Tezpur University)

Specialization/Areas of Interest: IPRs, Patents, Industrial Design and GI

E-mail: juriipr@tezu.ernet.in

Koushik Saikia, Ph. D. (Tezpur University)

Specialization/Areas of Interest: IPRs, Patents and Trademarks

Email: koushik@tezu.ernet.in

Office staff

Saurav Deka

Office Assistant

Email: sauravdeka@gmail.com

SCHOOL OF SCIENCES

Dean, School of Sciences

Department of Chemical Sciences

Department of Environmental Science

Department of Mathematical Sciences

Department of Molecular Biology and Biotechnology

Department of Physics

DEAN, SCHOOL OF SCIENCES

The School of Sciences comprises of five academic departments:

1. Chemical Sciences
2. Environmental Science
3. Mathematical Sciences
4. Molecular Biology and Biotechnology
5. Physics.

All the departments under the School of Sciences are DST-FIST and UGC-SAP supported. The departments under the School altogether offer a total of 12 academic programmes in the regular mode, apart from the Ph.D. programmes. Each department offers discipline specific UG, PG and Ph.D. programmes. The departments of Chemical Sciences, Mathematical Sciences, Molecular Biology and Biotechnology and Physics offer 5-Yr Integrated M. Sc. programmes with an intake of 25 students each. The 4-Yr Integrated B. Sc. B. Ed. Programmes, with an intake of 13 students per department is offered by Chemical Sciences, Mathematical Sciences and Physics. The total yearly intake of students in all 12 non-Ph. D. programmes of the School stands at 334. Over 300 Ph.D. students were on the roll under the School of Sciences during 2020-2021.

There are 74 members of faculty including 30 Professors, 10 Associate Professors and 34 Assistant Professors working in the five departments of the School. In addition, Prof. M. Lakshmi Kantam, Distinguished Professor at ICT, Mumbai is an Adjunct Professor in the Department of Chemical Sciences.

The members of the faculty of the School are engaged in advanced research in their respective areas. They have made several significant contributions in academic and research activities during 2020-21. In recognition to significant contribution in innovation and technology development, Prof. Pritam Deb of the Department of Physics has been adjudged for the prestigious Visitor's Award for Technology Development for the year 2020 for developing two-dimensional heterostructure based biodegradable film for food packaging. The faculty members of the School published over 300 research papers in peer-reviewed international and national journals during 2020-2021, a significant improvement over the preceding year.

The faculty members of the School have secured externally research projects from agencies such as DST, DBT, Deity, DRDO, BRNS, SERB, CSIR and UGC. Over 90 research projects were being conducted during 2020-2021. Some of the departments have active research collaboration with reputed national and international institutes and organizations. In December, 2020, the Department of Environmental Science was inaugurated as one of the three Centres of Excellence (CoE) under the National Mission for Sustaining the Himalayan Ecosystem (NMSHE) by the DST, Govt. of India. The first phase project entitled *Climate Change Impacts and Adaptation for a Climate Resilient North East India* with a duration of five years with a budget outlay of Rs 6.5 Crore.

The process of teaching-learning and evaluation was switched over to the online mode for most part of the 2020-2021, although some vital components were completed in a phase-wise planned offline mode during the brief relaxation period. Despite the unprecedented situation due to the pandemic for the large part of the year, the course completion and evaluation process was carried out well within the time frame stipulated by the UGC.

Alumni of the school are well placed in various academic institutions and industries, mainly in India and this has continued in 2020-2021 as well. Many of them have joined higher studies in reputed institutes in India and abroad. The number of students that have qualified for NET, GATE and SLET, from the School of Sciences, continues to remain high. Each department regularly organizes conferences/workshops and outreach programmes. In 2020-2021 these programmes were conducted in the online mode due to prevailing restrictions. Many faculty members participated as resource persons in online workshops organized by various institutions across the country.

InSCIgnis 2021, the eighth edition of the annual science festival organized by the Students' Science Council under the aegis of the School of Sciences was held in the online mode in its usual schedule coinciding with the National Science Day. The seventh edition of Anunaad, the bi-lingual annual science magazine of the Students' Science Council was also released at the same time.

PERSONNEL OF THE OFFICE OF THE DEAN

Dean, School of Sciences

Debajit Hazarika

Professor, Department of Mathematical Sciences

Office staff (Part-time engagement):

Mahendra Das

MTS

DEPARTMENT OF CHEMICAL SCIENCES

THE DEPARTMENT

Department of Chemical Sciences was established in the year 1997, with the prime objective of creating manpower in different areas of Chemical Sciences. Initially the department offered M.Sc. program in Polymer Science which was converted to M.Sc. in Applied Chemistry in 2006 to 2009. In 2009, the department started five years Integrated M.Sc. in Chemistry program and in 2010 the department again started M.Sc. in Chemical Sciences which was later renamed as M.Sc. in Chemistry. From 2011, autumn session, the department had started B.Sc. B.Ed. in Chemistry. The Department has also been running a Ph.D. program covering several important areas of research in Chemical Sciences including interdisciplinary areas.

Academic Programmes and Student intake

SL No	Programme Name	Intake
1	M.Sc. in Chemistry	30
2	Integrated M.Sc. in Chemistry	25
3	Ph.D. in Chemical Sciences	Variable, 8 in the 2020-21
4	Integrated B.Sc. B.Ed. in Chemistry	13

Major Facilities and Equipment Available

- 400 MHz NMR spectrophotometer, Jeol
- Thermal Analyzer, Shimadzu, (FIST Funded)
- CHN Analyzer, Perkin Elmer (FIST Funded)
- FTIR spectrophotometer, PerkinElmer
- Automated Compression Press, S5 Type, Santac
- UV-Visible Spectrophotometer, Shimadzu,
- Universal Testing Machine, 10 KN Zwick
- Rheometer, Bohlin Instruments
- High performance computational facilities
- Digital Polarimeter
- Millipore Water Purification System
- Tabletop Magnetometer
- Single Screw Laboratory Extruder
- Cyclic Voltmeter
- Cyclic Voltmeter with Rotating Disk Electrode
- Atomic Absorption Spectroscopy

Chemisorption Analyzer (FIST Funded)

- Micro Extruder (FIST Funded)
- Computational Laboratory with 20 nos. of Desktop computers (FIST Funded)

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

A. J. Thakur	<ul style="list-style-type: none"> Continuing exploration in Hypervalent iodine chemistry for the synthesis of bioactive heterocycles, a simple and robust metal-free arylation protocol has been developed for bio-active scaffold 1<i>H</i>-tetrazole-5-thiols. The developed procedure for the transformation is mild and operationally simple. It avoids the use of transition metals, additives, excess reagents and high temperature. Aryl (2,4,6-trimethoxyphenyl)iodonium trifluoroacetate has been found as excellent iodonium salt as arylating partner. The counter-anion studies for the iodonium salts and chemoselective study of unsymmetrical iodonium salts is well studied. Influence of substrate on the arylation has been studied with range of tetrazole-5-thiols and diaryliodonium salts. Both alkyl- and aryl- group in the <i>N</i>⁵- position of the tetrazole-5-thiol can be arylated with moderate to good yields. Both electron-donating and electron-withdrawing aryl-substituents can be tolerated in this protocol. In future scope, more studies on wide range of substrate studies and mechanistic investigation has been left in order to complete the work. <p>Au nanoparticles (NPs) of controlled morphology have been synthesised through an eco-friendly biogenic method utilizing the aqueous fruit extract of <i>Garcinia cowa</i> at room temperature. The bio extract executes dual role of reducing agent and stabilizing agent to add excellent stability to the synthesized colloidal Au NPs. The variation of particle size and morphology of Au nanostructures with respect to the quantitative part of the bio-extract were studied. After microscopic and spectroscopic characterization, further application of the Au NPs synthesized via green method in the preparation of complex organic molecules was studied. The Au NPs were employed as homogeneous catalyst in coupling of substituted indole and aromatic aldehydes to yield bisindolylmethanes, which are known precursors of anti-cancer bioactive molecules. In addition, microwave irradiation makes the coupling reaction more sustainable with very short reaction time of 40 secs.</p>
A. K. Phukan	<ul style="list-style-type: none"> Studied the potential of metalla-<i>N</i>-heterocyclic carbenes in the activation of small molecules. Designed and performed computational studies on several skeletally substituted cyclic alkyl amino silylenes (CAASis) and germylenes (CAAGes) to understand their stability, ligand properties and their potential in small molecule activation.
B. C. Sarma	<ul style="list-style-type: none"> Reported cocrystals technology as a remedy for fickle drugs by manipulating supramolecular synthons

	<ul style="list-style-type: none"> • Demonstrated reasons for cocrystal polymorphs formation and how they are different by drug bioavailability • Developed a methodology to crystallized drug molecules on functionalized surface in a predesigned orientation
K. K. Bania	<ul style="list-style-type: none"> • Cu(OH)₂-Ni(OH)₂ Nanocatalyst supported on zeolite-Y carbon matrix has been found to be effective hybrid catalyst for methanol oxidation • Copper Oxide nanocatalyst supported on zeolite-Y served as green solid catalyst for mechanochemical synthesis. • Cobalt-oxide doped with vanadium (V) brings out selective oxidation of 2-naphthol under UV-light irradiation with H₂O₂.
N. Gogoi	<ul style="list-style-type: none"> • Development of heterogeneous catalyst for challenging C-C coupling reactions. • Development of switchable and water processable molecular magnetic material.
N. Karak	<ul style="list-style-type: none"> • Reduced graphene oxide based bi-phasic MnO₂ nanohybrid as efficient catalyst for <i>N</i>-alkylation reactions of substituted aromatic amines with aromatic alcohols in solvent-free aerobic conditions. • Starch based double network hydrophobic and amphoteric hydrogel as efficient adsorbent for cationic and anionic dyes. • Hydrophobic interpenetrating-polymer-networks of polyurethane and polystyrene nanocomposites with high-speed thermo-responsive shape memory and anticorrosive behaviour. • Cashew nut shell liquid based hydrophobic and self-healable polyurethane with anticorrosive and biodegradable attributes. <p>Bio-based waterborne polyester supported oxygenic graphitic carbon-nitride nanosheets as a sustainable photocatalyst for waste water treatment.</p>
N. S. Islam	<ul style="list-style-type: none"> • Synthesis of octahedral copper (ii)-diimine complexes of triethylenetetramine: effect of stereochemical fluxionality and ligand hydrophobicity on CuII/CuI redox, DNA binding and cleavage, cytotoxicity activities. • Supported Tantalum catalysts for environmentally benign organic oxidations have been developed. • Water soluble Ta complexes were shown to be highly potent inhibitors of phosphatases enzymes.
P. Bharali	<ul style="list-style-type: none"> • Various Pd₂CuM/C (M = Ni, Co) with different Pd/Cu/M compositions have been synthesized, characterized and evaluated for cathodic oxygen reduction reaction. • Co₃O₄ with nanooctahedron and sponge-like morphology were synthesized and evaluated for oxygen reduction reaction. • FeO_x/CeO₂/C with different composition and morphologies have been synthesized, characterized and evaluated for oxygen electrocatalysis.

P. Puzari	<ul style="list-style-type: none"> • A novel electrochemical detection method for uric acid in human blood has been developed. • Diffusion of chemical species of dermatological significance is being studied through molecular dynamics calculations. • A novel low cost method for quantification of lactose in Milk has been developed.
R. Borah	<ul style="list-style-type: none"> • Development of organic-inorganic hybrids of polyoxometalate with functionalized ionic liquids as solvent responsive greener catalyst for oxidation of alcohol. • Designing of composite material of clay with metal based functionalized ionic liquids as photocatalyst.
R. C. Deka	<ul style="list-style-type: none"> • Design of Sn doped Pt cluster to oxidation of CO to CO₂ • Design of cation-doped tin nanocluster for conversion of CO₂ to formic acid. • Unveiling the Role of Hydrogen Bonding and g-Tensor in the Interaction of Ru-Bis-DMSO with Amino Acid Residue and Human Serum Albumin • Design of anionic bimetallic catalytic to oxidise NO to NO₂ • Degradation of 2-fluoropropene molecule was examined by Cl atom initiated H-abstractions mechanism. • Understanding the atmospheric chemistry of hydrofluoroethers by studying the oxidation of a highly fluorinated compound n-C₂F₅CF(OCH₃)CF(CF₃)₂ (HFE-7300) with OH/Cl oxidants.
R. K. Dutta	<ul style="list-style-type: none"> • Developed a method to predict suitability of limestone from different sources for using in Fluoride Nilogon method for removal of fluoride from drinking water. • Developed and piloted a novel customized method for conservation of Sancipat manuscript.
S. K. Das	<ul style="list-style-type: none"> • Developed a transition-metal-free, practical route to benzimidazole-fused 1,4-benzoxazepines. Operationally, the protocol involves a K₂CO₃-mediated intermolecular ring opening of terminal epoxides by 2-(2-fluorophenyl) benzimidazole, followed by an intramolecular nucleophilic aromatic substitution (S_NAr) reaction of the resulting products in the presence of NaH. • Investigated the regioselectivity of the trifluoroethanol-promoted intramolecular N-Boc-epoxide cyclization towards 1, 3-oxazolidin-2-ones and 1,3-oxazinan-2-ones. • Developed a HFIP-promoted transition-metal-free strategy for the synthesis of functionalized and substituted pyrrolo [3,2,1-ij]quinolines and tetrahydropyrido[1,2-a]indoles in moderate to good yields from indolyl-N-tethered epoxides

S. K. Dolui	<ul style="list-style-type: none"> • Synthesis of $\text{Ca}_x\text{Cu}_{3-x}\text{Ti}_4\text{O}_{12}$ Perovskite Materials and House-Hold LED Light Mediated Degradation of Rhodamine Blue Dye: Perovskite-based photocatalyst Calcium Copper Titanate (CCTO) ($\text{Ca}_x\text{Cu}_{3-x}\text{Ti}_4\text{O}_{12}$) ($x = 1, 1.5$ and 2) has been developed. This catalyst has a degradation efficiency of 99.74% for Rhodamine Blue (RhB) dye within 6h under exposure of 20-Watt LED light. The catalyst has been analysed with the help of X-ray diffraction, Scanning Electron Microscope, UV-Vis, FT-IR and Elemental X-ray Dispersive (EDX) analysis. • Development of Electro Catalyst for Efficient Hydrogen Evolution reaction (HER) in aqueous medium: Fe doped TiO_2- MWCNT electro catalyst has been developed by sol-gel method. The catalyst has been observed that H_2 evolved electrocatalytically at potential between -0.75V to -0.20 V vs SCE in acidic medium. The catalyst exhibited a small overpotential of 221 mV at current density 10 mAcm^{-2} which is less than that of platinumized Fe doped TiO_2 (388 mV at 10 mAcm^{-2}) and Fe doped TiO_2 (504 mV at 10 mAcm^{-2}). The catalyst showed fine stability up to 10800 sec. The physical properties of the catalyst were investigated by X-ray diffraction (XRD), ultraviolet-visible spectroscopy (UV-VIS), transmission electron microscopy (TEM), field emission scanning electron microscopy (FESEM) and energy-dispersive X-ray spectroscopy (EDX). • Synthesis of Perovskite Nanocrystal within Metal Organic Framework (MOF): Perovskite nanocrystal (CsPbBr_3) was embedded into metal organic framework (MOF). This perovskite showed a narrow fluorescence emission having 21 nm full width half maxima (FWHM) at 519 nm under exposure UV light with polar solvent. Perovskite without MOF showed low PL intensity whereas perovskite with MOF showed high PL intensity with a bright green emission.
S. P. Mahanta	<ul style="list-style-type: none"> • Developed a metal assisted strategy for the colorimetric sensing of fluoride in aqueous medium. • Developed a porous polymer as a solid acid catalyst towards dipyrromethene synthesis.
T. K. Maji	<ul style="list-style-type: none"> • Green composites were prepared using keratin fibres as reinforment and a natural crosslinker. The product showed significant improvement in various properties. Further work is in progress. • Composites were prepared successfully using PVC, rice husk ash and green heat stabiliser from Tannic acid and Calcium oxide. Epoxydised soybean oil was employed as compatibilizer and their various properties were analysed. • Different strategies were applied to modify curcumin & enhance its bioavailability. The prepared samples were evaluated for various bioactivities. Thorough analysis suggested the HPβCD complex of curcumin pyrazole derivative to exhibit the best sample among all others.

	<ul style="list-style-type: none"> A polyelectrolyte complex using chitosan and carrageenan biopolymers and MgO nanoparticles has been prepared, both with and without gluteraldehyde as crosslinker. Curcumin, an antidiabetic drug, was loaded on the said complex. The effect of variation of MgO nanoparticles on yield, drug loading, swelling and drug release has been studied in both acidic as well as basic pH. The effect of variation of the ratio of the two polymers (by weight) has also been studied, and the optimum ratio has been confirmed.
U. Bora	<ul style="list-style-type: none"> Direct site-specific C-H functionalization of indole moiety Methodology development C-C and C-N bond formation reactions Development of DMF/CAN as "CN" surrogate Development of alternative green and sustainable reaction medium for organic transformation.

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator	Collaboration
Chemistry of Monovalent Group 13 and Divalent Group 14 Bases: A Theoretical Study	DST-SERB	₹ 43.77 Lakhs	3 Years (2017-2020)	A. K. Phukan	
Computational Design of Functional and Structural Mimics of the Active Site of [FeFe]-Hydrogenase	CSIR	₹ 5.40 Lakhs	3 Years (2017-2020)	A. K. Phukan	
Synthesis, Reactivity and Bonding in Metal and Metal-free Borylenes	DST-DAAD	₹ 13.68 Lakhs	2 Years (2019-2021)	A. K. Phukan	Indo-German collaboration
Multicomponent crystal technology to improve drug pharmacokinetic attributes	CSIR	₹ 29.76 Lakhs	3 Years (2017-2021 July, in extension)	B. C. Sarma	
Crystallization of Drugs Templated by Mimetic Organogels and Functional surface	DST-SERB	₹ 29.64 Lakhs	3 Years (2020-2023)	B. C. Sarma	
Design of Ship in a Bottle Complexes and Zeolite-Y Supported Nanocatalyst for C-Cl Bond Activation and C-C Coupling Reactions.	DST-SERB	₹ 32.50 Lakhs	3 Years (2020-2023)	K.K. Bania	

Design of Zeolite-Y Supported Heterogeneous Catalyst for C-C Bond Coupling Reactions	CSIR	₹ 26.6 Lakhs	3 Years (2020-2023)	K. K. Bania	
Development of water-borne hyperbranched polyesters and polyurethanes from bio-based resources and their nanocomposites	CSIR	₹ 25.56 Lakhs	3 Years (2017-2020)	N. Karak	
Development of polymer supported Nb and Ta based catalysts for organic oxidation under ecologically sustainable reaction condition	SERB	₹ 45.17 Lakhs	3 Years (2017-2020)	N. S. Islam	
Identification of efficient semi-conductor dopant combination for selective chemiadsorption of tea pesticides on metal oxide semiconductor (MOS) sensors.	NTRF	₹ 34.50 Lakhs	4 Years (2016-2020) Extended to 2021	P. Puzari	
Directed functionalization of oxide and carbon nanomaterials for the development of efficient catalysts for carbon dioxide conversion into value-added products.	DST (under DST-RFBR program)	₹ 21.84 Lakhs	3 Years (2019-2021)	P. Bharali	Indo Russia collaboration
Synthesis, characterization and investigation of physicochemical properties of specific ionic liquid (IL) based systems for evaluation of electrochemical and photocatalytic activities	SERB	₹ 44.35 Lakhs	3 Years (2017-2020)	R. Borah	
Theoretical investigation of methane oxidation catalyzed by metal nanoclusters supported on zeolites	SERB-DST	₹ 47 Lakhs	3 Years (2018-2021)	R. C. Deka	
Tuning metal oxide clusters for selective catalytic hydrogenation of CO ₂ to	DST-SERB	₹ 29.48 Lakhs	3 Years (2021-2024)	R. C. Deka	

organic acids using quantum chemical methods.					
Decentralized water treatment for removal of arsenic, fluoride and mercury from drinking water	DST	₹105 Lakhs	3 Years (2017-2020)	R.K. Dutta	
Proposal for collaboration with UNICEF to support PHED in Water Quality Lab Strengthening in 10 selected districts of Assam	UNICEF	₹ 12 Lakhs	2 Years (2019-2020)	R.K. Dutta	
Arsenic removal from drinking water using do-it-yourself Arsiron Nilogon method	Numaligarh Refinery Ltd	₹ 20 Lakhs	1 Year (2020-2021)	R.K. Dutta	
Functionalized graphene-based nanocomposites for direct methanol fuel cell	CSIR	₹ 20 Lakhs	3 Years (2017-2020)	S .K. Dolui	
Stereoselective Synthesis of Spirocyclic Indolines	DST-SERB	₹ 45.7 Lakhs	3 Years (2019 – 2022)	S.K. Das	-
Design and Synthesis of Hybrid Molecules for Multi-Drug-Resistant Tuberculosis	DBT-NER-BPMC	₹ 31.3 Lakhs	3 Years (2018 – 2021)	S.K. Das	Dr A. Dasgupta, CSIR -CDRI
UGC-BSR Mid-Career Award	UGC	₹ 10 Lakhs	2 Years (2020-2021)	S. K. Dolui	
Development of a Cu(II) mediated strategy for the sensing of fluoride anion in aqueous medium	CSIR	₹ 20 Lakhs	3 Years (2019-2022)	S. P. Mahanta	
Asymmetric Total Synthesis of Marine Natural Products Ammonificins A-D and Their Analogs	CSIR	₹ 23.6 Lakhs	3 Years (2017-2020)	S.K. Das	
Stereoselective Synthesis of Spirocyclic Indolines	DST-SERB	₹ 45.7 Lakhs	3 Years (2019 – 2022)	S.K. Das	
Site specific Functionalization of Nitrogen Based heterocyclic moieties via C-H activation	SERB	₹ 48.7 Lakhs	3 Years (2017-2020)	U. Bora	

Green and sustainable catalysts based on zeolites for oxidative transformation reactions	DST (Under Indo-Bulgaria collaborative programme)	₹ 11.8 Lakhs	2 Years (2019-2020)	U. Bora	
--	---	--------------	---------------------	---------	--

PUBLICATIONS

Journal Publications

- Baruah J., Deka R. C. & Kalita E. Greener production of microcrystalline cellulose (MCC) from saccharum spontaneum (Kans grass): Statistical optimization. *International Journal of Biological Macromolecules*. 154. 2020.
- Baruah J. M., Sharma M., Das B., Saikia P., Saikia L., Roy S., Karunakar V.G., Bhattacharyya K.P. & Bania K.K. Boosting multiple photo-assisted and temperature-controlled reactions with a single redox-switchable catalyst: Solvents as internal substrate and reducing agent. *Journal of Catalysis*. 388. 2020.
- Baruah S. D., Deka R.C., Gour N. K. & Paul S. Atmospheric insight into the reaction mechanism and kinetics of isopropenyl methyl ether (i-PME) initiated by OH radicals and subsequent oxidation of product radicals. *Environ Sci Pollut Res*. 28. 2021.
- Baruah S. D., Paul S., Gour N. K., Biswakarma N. & Deka R. C. Mechanism and kinetics of catalytic oxidation of CO to CO₂ over Ptⁿ⁺ and MPt⁽ⁿ⁻¹⁾⁺, (M= Sn, Rh & Ru; n= 3, 4) clusters. *Molecular Catalysis*. 509. 2021.
- Bayan R. & Karak N. Bio-based hyperbranched polymer-supported oxygeneous graphitic-carbon nitride dot as heterogeneous metal-free solar light photocatalyst for oxidation and reduction reactions. *Applied Surface Science*. 514. 2020.
- Begum, S. S., Das, D., Gour, N. K. & Deka, R. C. Computational modelling of nanotube delivery of anti-cancer drug into glutathione reductase enzyme. *Scientific Reports*. 11. 2021.
- Bhattacharjee P. & Bora, U. Organocatalytic dimensions to the CH functionalization of carbocyclic core in indoles: A review update. *Organic Chemistry Frontiers*. 8. 2021.
- Bhattacharjee P., Boruah P. K., Das M. R. & Bora U. Direct C-H bond activation: palladium-on-carbon as a reusable heterogeneous catalyst for C-2 arylation of indoles with arylboronic acids. *New Journal of Chemistry*. 44. 2020.
- Biswakarma N., Sarma, P. J., Baruah S. D., Gour N. K. & Deka R. C. Catalytic oxidation of NO on [Au-M]⁻ (M = Pd and Pt) bimetallic dimers: an insight from density functional theory approach. *Journal of Physical Chemistry C*. 124. 2020.
- Bora S. J., Paul R., Dutta A., Goswami S., Guha A.K. & Thakur, A.J. Trinuclear Mn²⁺/Zn²⁺ based microporous coordination polymers as efficient catalysts for ipso-hydroxylation of boronic acids. *Dalton Transactions*. 49(17). 2020.
- Borah B. J. & Bharali P. Direct hydrogenation of nitroaromatics at room temperature catalyzed by magnetically recoverable Cu@Fe₂O₃ Nanoparticles. *Applied Organometallic Chemistry*. 34(9). 2020.
- Borah B. J., Yamada Y. & Bharali P. Unravelling the Role of Metallic Cu in Cu-CuFe₂O₄/C Nanohybrid for Enhanced Oxygen Reduction Electrocatalysis. *ACS Applied Energy Materials*. 3(4). 2020.

- Borah D., Saha B., Sarma B. & Das P. Cyclometalated Ir (III)-NHC complex as recyclable catalyst for acceptor less dehydrogenation of alcohols to carboxylic acids. *Dalton Transactions*. 49. 2020.
- Borgohain H., Talukdar K., Sarma B. & Das S. K. Regioselectivity of the trifluoroethanol-promoted intramolecular N-Boc-epoxide cyclization towards 1, 3-oxazolidin-2-ones and 1, 3-oxazinan-2-ones. *Organic & Biomolecular Chemistry*. 18(37). 2020.
- Chaudhuri H. & Karak N. Bio-derived water dispersible polyurethane/rGO@ α -MnO₂/rGO@ δ -MnO₂ nanocomposite as a heterogeneous catalyst and anticorrosive material. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 602. 2020.
- Chaudhuri H. & Karak N. Heterostructured Hybrid rGO@ α -MnO₂/rGO@ δ -MnO₂ Nanoflower: An efficient catalyst for aerobic solvent-free N-alkylation reactions and energy storage material. *ChemCatChem*. 12(6). 2020.
- Chaudhuri H. & Karak N. Water dispersed bio-derived transparent polyurethane: Synthesis, properties including chemical resistance, UV-aging, and biodegradability. *Progress In Organic Coatings*. 146. 2020.
- Chetry S., Sharma P., Frontera A., Saha U., Verma A.K., Sarma B., Kalita P.J. & Bhattacharyya M.K. Biologically relevant and energetically significant cooperative ternary (π - π) 2/(π - π) 1/(π - π) 2 assemblies and fascinating discrete (H₂O) 21 clusters in isostructural 2, 5-pyridine dicarboxylato Co (II) and Zn (II) phenanthroline compounds: antiproliferative evaluation and theoretical studies. *New Journal of Chemistry*. 45(7). 2021.
- Das A. J., Borgohain H., Sarma B., Das S. K. Switching of regioselectivity in base-mediated diastereoselective annulation of 2,3-epoxy tosylates and their N-tosylaziridine analogs with 2-mercaptobenzimidazole. *Organic & Biomolecular Chemistry*. 18(3). 2020.
- Das B., Baruah J. M., Sharma M., Sarma B., Karunakar V.G., Satyanarayana L., Roy S., Bhattacharyya K. P., Borah K. K. & Bania K. K. Self pH regulated iron (II) catalyst for radical free oxidation of benzyl alcohols. *Applied Catalysis A: General*. 589. 2020.
- Das B., Sharma M., Baruah J. M., Mounash P. B., Karunakar V.G. & Bania K. K. Gold nanoparticle supported on mesoporous vanadium oxide for photooxidation of 2-naphthol with hydrogen peroxide and aerobic oxidation of benzyl alcohols. *Journal of Environmental Chemical Engineering*. 8. 2020.
- Das D., Dutta S., Dowerah D. & Deka R. C. Unveiling the role of hydrogen bonding and g-tensor in the interaction of Ru-Bis-DMSO with amino acid residue and human serum albumin. *Journal of physical chemistry B*. 124(30). 2020.
- Das J., Borah B. J. & Das S. K. Base-mediated intramolecular one-pot double-cyclization of epoxide-tethered 2-fluorobenzenesulfonamides: An avenue to 1, 4-benzoxazine-fused benzothioxazepine-1,1-dioxides. *Organic & Biomolecular Chemistry*. 18(2). 2020.
- Das S. K., Bhattacharjee P., Sarmah M., Kakati M. & Bora U. A sustainable approach for hydration of nitriles to amides utilizing WEB as reaction medium. *Current Research in Green and Sustainable Chemistry*. 4. 2021.
- Das S. K., Laskar K., Konwar D., Sahoo A., Saikia B. K. & Bora U. Repurposing fallen leaves to bio-based reaction medium for hydroxylation, carbon-carbon and carbon-nitrogen bond formation. *Sustainable chemistry and Pharmacy*. 15. 2020.
- Das S. K., Tahu M., Gohain M., Deka D. & Bora U. Bio-based sustainable heterogeneous catalyst for ipso-hydroxylation of arylboronic acid. *Sustainable chemistry and Pharmacy*. 17. 2020.
- Deka R. C., Deka A., Deka P., Saikia S., Baruah, J. & Sarma P. J. Recent advances in nanoarchitectonics of SnO₂ clusters and their applications in catalysis. *Journal of Nanoscience and Nanotechnology*. 20(8). 2020.
- Devi R., Mukhopadhyay S., Das A. J. & Das S. K. Base-mediated synthesis of benzimidazole-fused 1,4-benzoxazepines via sequential intermolecular epoxide ring-opening/intramolecular S_NAr reactions. *Tetrahedron Letters*. 61(46). 2020.

- Dewan A., Sarmah M., Bharali P., Thakur A.J., Boruah P.K., Das M.R. & Bora U. Pd Nanoparticles-loaded honeycomb-structured bio-nanocellulose as a heterogeneous catalyst for heteroaryl cross-coupling reaction. *ACS Sustainable Chemistry & Engineering*. 9(2). 2021.
- Doley S., Bora A., Saikia P., Ahmed S. & Dolui S.K. Blending of cyclic carbonate based on soybean oil and glycerol: a non-isocyanate approach towards the synthesis of polyurethane with high performance. *Journal of Polymer Research*. 28(5). 2021.
- Duarah R., Deka A. & Karak N. Multifaceted bioinspired hyperbranched polyurethane nanocomposite as a non-contact triggered self-healing material. *Express Polymer Letters*. 14 (6). 2020.
- Dutta A. K., Boruah K. & Borah R. Development of N,N-disulfo-1,1,3,3-tetramethylguanidinium chlorometallates as heterogeneous catalysts for one pot synthesis of 1,2-dihydro-1-aryl-3H-naphth[1,2-e][1,3]oxazin-3-one Derivatives. *Current Organo catalysis*. 7(1). 2020.
- Dutta D., Sharma P., Frontera A., Gogoi A., Verma A.K., Dutta D., Sarma B. & Bhattacharyya M. K. Oxalato bridged coordination polymer of manganese (III) involving unconventional O \cdots π -hole(nitrile) and antiparallel nitrile contacts: antiproliferative evaluation and theoretical studies. *New Journal of Chemistry*. 44. 2020.
- Dutta G. & Karak N. Bio-based waterborne polyester supported oxygeneous graphitic carbon nitride nanosheets as a sustainable photocatalyst for aquatic environment remediation. *Journal of Cleaner Production*. 285. 2020.
- Dutta R. K., Goswami B. R. & Ligira N. The Science and Technology of Manuscript Writing-aid and Folk Paintings in Medieval Assam. *Indian Journal of History of Science*. 1 (55). 2020.
- Ghosh B. & Phukan A.K. Probing the potential of metalla-N-heterocyclic carbenes towards activation of enthalpically strong bonds. *Dalton Transactions*. 49(27). 2020.
- Ghosh B., Bharadwaz P., Sarkar N. & Phukan, A. K. Activation of small molecules by cyclic alkyl amino silylenes (CAASis) and germynes (CAAGes): a theoretical study. *Dalton Transactions*. 49(39). 2020.
- Ghosh T. & Karak N. Cashew nut shell liquid terminated self-healable polyurethane as an effective anticorrosive coating with biodegradable attribute. *Progress In Organic Coatings*. 139. 2020.
- Ghosh T. & Karak N. Mechanically robust hydrophobic interpenetrating polymer network-based nanocomposite of hyperbranched polyurethane and polystyrene as an effective anticorrosive coating. *New Journal of Chemistry*. 44(15). 2020.
- Ghosh T., Voit B. & Karak N. Polystyrene/thermoplastic polyurethane interpenetrating network-based nanocomposite with high-speed, thermo-responsive shape memory behaviour. *Polymer*. 200. 2020.
- Gogoi G., Chowdhury C. & Maji T. K. Effect of nanoclay on the properties of rosin derivative cross-linked green composite based on chicken feather fiber and modified vegetable oil. *Polymer engineering and Science*. 288. 2021.
- Gogoi K., Bora B. R., Borah G., Sarma B. & Gogoi S. Synthesis of quaternary carbon-centered indolo [1, 2-a] quinazolinones and indazolo [1, 2-a] indazolones via C-H functionalization. *Chemical Communications*. 57(11). 2021.
- Gogoi P., Boruah K. & Borah R. Studies on coordination environment of transition metal chloride anionic speciation of N, N-disulfodiisopropylammonium ionic salts and assessment of their Brønsted-Lewis acidic properties. *Indian Journal of Chemistry-Section A*. 59(10). 2020.
- Gogoi P., Dutta A., Ramteke A., & Maji T.K. Preparation, characterization and cytotoxic applications of curcumin-(\pm) α -lipoic acid coloaded phosphorylated chitosan nanoparticles in MDA MB 231 breast cancer cell line. *Polymers for Advanced Technologies*. 31 (11). 2020.

- Gogoi P., Das M., Begum P., & Maji T.K. Nature of sorption of trivalent arsenic on novel iron oxyhydroxide stabilized starch/OMMT composite: A mechanistic approach. *Journal of Water & Health*. 19 (2). 2021.
- Gohain M., Bardhan P., Laskar K., Sarmah S., Mandal M., Bora U., Kalita M. C., Goud V. V. & Deka D. *Rhodotorula mucilaginosa*: A source of heterogeneous catalyst for biodiesel production from yeast single cell oil and waste cooking oil. *Renewable Energy*. 160. 2020.
- Gohain M., Laskar K., Paul A. K., Daimary N., Maharana M., Goswami I. K., Hazarika A., Bora U. & Deka D. Carica papaya stem: A source of versatile heterogeneous catalyst for biodiesel production and C-C bond formation. *Renewable Energy*. 147. 2020.
- Goswami C., Saikia H., Borah B. J., Kalita M. J., Tada K., Tanaka S. & Bharali P. Boosting the electrocatalytic activity of Pd/C by Cu alloying: Insight on Pd/Cu composition and reaction pathway. *Journal of Colloid and Interface Science*. 587. 2021.
- Goswami C., Saikia H., Tada K., Tanaka S., Sudarsanam P., Bhargava S.K. & Bharali P. Bimetallic palladium nickel nanoparticles anchored on carbon as high-performance electrocatalysts for oxygen reduction and formic acid oxidation reactions. *ACS Applied Energy Materials*. 3(9). 2020.
- Goswami C., Yamada Y., Matus E. V., Ismagilov I. Z., Kerzhentsev M. & Bharali P. Elucidating the role of oxide-oxide/carbon interfaces of CuO_x-CeO₂/C in boosting electrocatalytic performance. *Langmuir*. 36(49). 2020.
- Goswami B. R., Das D., Saikia P. & Dutta R. K. Role of saponins on enhancement of quality of Mahi, a traditional herbal ink of early Assam. *Dyes and Pigments*. 109234 (188). 2021.
- Gowda V., Sarma B., Larsson A. C., Lantto P. & Antzutkin, O. N. Bi(III) Complexes containing dithiocarbamate ligands: synthesis, structure elucidation by X-ray diffraction, solid-state ¹³C/¹⁵N NMR, and DFT calculations. *ChemistrySelect*. 5(29). 2020.
- Handique J., Gogoi J., & Dolui, S.K. Development of self-healing star metallopolymers by metal-ligand crosslinking. *Journal of Applied Polymer Science*. 137(14). 2020.
- Hatiboruah D., Das T., Chamuah N., Rabha D., Talukdar B., Bora U., Ahamad K.U. & Nath P. Estimation of trace-mercury concentration in water using a smartphone. *Measurement*. 154. 2020.
- Hazarika K. K., Hazarika D. & Bharali P. Binary α-Fe₂O₃-Co₃O₄ nanostructures for advanced oxidation process: Role of synergy for enhanced catalysis. *Applied Organometallic Chemistry*. 34(11). 2020.
- Hazarika K. K., Talukdar H., Sudarsanam P., Bhargava S. K. & Bharali P. Highly dispersed Mn₂O₃-Co₃O₄ nanostructures on carbon matrix as heterogeneous Fenton-like catalyst. *Applied Organometallic Chemistry*. 34(4). 2020.
- Hazarika K. K., Yamada Y., Matus E. V., Kerzhentsev M. & Bharali, P. Enhancing the electrocatalytic activity via hybridization of Cu (I/II) oxides with Co₃O₄ towards oxygen electrode reactions. *Journal of Power Sources*. 490. 2021.
- Joseph B., Gomosta S., Prakash R., Roisnel T., Phukan A. K. & Ghosh S. Chalcogen stabilized bis-hydridoborate complexes of cobalt: Analogues of tetracyclo[4.3.0.02,4.03,5] nonane. *Chemistry-A European Journal*. 26. 2020.
- Kashyap N., Das S. & Borah R. Solvent responsive self-separation behaviour of Brønsted acidic ionic liquid-polyoxometalate hybrid catalysts on H₂O₂ mediated oxidation of alcohols. *Polyhedron*. 196. 2021.
- Konwar D. & Bora U. Free radical triggered convenient synthesis of bis(indolyl) methane with potassium peroxodisulfate as catalyst. *ChemistrySelect*. 5. 2020.
- Konwar D. & Bora U. Recent developments in transition-metal-catalyzed regioselective functionalization of imidazo [1, 2-a] pyridine. *ChemistrySelect*. 6(11). 2021.

- Krishnakumar B., Sanka R. V. S. P., Binder W. H., Parthasarthy V., Rana S. & Karak N Associative dynamic covalent adaptive networks in thermoset polymers. *Chemical Engineering Journal*. 385. 2020.
- Mahanta A., Dutta A., Thakur A. J. & Bora U. Biocatalysis with Baker's yeast: A green and sustainable approach for C–B bond cleavage of aryl/heteroarylboronic acids and boronate esters at room temperature. *Sustainable Chemistry and Pharmacy*. 19. 2021.
- Mahanta A., Thakur A.J. & Bora U. Effective utilization of basic nature of WEB in copper catalyzed Chan-Lam N-arylation reaction under ligand free conditions. *Current Research in Green and Sustainable Chemistry*. 4. 2021.
- Mandal M., Bardhan P., Mandal M. & Maji T. K. Development of wood polymer composites with thermosetting resin from soybean oil cross-linked with rosin derivative. *European Journal of Wood and Wood Products*. 78(6). 2020.
- Matus E. V., Ismagilov I. Z., Ushakov V. A., Nikitin A. P., Stonkus O. A., Gerasimov E. Y., Kerzhentsev M. A., Bharali P. & Ismagilov Z. R. Genesis And Structural Properties Of $(\text{Ce}_{1-x}\text{M}_{x0.8}\text{Ni}_{0.2}\text{O}_y)$ (M = La, Mg) Oxides. *Journal of Structural Chemistry*. 61(7). 2020.
- Mohan M. & Dutta R. K. A study of suitability of limestone for fluoride removal by phosphoric acid-crushed limestone treatment. *Journal of Environmental Chemical Engineering*. 8(6). 2020.
- Mudoi P. P., Sarma B., Choudhury A. & Gogoi N. Evidence of protonation induced intra-molecular metal-to-metal charge transfer in a highly symmetric cyanido bridged $\{\text{Fe}_2\text{Ni}_2\}$ molecular square. *Dalton Transactions*. 50(6). 2021.
- Nath J., Saikia P. P., Handique J., Gupta K. & Dolui S. K. Multifunctional mussel-inspired gelatin and tannic acid-based hydrogel with pH-controllable release of vitamin B12. *Journal of Applied Polymer Science*. 137(39). 2020.
- Nath J., Shekhar S. & Dolui S. K. Artificial nacre-based chitosan/graphene oxide-mg hydrogel with significant mechanical strength and shape memory effect. *Polymer Science, Series A*. 63(2). 2021
- Pathak D., Khatioda R., Sharma H., Guha A. K., Saikia L. & Sarma, B. Endorsing Organic Porous Polymers in regioselective and unusual oxidative C=C bond cleavage of styrenes into aldehydes and anaerobic benzyl alcohol oxidation via hydride elimination. *ACS Applied Materials & Interfaces*. 13(13). 2021.
- Paul S., Deka R. C., Gour N. K. & Singh A. Ring-opening pathway of 2, 4, 6-trichlorophenol initiated by OH radical: an insight from first principle study. *Molecular Physics*. 118. 2020.
- Pranckevicius C., Weber M., Krummenacher I., Phukan A. K. & Braunschweig H. Phosphinoborylenes as stable sources of fleeting borylenes. *Chemical Science*. 11(40). 2020.
- Rathnam V., Kichu A., Dutta N., Maji T. K. & Devi N. Influence of organically modified nanoclay and TiO_2 nanopowder on the properties of azadirachta indica wood flour-reinforced high-density polyethylene, low-density polyethylene, polypropylene, and polyvinyl chloride nanocomposite. *Journal of Thermoplastic Composite Materials*. July. 2020.
- Saikia A. & Karak N. Cellulose nanofiber-polyaniline nanofiber-carbon dot nanohybrid and its nanocomposite with sorbitol based hyperbranched epoxy: Physical, thermal, biological and sensing properties. *Colloids and Surfaces A-Physicochemical and Engineering Aspects*. 584. 2020.
- Saikia B., Mulvee M. T., Torres-Moya I., Sarma B. & Steed J.W. Drug mimetic organogelators for the control of concomitant crystallization of barbital and thalidomide. *Crystal Growth & Design*. 20. 2020.
- Saikia P., Sarmah H. J., Ahmed S., Lahkar S., Das, J. P. & Dolui S. K. Synthesis of $\text{Ca}_x\text{Cu}_{3-x}\text{Ti}_4\text{O}_{12}$ Perovskite materials and house-hold LED light mediated degradation of rhodamine blue dye. *Journal of Inorganic and Organometallic Polymers and Materials*. 31(5). 2021

- Saikia R. A., Barman D., Dutta A. & Thakur A. J. N^1 - and N^3 -Arylations of hydantoins employing diaryliodonium salts via copper (I) catalysis at room temperature. *European Journal of Organic Chemistry*. 3. 2021.
- Saikia R., Park K., Masuda H., Itoh M., Yamada T., Sajiki H., Mahanta S. P., Thakur A. J. & Bora U. Revisiting the synthesis of aryl nitriles: a pivotal role of CAN. *Organic & Biomolecular Chemistry*. 19(6). 2021.
- Sarmah D. & Bora U. Methylene surrogates for the synthesis of 3, 3'-diindolylmethanes. *ChemistrySelect*. 5. 2020.
- Sarmah D. & Karak N. Biodegradable superabsorbent hydrogel for water holding in soil and controlled-release fertilizer. *Journal of Applied Polymer Science*. 137(13). 2020.
- Sarmah D. & Karak N. Double network hydrophobic starch based amphoteric hydrogel as an effective adsorbent for both cationic and anionic dyes. *Carbohydrate Polymers*. 242. 2020.
- Sarma, P. J., Dowerah, D., Gour, N. K., Logsdail, A. J., Catlow, C. R. A. & Deka, R. C. Tuning the transition barrier of H₂ dissociation in the hydrogenation of CO₂ to formic acid on Ti-doped Sn₂O₄ clusters. *Physical Chemistry Chemical Physics*. 23. 2020.
- Sharma M., Das B., Baruah J. M., Bhattacharyya K. P., Saikia L. & Bania K. K. Pd-NiO-Y/CNT Nanofoam: A zeolite-carbon nanotube conjugate exhibiting high durability in methanol oxidation. *Chemical Communication*. 56. 2020.
- Sharma M., Ganeshpandian M., Majumder M., Tamilarasan A., Sharma M., Mukhopadhyay R., Islam N.S. & Palaniandavar M. Octahedral copper (II)-diimine complexes of triethylenetetramine: effect of stereochemical fluxionality and ligand hydrophobicity on CuII/CuI redox, DNA binding and cleavage, cytotoxicity and apoptosis-inducing ability. *Dalton Transactions*. 49(24). 2020.
- Sharma M., Pandian M. G., Sanjeev A., Tamilarasan A., Mattaparthi V. S. K., Islam N. S., & Palaniandavar M. Bis- and mixed-ligand copper (II) complexes of nalidixic acid the antibacterial drug: mode of nalidixate coordination determines DNA binding and cleavage and cytotoxicity. *Inorganica Chimica Acta*. 504. 2020.
- Sharma P., Sarma P., Frontera A., Barceló-Oliver M., Verma A. K., Sarma B., Barthakur T. & Bhattacharyya M. K. Energetically significant cooperative π -stacked ternary assemblies in Ni(II) phenanthroline compounds involving discrete water clusters: Anticancer activities and theoretical studies. *Journal of Molecular Structure*. 1229. 2020.
- Uppuladinne M. V., Dowerah D., Sonavane U. B., Ray S. K., Deka, R. C. & Joshi R. R. Structural insight into locked nucleic acid based novel antisense modifications: A DFT calculations at monomer and MD simulations at oligomer level. *Journal of Molecular Graphics and Modelling*. 107. 2021.

Books/Chapters

- K. K. Hazarika & P. Bharali. 3d-Metal Oxide Nanostructures for Oxygen Electrocatalysis. In *Advanced Heterogeneous Catalysts Volume 1: Applications at the Nano-Scale*. American Chemical Society, USA, 2020.
- M. Mondal, G. Gogoi, N. Dutta & T. K. Maji. Development of Biobased Wood Polymer Nanocomposites: Industrial Applications, Market, And Future Trends. In *Handbook of Polymer Nanocomposites for Industrial Applications*. Elsevier, Amsterdam, Netherlands 2021.
- N. Kashyap, S. Das & R. Borah. A Brief Insight into the Polyoxometalate Based Organic-Inorganic Hybrid Systems and their Catalytic uses in Oxidation and Acid Catalyzed Organic Reactions. In A. K. Acharya (Ed.). *Recent Trends in Chemical Sciences*. AkiNik, Delhi, 2020.
- S. Das, N. Kashyap, S. Kalita, D. B. Bora & R. Borah. A Brief Insight into the Physicochemical Properties of Room-Temperature Acidic Ionic Liquids and Their Catalytic Applications in C-C

Bond Formation Reactions. In I. H. Williams & N. H. Williams (Eds.). Advances in Physical Organic Chemistry. Elsevier, Academic Press, Amsterdam, Netherlands, 2020.

- S. Saikia & R. Borah. Ionic Liquid Based Polyoxometalates as Functionalized Organic-Inorganic Hybrid Materials for Catalytic Organic Reactions. In A.-U.-Rahman Advances in Organic Synthesis. Bentham Science Publisher. UAE, 2021.
- S. Gogoi, S. Kalita, R. Hazarika & P. Puzari. Bilayer Lipid membrane on an integrated porous cushion: A platform for electrochemical detection of pore forming agents in biological membranes, Editors: P. Dutta and A.T.T. Mostako, ISBN 978-93-5473-472-4, 2021.
- P. Gogoi, P. Begum, K. Rakshit & T. K. Maji. Synergistic Effect of E. crassipes Biomass/Chitosan for As (III) Remediation From Water. In Mathematics Applied to Engineering in Action (pp. 71-91). Apple Academic Press. USA, 2021.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/Institute /Venue
K. K. Bania	International Conference on "The Present and future of excellence in Organic Synthesis"	Department of Chemistry, Tezpur University	7 – 8 January 2021	Tezpur University (Online)
	One Week workshop on Analytical Techniques in Chemical Science	TLC, Tezpur University	20 – 25 January 2020	Tezpur University
	Guest Lecture Series on Chemistry Education	Department of Chemistry, Tezpur University	28 January – 18 February 2021	Tezpur University (Online)
	International Conference on "Material Chemistry and Catalysis"	Department of Chemistry, Tezpur University	4 – 5 March 2021	Tezpur University (Online)
	Faculty Development Program On Moodle Learning Management System	Department of Mathematical Sciences, Bodoland University, Kokrajhar, Assam	11 – 15 May 2020	Bodoland University, Kokrajhar, Assam (Online)
P. Puzari	MOFPI-FICCI Virtual Processed Food Research and Development EXPO 2021.	Ministry of Food Processing Industries in collaboration with the Federation of Indian Chambers of Commerce and Industries	20-22 January 2021	Tansen Marg, New Delhi (Online)
R. C. Deka	Chemistry of Alcohols	Majuli College	26 August 2020	Department of Chemistry, Majuli College (Online)

	Quantum Chemistry	Bahona College	17 August 2021	Department of Chemistry, Bahona College. (Online)
S.P. Mahanta	One Week Faculty Development Programme on "Entrepreneurship, Incubation and Innovation"	Teaching Learning Centre, Ramanujan College, University of Delhi	23 – 29 June 2020	Ramanujan College, University of Delhi (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
A. J. Thakur	Chemistry Education: Prospects & Opportunities	26 June 2020	Pandu College, Assam (Online)
K. K. Bania	Looking for Our Future Through Learning Chemistry	18 August 2020	Mangaldoi College, Assam (Online)
	Chemistry Education for Undergraduate: Opportunities and Career Prospects	17 December 2020	Sibasagar College, Assam (Online)
	Emerging Trends and Future Prospects in Chemistry	21 August 2020	Tinsukia College, (Online)
N. S. Islam	National seminar on Women in Science: North-East Chapter	7 November 2020	Tripura Central University, (Online)
R C Deka	Faculty Induction Programme II November 16 – December 14, 2020	25 November 2020	Jawaharlal Nehru University, New Delhi (Online)
R. K. Dutta	Webinar on Arsiron Nilogon	31 July 2020	LTK College, Lakhimpur, Assam (Online)
	International Webinar on "Emerging Materials and Technology for Water Purification,"	12 Aug 2021	Organized by Dept. of Physics, Jawaharlal Nehru College Pasighat, Arunachal Pradesh in collaboration with IQAC. (Online)
	Water Quality in Nagaland and its Related Health Issues: Awareness Program	9 Sept 2020	NIT Nagaland (Online)
S. P. Mahanta	Webinar on "Strategic approaches towards qualifying NET/GATE in Chemistry" Organized in Dhemaji College. In collaboration with Department of Chemistry & IQAC Cell, Dhemaji College and Department	3 - 4 August 2020	Dhemaji College, Assam (Online)

	of Chemistry, Tezpur University		
	Presented a paper on "Sensitive and Selective Detection of Fluoride through Synergistic Cu(2+) - Anion Interaction with Receptor" in the International E-Conference on Current Trends in Chemical Research organized by Dept. of Chemistry in IQAC, Nogaon College, Nagaon, Assam	22 August 2020	Nagaon College. (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES/TRAINING ORGANISED

Title	Duration
Sustainability of the recently installed Fluoride Nilogon filters at Khaira, Odisha and way forward	4 July 2020
Strategic approaches towards qualifying NET/GATE in Chemistry Organized in Dhemaji College. In collaboration with Department of Chemistry & IQAC Cell, Dhemaji College and Department of Chemistry, Tezpur University	3-4 August 2020
Fluoride Nilogon in Chhattisgarh	29 August 2020
Arsiron Nilogon Training Program for Art of living, Saci Waters Assam and Gram Panchayats from Nalbari and Borpeta	8 September 2020
Arsiron Nilogon for solving Arsenic problem of Majuli	20 September 2020
Arsiron Nilogon for Arsenic affected Dhemaji District	11 October 2020
Arsiron Nilogon for Arsenic affected Golaghat District	17 October 2020
Arsenic in Groundwater and Mitigation through Scientific way	17 November 2020
Workshop on Arsenic contamination of drinking water and its testing and Removal by Arsiron Nilogon	21 November 2021 (Morning)
Awareness and training on Arsiron Nilogon	21 November 2020 (Afternoon)
International Conference on The Present and future of excellence in Organic Synthesis	7-8 January 2021
Guest Lecture Series on Chemistry Education	28 January - 15 February 2021
Workshop on Conservation of Sancipat Manuscript and Woodcarving by Customized Scientific Method	20-26 February 2021
International Conference on Material Chemistry and Catalysis	4-5 March 2021

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Faculty members and Staff

- Patent commercialization: Negotiations have been started for commercialization of an Indian Patent entitled "a highly efficient defluoridation method by in-situ generation of an efficient precipitant and strong adsorbents of fluoride in crushed limestone fixed-bed column and plug flow reactors" under Patent No. 289204 Granted on 03/11/2017, Application No.: 168/KOL/2011, dated 09/02/2011 recorded in favor of Prof. Robin Kumar Dutta and his student Dr. Suresh Kumar Nath.

Honorable Prime Minister Shri Narendra Modi at TU convocation, Jan 2021 hailed Arsiron Nilogon and Fluoride Nilogon reaching various states in the country.

- Prof. Niranjana Karak, International-Listed in World ranking among top 2% scientists from India by Stanford University scientists (rank 738, top 0.91483823% in polymer), 2020.
- Prof. Niranjana Karak, National-Professor M. Santappa Award in Polymer Science of the year 2020 by Polymer Society of India, 2021.
- Prof. Niranjana Karak has been awarded Prof. M. Santappa Award in Polymer Science of the year 2020 by The Society for Polymer Science (India). (January 2021)

Research Scholar/Student

- Barsha Ritu Goswami received INSA Young Historian of Science Award, 2020.
- Simanta Doley received National Technology Innovation Award, 2020 awarded by Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

Ongoing Project Scheme of Department

- DST-FIST project, Amount sanction ₹ 259 lakhs; Duration 2018-2023

Some salient information of the Department- Innovation

A customized method has been developed for conservation of old Sancipat manuscripts, a unique kind of traditional manuscripts of early Assam.

Outreach programme organized / attended

Date	Activity	Place
9 th Apr 2020	Food items were distributed in Bihaguri Village during COVID-19 pandemic situation	Bihaguri, Sonitpur Assam
17 Oct 2020	Online meeting on Arsenic Contamination and Arsiron Nilogon for Golaghat District of Assam	(Online)
28 Oct 2020	Training on Water Quality Testing For laboratory personnel of PHED Kokrajhar District An Initiative of UNICEF Assam Tezpur University: 28 October 2020.	(Online)
2 Nov 2020	Training on Water Quality Testing For laboratory personnel of PHED Baksa District An Initiative of UNICEF Assam Tezpur University:	(Online)
12 Nov 2020	Training on Water Quality Testing For laboratory personnel of PHED Borpeta and Bongaigaon District An Initiative of UNICEF Assam Tezpur University:	(Online)
17 Nov 2020	Training on Water Quality Testing For laboratory personnel of PHED Dhubri and Chirang District An Initiative of UNICEF Assam Tezpur University:	(Online)
12, 23 and 30 Dec 2020	Online Meeting with coordinators of colleges and universities for Discussion on modalities for setting up of Water Quality Testing Centres in Science Laboratories An Initiative of UNICEF Assam Tezpur University	(Online)

Contribution to the Society

- Fluoride Nilogon filters of 30 litre capacity each have been installed in 36 households at Gangabairappanpalya, a village near Nelamangala in Outer Bangalore district in Karnataka in collaboration with Water Aid India and Swami Vivekananda Youth Movement, another NGO.
- Assisted in installation of Fluoride Nilogon filters of 15 litre capacity each have been in 36 households in Kanker district of Chhattisgarh.
- Supporting installation of Arsiron Nilogon filters at villages and schools in Assam through creation of awareness, collection and testing of water, installation of filters and helping in acquiring chemical kits in association with various governmental and nongovernmental organizations like Numaligarh Refinery Ltd.
- Conserved some waring out Sancipat manuscripts and restored some waring out woodcarvings through customized scientific methods at Kaliabor College where some students of the college have also been trained in conservation and restoration.

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET/ CSIR-SRF/OBC-NF: 28

NOTABLE PLACEMENTS

Name	Designation	Organization
Ms. Saheen Shehnaz Begum	Assistant Professor	Gargaon College, Assam
Mr. Satyajit Dey Baruah	Assistant Professor	Lumding College, Assam
Mr. Sudhangshu Priya Bharati	Assistant Professor	Lumding College, Assam
Ms. Sukanya Das	Assistant Professor	Debraj Roy College, Assam
Ms. Prantika Bhattacharjee	Assistant Professor	Bahona College, Assam
Dr. Pranita Bora	Assistant Professor,	Nalbari College, Assam
Ms. Trisha Dutta	Assistant Professor	Eastern Karbi-Anglong College, Assam
Mr. Aditya Borah	Assistant Professor	Jengraimukh College, Assam
Dr. Simanta Doley	Assistant Professor	Jengraimukh College, Assam
Dr. Rajarshi Bayan	Assistant Professor	Arya Vidyapeeth College, Assam
Dr. Gangutri Saikia	Assistant Professor	Nowgong Girls' College, Assam
Dr. Rajib Khatioda	Assistant Professor	Sadiya College, Assam
Dr. Sudarshan Gogoi	Assistant Professor	Sadiya College, Assam
Dr. Kiran Mohan	Assistant Professor	Rangapara College, Assam
Dr. Champak Dutta	Assistant Professor	Bahona College, Assam
Dr. Mamon Dey	Assistant Professor	S.B. Deorah College, Assam
Dr. Bitupon Borthakur	Assistant Professor	D.D.R. College, Assam
Dr. Biraj Das	Assistant Professor	D.D.R. College, Assam
Dr. Mukesh Sharma	Assistant Professor	Suren Das College, Assam
Dr. Runjun Devi	Research Scientist	Jubilant Life Sciences.
Mr. Afzalur Rahman	Junior Scientific Assistant	ONGC, Assam Asset
Ms. Preetima Changmai	Assistant Teacher	Simaluguri Adarsha High School, Assam
Ms. Geetali Sonowal	Assistant Teacher	Chaulkhowa Janajati M.E. School, Assam
Mr. Biplob Chetia	Sub-inspector	Assam Police
Ms. Sampurna Bordoloi	Assistant Teacher	Namkakila High School, Assam
Mr. Rupjyoti Kalita	Assistant Teacher	Borgang High School, Assam
Ms. Monsun Mout	Assistant Teacher	

Ms. Nazia Farnaz	Single Window Operator	Punjab National Bank
Ms. Mubin ul Hanif	Junior Associate	State Bank of India
Mr. Paban Nandi	L & D specialist	BYJU's
Mr. Ranjit Hazarika	Junior Technical Assistant	ONGC, Assam Asset
Mr. Ashim Jyoti Pathak	Junior Scientific Assistant	ONGC, Assam Asset
Ms. Maitrayee Kashyap	Junior Technical Assistant,	ONGC, Assam Asset
Ms. Ashok Mishra	Junior Technical Assistant	ONGC, Assam Asset
Ms. Priyakshi Sharma	Management Trainee- Corporate Communications	Linde Plc.
Ms. Pallabi Borah	T.A. Chemistry & Bioprospecting Division	RFRI, Jorhat
Mr. Pritam Kr. Batsa	Laboratory Assistant	Public Health Engineering, Hojai Division
Mr. Deepjyoti Choudhury	Junior Executives QA	Montex Glass Fibre Industries Pvt. Ltd.
Ms. Parineeta Gogoi	Guest Faculty	North Lakhimpur College
Mr. Bikash Das	Guest Faculty	Majuli College.
Dr. Tuhin Ghosh	Research Scientist (R&D)	Hindustan Gum and Chemicals Limited
Dr. Aditi Saikia	Assistant Professor	University of Science and Technology, Meghalaya

THE FACULTY OF THE DEPARTMENT

Professors

Swapan K. Dolui, Ph.D. (IIT, Kharagpur)
Specialization/Areas of interest: Polymer Chemistry
 E-mail: dolui@tezu.ernet.in

Nashreen S. Islam, Ph.D. (NEHU)
Specialization/Areas of interest: Inorganic Chemistry
 E-mail: nsi@tezu.ernet.in

Tarun K. Maji, Ph.D. (Calcutta University)
Specialization/Areas of interest: Polymer Chemistry
 E-mail: tkm@tezu.ernet.in

Robin K. Dutta, Ph.D. (NEHU)
Specialization/Areas of interest: Physical Chemistry
 Email: robind@tezu.ernet.in

Niranjan Karak, Ph.D. (IIT, Kharagpur)
Specialization/Areas of interest: Advance Polymers and Nanomaterials
 E-mail: nkarak@tezu.ernet.in

Ramesh C. Deka, Ph.D. (NCL, Pune)
Specialization/Areas of interest: Theoretical Chemistry
E-mail: ramesh@tezu.ernet.in

Ashim J. Thakur, Ph.D. (NEIST, Jorhat)
Specialization/Areas of interest: Organic Chemistry
E-mail: ashim@tezu.ernet.in

Ashwini K. Phukan, Ph.D. (Hyderabad University)
Specialization/Areas of interest: Computational Inorganic/Organometallic Chemistry
E-mail: ashwini@tezu.ernet.in

Ruli Borah, Ph.D. (NEIST, Jorhat)
Head, Department of Chemical Sciences
Specialization/Areas of interest: Organic Chemistry/Functionalized Ionic liquids
E-mail: ruli@tezu.ernet.in

Associate Professors

Panchanan Puzari, Ph.D. (IIT, Guwahati)
Specialization/Areas of interest: Molecular dynamics, Chemical sensors, Biosensors, Gas sensors, Toxicology and Battery
E-mail: pancha@tezu.ernet.in

Utpal Bora, Ph.D. (NEIST, Jorhat)
Specialization/Areas of interest: Organic Chemistry
E-mail: ubora@tezu.ernet.in

Assistant Professors

Kusum K. Bania, Ph.D. (Tezpur University)
Specialization/Areas of interest: Inorganic Chemistry
E-mail: kusum@tezu.ernet.in

Pankaj Bharali, Ph.D. (IICT, Hyderabad University)
Specialization/Areas of interest: Inorganic Chemistry & Catalysis
E-mail: pankajb@tezu.ernet.in

Nayanmoni Gogoi, Ph.D. (IIT, Bombay)
Specialization/Areas of interest: Inorganic Chemistry
E-mail: ngogoi@tezu.ernet.in

Bipul C. Sarma, Ph.D. (Hyderabad University)
Specialization/Areas of interest: Organic Chemistry
E-mail: bcsarma@tezu.ernet.in

Sajal K. Das, Ph.D. (CDRI, Lucknow University)
Specialization/Areas of interest: Synthetic Organic Chemistry
E-mail: sajalkd@tezu.ernet.in

Sanjeev P. Mahanta, Ph.D. (Hyderabad University)
Specialization/Areas of interest: Physical Chemistry
E-mail: samahan@tezu.ernet.in

Adjunct Professor

M. Lakshmi Kantam, Ph.D. (Kurukshetra University)

Specialization/Areas of interest: Inorganic

Email: mlakshmi@iict.res.in

Ashwini K. Phukan, Ph.D. (Hyderabad University)

Specialization/Areas of interest: Computational Inorganic/Organometallic Chemistry

E-mail: ashwini@tezu.ernet.in

Technical staff

Biren Gohain, Ph.D. (Tezpur University)

Technical Officer

E-mail: bng@tezu.ernet.in

Biraj J. Borah, Ph.D. (Tezpur University)

Senior Technical Assistant

E-mail: biraj@tezu.ernet.in

Raju K. Borah, Ph.D. (Tezpur University)

Technical Assistant

E-mail: raju@tezu.ernet.in

Nipu Dutta, M.Sc. (Annamalai University)

Technical Assistant

E-mail: nipu@tezu.ernet.in

Sankur Phukan, M.Sc. (Vinayaka University)

Technical Assistant

E-mail: sankur@tezu.ernet.in

Manuranjan Sarma, M.Sc. (Madurai Kamaraj University)

Laboratory Assistant

E-mail: mranjan@tezu.ernet.in

Biplob Ozah, M.Sc. (IGNOU)

Laboratory Assistant

E-mail: bipozah@tezu.ernet.in

Office staff

Babita Das, M.Sc. (SMU)

Upper divisional Clerk

bobi@tezu.ernet.in

Khogen Ch. Das

MTS

DEPARTMENT OF ENVIRONMENTAL SCIENCE

THE DEPARTMENT

Initially established as a Centre for Environmental Science in 2003, the Centre was converted to the Department of Environmental Science in 2004, with the objective of imparting education on regional and global environmental issues. The curriculum for the M. Sc. Programme focuses on all important aspects of Environmental Science covering contemporary problems of natural resource conservation and environmental quality. Areas of research includes, Atmospheric processes, Environmental pollution, Greenhouse gas emission, Riverine hazards, Hydrogeochemistry, Geomorphology, Vulnerability & adaption, Natural hazards, Climate change and its impacts on agroecosystem and forest ecosystem, Plant-insect interactions, Nanotechnology in environmental research, Waste management, Vermicomposting, Pollution remediation, Ecosystem dynamics, Biodiversity conservation and Atmospheric system modeling.

The Department is a recipient of grant under UGCSAP and DST-FIST.

Academic Programmes and Student intake

Programme	Intake
M. Sc.	33
Ph.D.	Variable, 04 in the 2020-21

Major Facilities and Equipment Available

Besides laboratories for regular academic activities the department has specialized laboratories that facilitate varied research activities. Some of the instruments house in the laboratories of the department includes ICP-OES, Laser Leaf Area Meter with Root Measurement Attachment, Portable Photosynthesis Systems, Gas Chromatograph, TOC Analyzer, Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler with gaseous sampling attachment, High Speed Refrigerated Centrifuge, Sartorius RO System, Sartorius Ultra-Pure Water Purification System, HOBO Pro V2 Tea/RH data logger, Flame Photometer, Electrophoresis gel unit and Fluorescence Microscope with Camera & Software. Department also have GIS laboratory facilitate with Arc GIS Master Lab Kit and ERDAS Software and plant culture house.

Other major equipment

- Inductively Coupled Plasma Mass spectrophotometer (ICP-MS)
- Carbon Hydrogen Nitrogen and Sulphur Analyzer (CHNS)
- High-performance liquid chromatography (HPLC)
- Ion Chromatography (IC)
- Florescence Microscope

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
R. R. Hoque	<p>1. Brought to light the chemical nature of the rainwater over mid-Brahmaputra region. IN the study the transport and sources of the chemical species of the rainwater were appreciated with application of HYSPLIT an PMF models. The findings appeared on Aerosol and Air Quality Research (Impact factor : 2.7)</p> <p>2. Application of lichen species - <i>Pyxine cocoes</i> and <i>Parmotrema tinctorum</i> (Nyl.) Hale - for monitoring air pollution was successfully achieved. Two publications appeared on Environ. Monit. Assess (Springer-Nature).</p> <p>3. Identified a diatom species in the aerosol over Tezpur, which was used to hypothesize that the dry beds of the Brahmaputra River was a significant source of aerosol during the dry season. The idea was concluded with support of SEM-EDX and FTIR studies of aerosol, and was published in S.N. Applied Sciences (Springer-Nature)</p>
S. S. Bhattacharya	<p>In literature it is found that earthworms efficiently detoxify metals by a small (~ 13 kDa) cysteine rich protein, metallothionein (MT). However, MT expression and the extent of metal accumulation often do not correlate; the reason behind such incoherence was unclear. Therefore, fluorescence probed cadmium was used to navigate the metal transportation in vermibeds as well as in earthworm body. The study initially revealed that significant amount of cadmium was accumulated in different sections of the worm body. Eventually, molecular techniques facilitated to identify a few metal-induced high molecular weight proteins in cadmium exposed earthworms; out of which the most prominent one was purified. This protein is substantially large (150 kDa) and efficiently sequesters cadmium in <i>Eisenia fetida</i>. Eventually, microscopic analyses exhibited that the purified protein transports the bound cadmium to chloragogenous tissues, which function similar to vertebrate liver, where the toxic metal is neutralized. Hence, this apparently novel 150 kDa protein is an important and promising heavy metal binding protein in earthworm.</p>

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Centre of Excellence Project "Climate Change	DST	₹ 635 Lakhs	5 Years (2020-2025)	A. Devi (PI) Co-PI(s) D.C. Baruah,	Dept. of Energy, Tezpur

Impacts and Adaptation for a Climate Resilient North East India"				R R Hoque, A.K. Das, N.Gogoi, S. Handique, A. Prakash	University, Assam
Exploration of Biodiversity and conservation issues of Talley Valley Wildlife sanctuary, Arunachal Pradesh with reference to wildlife species distribution along climate and topographical gradients	MoEF	₹ 38.96 Lakhs	3 Years (Extended till Sept. 2021)	A. Devi	
Enumeration and valuation of the Economic Impact of female labour in the Hills: A study of Indian Himalayan region". Study.	UGC (Assigned by NITI AAYOG, New Delhi)	₹1.45 Lakhs	1 Year (2021)	A. Devi	Indian Himalayan Central Universities Consortium (IHCUC)
Exploring Wildlife and Nature Based Tourism as a Potential Livelihood Option for Local People inhabiting in and around the Protected Areas in Eastern Himalayas, Arunachal Pradesh: A Sustainable approach for biodiversity conservation.	National Mission on Himalayan Studies, G.B. Pant National Institute of Himalayan Environment and Sustainable Development (GBPNIHESD) funded project	₹ 45 Lakhs	3 Years (2018-2021)	A. Devi (Co-PI) A. Kumar (PI) M. Krishna (Co-PI)	Dept. of Forestry, NERIST, Arunachal Pradesh Amity Institute of Forestry & Wildlife (AIFW), Amity University, Noida
Status survey and potential threats of threatened Mishmi Takin (<i>Budorcas</i>)	IERP-GBPNIHESD, Kosi-Katarmal, Almora,	₹ 9.97 Lakhs	3 Years (2018-2021)	A. Devi (Co-PI) A. Kumar (PI)	Dept. of Forestry, NERIST, Arunachal Pradesh

<i>taxicolor</i>) and its conservation through sensitization of local communities in eastern Arunachal Pradesh, India	Uttarakhand, India				
Quantitative assessment and mapping of plant diversity and biological resources in Upper and Lower Assam" under the sub-component 1entitled "Inventories and mapping of bioresources in North East India" of major project "Bioresources and sustainable livelihoods in North East India.	DBT	₹ 78.49 Lakhs	3 Years (2018-2021)	A. Devi (Co-PI) G. Dutta (PI)	Balipara Foundation, Assam
Harnessing Endophytes and Arbuscular Mycorrhizal Fungi from Citrus microbiome for plant and soil health management in North East India	DBT	₹ 20.82 Lakhs	3 Years (2021-2024)	N. Gogoi	
Ecohydrological assessment of eutrophicated water bodies - monitoring algal blooms (algal toxins), water quality and developing techniques to reduce eutrophication	Science and Engineering Research Board (SERB)	₹ 26.21 Lakhs	3 Years (2019-2022)	N. Gogoi	
Soil plant	Ministry	₹47.90	3 Years	N. Gogoi	

atmosphere study in relation to net CO ₂ flux from terrestrial ecosystem of Assam	of Earth Science, Govt. of India	Lakhs	(2019-2022)		
Study of shifting cultivation and associated environmental problems in Meghalaya: Physicochemical and geospatial approach	SERB	₹ 35.50 Lakhs	3 Years (2020-2023)	P. Deka	
UGC-BSR startup grant for newly recruited faculty at Assistant Professor level in Science department	UGC	₹ 10 Lakhs	2 Years (2019-2021)	P. Deka	
Earthworm Gut Microbes Mediated Carcinogenic Polycyclic Aromatic Hydrocarbons (CPAHs) Remediation in Contaminated Soil	DBT	₹ 56.39 Lakhs	3 Years (2018-2021)	R.R. Hoque	
Exploiting chemical ecology for IPM: Deciphering the phyto-semiochemicals involved in Insect-Plant interactions of major crop pests of North East Region -India	DBT	₹ 475.79 Lakhs	3 Years (2021-2024)	S. Kalita (Co-PI)	Assam Agricultural University; Citrus Research Station, Tinsukia; CSIR Indian Institute of Integrative Medicine, Jammu; Indian Institute of Horticultural Research, Bangalore
Elucidating the	ICAR-	₹ 46.57	3 Years	S. S.	

mechanism and assessing amelioration potential of Ocium and Lucas in stress induced impaired homeostasis on growth and reproduction in zebrafish.	NASF	Lakhs	(2017-2020))	Bhattacharya	
Utilization of textile industry sludge through application of vermitechonology : An in-sight on metal accumulation potential of earthworm.	DST-SERB	₹ 54.8 Lakhs	3 Years (2017-2020)	S. S. Bhattacharya	
Prospect of a novel protein in earthworm gut to minimize heavy metal risk in vermicompost for sustainable crop production	CSIR	₹ 26.9 Lakhs	3 Years (2017-2020)	S. S. Bhattacharya	

PUBLICATIONS

Journal Publications

- Baidya S., Thakur, B., & Devi A. Ethnomedicinal plants of the sacred groves and their uses by karbi tribe in karbi anglong district of assam, northeast india. *Indian Journal of Traditional Knowledge*, 19(2), 277–287. 2020
- Baidya S., Thakur, B., Malunguja G., & Devi, A. Changes of land use land cover and floristic composition in sacred forests of West Karbi Anglong district, Assam, India. *Tropical Plant Research*, 7, 296–308. <https://doi.org/10.22271/tpr.2020.v7.i2.035>. 2020
- Baruah N., Gogoi N., & Farooq M. Influence of biochar and organic soil amendments on bioavailability and immobilization of copper and lead to common cocklebur in acidic sandy loam soil. *Journal of Environmental Chemical Engineering*, 8(6), 104480. <https://doi.org/10.1016/j.jece.2020.104480>. 2020
- Baruah S., Bora M. S., Dutta S., Hazarika K. K., Mudoi P., & Sarma K. P.. Antimony induced structural and ultrastructural changes in *Trapa natans*. *Scientific Reports*, 11(1), 10695. <https://doi.org/10.1038/s41598-021-89865-2>. 2021
- Basumatary H., Devi H. S., Borah S. B., & Das A. K. Land cover dynamics and their driving factors in a protected floodplain ecosystem. *River Research and Applications*, 37(4), 627–643. <https://doi.org/10.1002/rra.3775>. 2021

- Basumatary H., Sah R. K., & Das A. K. Bankline dynamics and their effects on protected areas along the Brahmaputra river. *CATENA*, 197, 104947. <https://doi.org/10.1016/j.catena.2020.104947>. 2021
- Bhuyan P., Ahmed M. S., Hopke P. K., & Hoque R. R. Understanding the Chemistry and Sources of Precipitation Ions in the Mid-brahmaputra Valley of Northeastern India. *Aerosol and Air Quality Research*, 20. <https://doi.org/10.4209/aaqr.2020.02.0072>. 2020
- Bhuyan P., Borah N., Deka P. & Hoque R. R. Chemistry of soluble ions in atmospheric bulk precipitation during the monsoon over the Brahmaputra Valley. *Arabian Journal of Geosciences*, 14(3), 151. <https://doi.org/10.1007/s12517-021-06500-0>. 2021
- Bidyut S., Awadhesh K., Sarma k., Singh B.B., Basumatary H. and Devi A. 2021. A comparative assessment of external morphological traits between *Macaca munzala*, *Tawang* and *Macaca assamensis*, Goalpara population in Northeast India. *Primates*, 62:343-360. <https://doi.org/10.1007/s10329-020-00872-9>.
- Bora J., Deka P., Bhuyan P., Sarma K. P., & Hoque R. R. Morphology and mineralogy of ambient particulate matter over mid-Brahmaputra Valley: application of SEM-EDX, XRD, and FTIR techniques. *SN Applied Sciences*, 3(1), 137. <https://doi.org/10.1007/s42452-020-04117-8>. 2021
- Bora M. S., & Sarma K. P. Anatomical and ultrastructural alterations in *Ceratopteris pteridoides* under cadmium stress: A mechanism of cadmium tolerance. *Ecotoxicology and Environmental Safety*, 218, 112285. <https://doi.org/10.1016/j.ecoenv.2021.112285>. 2021
- Bora M. S., Gogoi N., & Sarma K. P. Tolerance mechanism of cadmium in *Ceratopteris pteridoides*: Translocation and subcellular distribution. *Ecotoxicology and Environmental Safety*, 197, 110599. <https://doi.org/10.1016/j.ecoenv.2020.110599>. 2020
- Bora M., Bordoloi S., Kumar H., Gogoi N., Zhu H.-H., Sarmah A., Sreeja P., Sekharan S., & Mei G. Influence of biochar from animal and plant origin on the compressive strength characteristics of degraded landfill surface soils. *International Journal of Damage Mechanics*, 105678952092552. <https://doi.org/10.1177/1056789520925524>. 2020
- Boro R. M., Baruah N., & Gogoi N. Impact of Biochar and Lime on Phytoavailability of Pb and Cd in a Contaminated Soil. *Tropical Agricultural Research*, 32(2), 125. <https://doi.org/10.4038/tar.v32i2.8460>. 2021
- Chakraborty S., Metya A., Datye A., Debburman P., Dasgupta P., Sarma D., & Gogoi N. Isotopic and concentration analyses of CO₂ and CH₄ in association with the eddy-covariance based measurements in a tropical forest of northeast India. <https://doi.org/10.1002/essoar.10502721.1>. 2020
- Chetia J., Gogoi N., Baruah D., Fouassier N., & Sippel F. Potential use of bioenergy power plant residue biochar in mitigating N₂O emission from acidic sandy loam soils: a comparative study. *Environmental Sustainability*. <https://doi.org/10.1007/s42398-021-00169-7>. 2021
- Chetia J., Gogoi N., Gogoi R., & Yasmin F. Impact of heavy metals on physiological health of lichens growing in differently polluted areas of central Assam, North East India. *Plant Physiology Reports*. <https://doi.org/10.1007/s40502-021-00575-3>. 2021
- Daimari R., Bhuyan P., Hussain S., Nayaka S., Mazumder M. A. J., & Hoque R. R. Anatomical, physiological, and chemical alterations in lichen (*Parmotrema tinctorum* (Nyl.) Hale) transplants due to air pollution in two cities of Brahmaputra Valley, India. *Environmental Monitoring and Assessment*, 193(2), 101. <https://doi.org/10.1007/s10661-021-08897-3>. 2021
- Das P., Paul S., Bhattacharya S. S., & Nath P. Smartphone-Based Spectrometric Analyzer for Accurate Estimation of pH Value in Soil. *IEEE Sensors Journal*, 21(3), 2839–2845. <https://doi.org/10.1109/JSEN.2020.3027587>. 2021
- Das S., Barman S., Teron R., Bhattacharya S. S., & Kim K.-H. Secondary metabolites and anti-microbial/anti-oxidant profiles in *Ocimum* spp.: Role of soil physico-chemical characteristics as

- eliciting factors. *Environmental Research*, 188, 109749. <https://doi.org/10.1016/j.envres.2020.109749>. 2020
- Deka J., Baul N., Bharali P., Sarma K. P., & Hoque R. R. Soil PAHs against varied land use of a small city (Tezpur) of middle Brahmaputra Valley: seasonality, sources, and long-range transport. *Environmental Monitoring and Assessment*, 192(6), 357. <https://doi.org/10.1007/s10661-020-08296-0>. 2020
 - Devi J., Deb U., Barman S., Das S., Bhattacharya S.S., Fai Tsang Y., Lee J.-H., & Kim K.-H. Appraisal of lignocellulosic biomass degrading potential of three earthworm species using vermireactor mediated with spent mushroom substrate: Compost quality, crystallinity, and microbial community structural analysis. *Science of The Total Environment*, 716, 135215. <https://doi.org/10.1016/j.scitotenv.2019.135215>. 2020
 - Gogoi A., Taki K., & Kumar M. Seasonal dynamics of metal phase distributions in the perennial tropical (Brahmaputra) river: Environmental fate and transport perspective. *Environmental Research*, 183, 109265. <https://doi.org/10.1016/j.envres.2020.109265>. 2020
 - Gogoi L., Gogoi N., Borkotoki B. & Katakaki R. Efficacy of biochar application on seed germination and early growth of forest tree species in semi-evergreen, moist deciduous forest. *Forests, Trees and Livelihoods*, 29, 1–18. <https://doi.org/10.1080/14728028.2020.1790432>. 2020
 - Gogoi L., Narzari R., Gogoi N., Borkotoki B. & Katakaki R. Effect of Biochar on Soil Respiration from a Semi-evergreen, Moist Deciduous Forest Soil. *International Journal of Geosynthetics and Ground Engineering*, 6(2), 26. <https://doi.org/10.1007/s40891-020-00214-1>. 2020
 - Gogoi R.R., Khanikar L., Gogoi J., Neog N., Deka D.J. & Sarma K.P. Geochemical sources, hydrogeochemical behaviour of fluoride release and its health risk assessment in some fluorosis endemic areas of the Brahmaputra valley of Assam, India. *Applied Geochemistry*, 127, 104911. <https://doi.org/10.1016/j.apgeochem.2021.104911>. 2021
 - Gohain M., & Deka P. Trace metals in indoor dust from a university campus in Northeast India: implication for health risk. *Environmental Monitoring and Assessment*, 192(11), 741. <https://doi.org/10.1007/s10661-020-08684-6>. 2020
 - Gope M., Masto R.E., Basu A., Bhattacharyya D., Saha R., Hoque R. R., Khillare P. S., & Balachandran S. Elucidating the distribution and sources of street dust bound PAHs in Durgapur, India: A probabilistic health risk assessment study by Monte-Carlo simulation. *Environmental Pollution*, 267, 115669. <https://doi.org/10.1016/j.envpol.2020.115669>. 2020
 - Chaudhury G., Basumatari M., Darji C.B., Ahmed A.F., Borah D., Sah R.K, Devi A., Hazarika N. & Dutta G. 2021. Economic significance of wild bioresources to rural communities in the Eastern Himalayan state of Assam, Northeast India. *Trees, Forests and People*, 5:100102. <https://doi.org/10.1016/j.tfp.2021.100102>
 - Hussain N., Chatterjee S.K., Maiti T.K., Goswami L., Das S., Deb U., & Bhattacharya S.S. Metal induced non-metallothionein protein in earthworm: A new pathway for cadmium detoxification in chloragogenous tissue. *Journal of Hazardous Materials*, 401, 123357. <https://doi.org/10.1016/j.jhazmat.2020.123357>. 2021
 - Hussain B., Uma M.J., Li J., Ma Y., Ashraf M.N., Tahir N., Ullah A., Gogoi N. & Farooq M. Strategies for reducing cadmium accumulation in rice grains. *Journal of Cleaner Production* 10.1016/j.jclepro.2020.125557. 2021
 - Kumar M., Gogoi A., & Mukherjee S. Metal removal, partitioning and phase distributions in the wastewater and sludge: Performance evaluation of conventional, upflow anaerobic sludge blanket and downflow hanging sponge treatment systems. *Journal of Cleaner Production*, 249, 119426. <https://doi.org/10.1016/j.jclepro.2019.119426>. 2020
 - Malunguja G. Climate change mitigation through carbon dioxide (CO₂) sequestration in community reserved forests of northwest Tanzania. *Archives of Agriculture and Environmental Science*, 5, 231–240. <https://doi.org/10.26832/24566632.2020.050301>. 2020

- Malunguja G., & Devi A. Current Trend on Plant Species Diversity and Productivity Potential among Community Conserved Ngitili Subjected to Grazing Pressure in Kishapu District, Tanzania. *International Journal of Scientific Research and Engineering Development*, 3(2). 2020
- Malunguja G., Rubanza C., & Devi A. An assessment of the current status and regeneration potential of the traditional conserved forests (Ngitili) in Kishapu district, Tanzania. *Tropical Plant Research*, 7, 336–356. <https://doi.org/10.22271/tpr.2020.v7.i2.040>. 2020
- Metya A., Datye A., Chakraborty S., Tiwari Y. K., Sarma D., Bora A., & Gogoi N. Diurnal and seasonal variability of CO₂ and CH₄ concentration in a semi-urban environment of western India. *Scientific Reports*, 11(1), 2931. <https://doi.org/10.1038/s41598-021-82321-1>. 2021
- Mondal A., Goswami L., Hussain N., Barman S., Kalita E., Bhattacharyya P., & Bhattacharya S.S. Detoxification and eco-friendly recycling of brick kiln coal ash using *Eisenia fetida*: A clean approach through vermitechnology. *Chemosphere*, 244, 125470. <https://doi.org/10.1016/j.chemosphere.2019.125470>. 2020
- Mondal S. C., Sarma B., Farooq M., Nath D. J., & Gogoi N. Cadmium bioavailability in acidic soils under bean cultivation: role of soil additives. *International Journal of Environmental Science and Technology*, 17(1), 153–160. <https://doi.org/10.1007/s13762-019-02263-0>. 2020
- Nawaz A., Farooq M., Allah S., Gogoi N., Lal R. & Siddique K.M.H. Sustainable soil management for food security in South Asia. *Journal of Soil Science and Plant Nutrition*. DOI: 10.1007/s42729-020-00358-z. 2021
- Pal M., Gope M., Basu A., Laha T., Masto R., Labar R., Kundu T., Hoque R. R, Khillare P.S., & Balachandran S. Indoor Quality of Residential Homes and Schools of an Industrial Area in Asansol: Characterization, Bioaccessibility and Health Risk Assessment of Potentially Toxic Elements. *Nature Environment and Pollution Technology*, 20, 13–28. <https://doi.org/10.46488/NEPT.2021.v20i01.002>. 2021
- Paul B., Bhattacharya S.S., & Gogoi N. Primacy of ecological engineering tools for combating eutrophication: An ecohydrological assessment pathway. *Science of The Total Environment*, 762, 143171. <https://doi.org/10.1016/j.scitotenv.2020.143171>. 2021
- Paul S., Goswami L., Pegu R., & Bhattacharya S.S. Vermiremediation of cotton textile sludge by *Eudrilus eugeniae*: Insight into metal budgeting, chromium speciation, and humic substance interactions. *Bioresource Technology*, 314, 123753. <https://doi.org/10.1016/j.biortech.2020.123753>. 2020
- Sarma Bora, M., Devi U., Bharadwaj N., Sharma P., Kalita S., Baruah S., Das A. K., & Sarma K. P. Pollution and health risk assessment of toxic metals in solid waste dumping site soil and its impact on groundwater: a case study. *International Journal of Environmental Analytical Chemistry*, 1–21. <https://doi.org/10.1080/03067319.2020.1862813>. 2021

Books

- J. Sarma, A. Devi, G. C. Sarma & G. Dutta. *Dicot Flora of Erstwhile Sonitpur District, Assam*. Balipara Foundation, Assam India, 2020.

Book Chapters

- J. M. Bora, S. Bordoloi, H. Kumar, N. Gogoi, H.H. Zhu, A.K. Sarmah, P. Sreeja, S. Sreedeeep & G. Mei. Influence of biochar from animal and plant origin on the compressive strength characteristics of degraded landfill surface soils. *International Journal of Damage Mechanics*, 30(4), 484-501. (SAGE Publications) .2020.
- L. Khanikar, R. Gogoi & K. Sarma. Hydrogeochemical Investigation and Health Perspective of Arsenic in the Mid-Brahmaputra Floodplain of Assam, India (pp. 143–158). https://doi.org/10.1007/978-981-32-9771-5_8. (Springer).2020.
- M. Hiloidhari, N. Bhuyan, N. Gogoi, D. Seth, A. Garg, A. Singh, S. Prasad & R. Katak. Agroindustry wastes: biofuels and biomaterials feed stocks for sustainable rural development. *Technology*,

Advances, Life Cycle Assessment, and Economics, 357-388, <https://doi.org/10.1016/B978-0-12-818996-2.00016-8>. (ScienceDirect). 2020.

- N. Bhuyan, R. Narzari, L. Gogoi, N. Bordoloi, D.R. Palsaniya, U. Dev, N. Gogoi & R. Kataki. Velarization of Agricultural waste for multidimensional use In Current developments in biotechnology and bioengineering. DOI 10.1016/B978-0-444-64309-4.00002-7. (Elsevier). 2020.
- N. Gogoi & N. Gogoi. Evaluation of Effectiveness of Innovative Teaching over Conventional Method of Teaching. Eds. Effective Pedagogy, An Action Research Approach.(Tezpur University, ISBN: 978-81-937452-5-0). 2020.
- N.M. Gogoi, B. Baruah & N. Gogoi. Ecological tools for remediation of soil pollutants In Bioremediation science from Theory to Practice. DOI 10.1201/9780429327643-4. (CRC Press). 2020.
- P. Borah, N. Baruah, L. Gogoi, B. Borkotoki, N. Gogoi & R. Kataki. Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission In book: Biochar Applications in Agriculture and Environment Management. DOI: 10.1007/978-3-030-40997-5_11. (Springer). 2020.
- P. Sarma & A. Devi. Impact of Altitude and Climatic Parameters on the Phenophases and Distribution of Vegetations: A Review. In: Bio luminescence Vol. I (Ed. H. C. Majundar). (Eastern Book House (EBH) Publishers, Guwahati, India. Pp.221-227. ISBN No.: 9789388881906). 2020.
- S. Barman, S. S. Bhattacharya & N.C. Mandal. Serratia. In N. Amaresan, M. S. Kumar, K. Annapurna, K. Kumar & A. Sankaranarayana (Eds.). Beneficial Microbes in Agro-Ecology. (Elsevier). 2020.
- S. Das, L. Goswami & S.S. Bhattacharya. Vermicomposting: earthworms as potent bioresources for biomass conversion (R. Kataki, A. Pandey, S.K. Khanal, DS. Pant, Eds.) Chapter 3, pp-79-102. (Elsevier, ISBN: 978-0-444-64309-4).2020.
- S. Hussain & R.R. Hoque. Ecological and Natural Based Solutions as Green Growth Strategies for Disaster and Emergency Management of Air Pollution Extremes, in Extremes in Atmospheric Processes and Phenomena: Assessment, Impacts and Mitigation (Springer-Nature). 2020 .

PATENT: GRANTED OR APPLIED FOR DURING THE REPORTING PERIOD

Inventor(s)	Patent	Patent number/ Application Number	National/International
Sanjay Pratihar, Satya Sundar Bhattacharya, Pallabi Das and Kasturi Sarmah	Novel Soil Conditioners.	Grant No. 343590 dt. 07/08/2020	Indian patent

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
A. Devi	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020	Tezpur University

A. Devi	21 days Online GIS Training Program using QGIS	Department of Geography, Central University of Karnataka, India, jointly with State Institute of Urban Development, Karnataka, India	7-27 September, 2020	University of Karnataka
	One Week National e-Training on "Wildlife Conservation and Management"	College of Forestry, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, Maharashtra	2-6 October, 2020	Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola
	One-week online course on 'RS & GIS applications in Forestry & Ecology'	North Eastern Space Applications Centre (NESAC), Shillong, Meghalaya	1-5 February 2021	NESAC, Meghalaya
	National seminar on "Bio-energy & Bio-Diversity Conservation for Sustainable Future"	Biotechnology, Karpaga Vinayaga College of Engineering and Technology, Affiliated to Anna University, Chennai.	23 March 2021 (Google Meet)	Karpaga Vinayaga College of Engineering and Technology, T.N.
	Online Basic Training on Use of ICT in Teaching	TLC, Tezpur University	20-23 April 2020	Tezpur University
	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020	Tezpur University
A. Prakash				

N. Gogoi	Online Basic Training on Use of ICT in Teaching	TLC, Tezpur University	20-23 April 2020	Tezpur University
	Participated 12week long, faculty development course on Environmental Soil Chemistry.	NPTEL-AICTE	September-December 2020	Online
	Weeklong online workshop on Assessment and Evaluation	TLC, Tezpur University	24-29 August 2020.	Tezpur University
	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020	Tezpur University
	Participated online interdisciplinary refresher course on changing perspectives in pedagogy	TLC, Tezpur University under PMMMMNTT scheme of Ministry of Education, Govt. of India	8-22 October 2020.	
	Completed E training course on Basics of Soil science in relation to crop productivity and soil contamination	North Eastern Regional Institute of Water and Land Management, Tezpur	4-15 May 2020.	Tezpur
	Online Basic Training on Use of ICT in Teaching	TLC, Tezpur University	20-23 April 2020	Tezpur University
N.M. Gogoi	Weeklong online workshop on as-sessment and evaluation	Teaching Learning Centre, Tezpur University	14-19 December 2020	Teaching Learning Centre, Tezpur University
	Online Workshop cum FDP programme on Technologies for Waste to Energy & Resources**	Department of Biotechnology and Medical Engineering and	9-13 December 2020	National Institute of Technology Rourkela, online

	(eFDP-TWER-2020)	Department of Chemical Engineering		
P. Deka	Online Basic Training on Use of ICT in Teaching	TLC, Tezpur University	20-23 April 2020	Tezpur University
	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020	Tezpur University
	Two-day workshop on online basic training on use of ICT in teaching	TLC, Tezpur University, Assam	20-23 April 2020	Tezpur University, Assam
	Webinar on "Reorienting academic leadership, pedagogy and research in the time of crisis"	Dept. of Education, Tezpur University, Assam	30 May 2020	Tezpur University, Assam
	Weeklong online workshop on assessment and evaluation	TLC, Tezpur University	24-29 August 2020	Tezpur University
	Academic Integrity with Turnitin	Central Library, Tezpur University, Assam	03 June 2020	Tezpur University, Assam
	FDP on "Open source tools for research"	TLC, Ramanujan College, University of Delhi	08-14 June 2020	Ramanujan College, University of Delhi
	FDP on "Application of Digital tools and technology in teaching and learning"	IGNTU, Amarkantak, M.P.	16-29 June 2020	IGNTU, Amarkantak, M.P.

	Online workshop on "Applying SPSS for educational and psychometric data analysis"	National Psychological Corporation, Agra (UP)	17-21 July 2020	National Psychological Corporation, Agra (UP)
	Fostering UBA, a commitment of HEI's beyond campus: issues and challenges	IQAC, Sonapur College, Assam	07 August 2020	Sonapur College, Assam
	Online interdisciplinary refresher course on "Changing perspectives in pedagogy"	TLC, Tezpur University, Assam	8-22 October 2020	Tezpur University, Assam
S. Handique	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020	Tezpur University
S. Kalita	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020	Tezpur University
	Webinar on Academic & Research Support Services with ProQuest	Central Library, Tezpur University	17 June 2020	Tezpur University
	Weeklong Online Workshop On Assessment And Evaluation	TLC, Tezpur University	24-29 August 2020	Tezpur University
	Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	TLC, Tezpur University	8-22 October 2020	Tezpur University

S. Kalita (Member of Advisory Committee)	One Week Online Faculty Develop- ment Programme on “E - Learning and Developing MOOCs for Teach- ing Process in Higher Education”	TLC, Ramanujan College, University of Delhi – Dept of Statistics & IQAC, Hindu College, University of Delhi	14-20 December 2020	University of Delhi (Online mode)
S.S. Bhattacharya	Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020	Tezpur University

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period , year	Place/institute/venue
A. Devi	Webinar organized by Assam State Biodiversity Board, Assam on the celebration of International day of Biological Diversity, 2020	21 May 2020	Assam State Biodiversity Board, Assam (Zoom webinar)
	National webinar on “Environment concerns: problems and prospective solutions”	29-30 June 2020	Barnagar college, Sorbhog, Assam (Google Meet)
	Webinar on “Conservation of nature in the light of socio-cultural perspectives”	19 July 2020	Guwahati college, Guwahai, Assam (Link: www.guwahaticollege.org.in/webinar)
N. Gogoi	Invited Lecture delivered on Sustainability	5 December 2020	Department of Civil and Environmental Engineering , Shantou University, China.
	Worked as visiting faculty	Autumn 2020.	IITM Gwalior

N.M. Gogoi	AADRITA ARDRABHUMI, one-day online event on the occasion of World Wetland Day	2 February 2021	Indian Institute of Technology and Cotton University
P. Deka	National Workshop on Error analysis, Curve Fitting and Scientific documentation (Online Mode)"	8-12 March 2021	Central Institute of Technology, Kokrajhar, Assam, India
S.S. Bhattacharya	International Virtual Summit on 'Building the New World: From Personal to Global Transformation", September 9 to November 1, 2020 organized by The Oracle Institute (www.TheOracleInstitute.org), USA	14 October 2020	TheOracleInstitute.org, USA

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET : 1
CSIR –SRF: 01

NOTABLE PLACEMENTS

Name	Designation	Organization
Subhasish Das	Assistant Professor	Mizoram University
Gitamani Dutta	Assistant Professor	DHSK college, Dibrugarh, Assam.

THE FACULTY MEMBERS AND STAFF

Professors

Kali Prasad Sarma, Ph.D. (NEHU)

Specialization/ Areas of Interest: Water and Soil Pollution, Hydro-geochemistry& Remediation of Toxic Substances

E-mail: sarmakp@tezu.ernet.in

Raza Rafiqul Hoque, Ph.D. (JNU),

Head of the Department

Specialization/ Areas of Interest: Atmospheric Chemistry, Chemistry of aerosol and atmospheric deposition chemistry, chemistry of surface ozone, Organic pollutants, PAHs, biomass burning and air quality, pollutant transport and source apportionment.

E-mail: rrh@tezu.ernet.in

Apurba Kumar Das, Ph.D. (JNU)

Specialization/Research area: Fluvial Geomorphology, River morphology and landforms, Riverine hazards. Climate studies, Application of Remote Sensing and GIS techniques to atmospheric, urban climate, hydro- geomorphic, LULC, phyto-geographic studies, and socio-environmental issues.

Email: apurba@tezu.ernet.in

Associate Professors

Ashalata Devi, Ph.D. (NEHU)

Specialization/ Areas of Interest: Forest ecosystem dynamics, behavioural ecology of primates, predictive distribution modeling, bioresources assessment, utilization and indigenous conservation practices, and biodiversity conservation

E-mail: kh_asha@tezu.ernet.in

Assistant Professors

Nirmali Gogoi, Ph.D. (Dibrugarh University)

Specialization/ Areas of Interest: Stress Physiology & Biochemistry. Plant Abiotic Stress, GHG emission from Agro ecosystem and soil C sequestration

E-mail: nirmali@tezu.ernet.in

Satya Sundar Bhattacharya, Ph.D. (Visva Bharati University)

Specialization/ Areas of Interest: Vermiculture, Plant Nutrition and Soil Fertility Management, Soil C management, Plant products & Nano fertilizers, Solid waste management

E-mail: satya72@tezu.ernet.in

Sumi Handique, Ph.D. (Tezpur University)

Specialization/ Areas of Interest: Geochemistry of River Basins & Hydrogeochemistry. Water pollution and remediation

E-mail: sumihan@tezu.ernet.in

Amit Prakash, Ph.D. (JNU)

Specialization/ Areas of Interest: Environmental System Modelling, Air Pollution Meteorology, Climate Impact Modelling, Extreme Events analysis, Machine Learning Technique for Environmental Systems, Neurofuzzy Systems, Nonstationary Stochastic System and Noise Pollution

E-mail: ap@tezu.ernet.in

Nayanmoni Gogoi, Ph.D. (IIT Guwahati)

Specialization/ Areas of Interest: Ecosystem functions, Wetland Productivity, Nanotechnology in Environmental Research

E-mail: nayanmoni@tezu.ernet.in

Santa Kalita, Ph.D. (Gauhati University)

Specialization/ Areas of Interest: Entomology & Environmental Physiology

E-mail: santa@tezu.ernet.in

Pratibha Deka, Ph.D. (Tezpur University)

Specialization/ Areas of Interest: Environmental Pollution– Air, Water and Soil & Human– Environment Interactions

E-mail: pratibha@tezu.ernet.in

Technical staff

Pranjol Goswami, MCA (Dibrugarh University)
Senior Technical Assistant
E-mail: pranjol@tezu.ernet.in

Jayanta Bora, M.Sc. (Gauhati University)
Technical Assistant
E-mail: jborain@tezu.ernet.in

Office staff

Anup Kumar Dutta
UDC
E-mail: dutta12@tezu.ernet.in

Ranjit Bora
MTS
E-mail: ranjit2@tezu.ernet.in

DEPARTMENT OF MATHEMATICAL SCIENCES

THE DEPARTMENT

Established in 1994, the Department of Mathematical Sciences is one of the first three departments of the University. So far, 26 batches of students have successfully completed their M.Sc. in Mathematics, eight batches of students have successfully completed their Integrated M. Sc. in Mathematics and the two batches of students have successfully completed their Integrated B. Sc. B.Ed. (Major in Mathematics) from the department. Besides this, 63 scholars have done their Ph.D. in Mathematics from the department. The faculty of the department have published more than 210 research papers in national and international journals during the last five years.

Academic Programmes and Student intake

Programme	Intake
Int B.Sc. B.Ed. in Mathematics	11
Int M.Sc. in Mathematics	22
M.Sc. in Mathematics	47
Doctor of Philosophy	<i>Variable, 06 in the 2020-21</i>

Major Facilities and Equipment Available

Computer lab equipped with 01 server, 22 PC

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient research findings
D. K. Basnet	<ul style="list-style-type: none"> ● We have established a sufficient condition for existence of a primitive normal element α such that $f(\alpha)$ is a primitive element, where $f(x) = ax^2 + bx + c$, ($b^2 \neq ac$) over a finite field of characteristic 3. ● We have introduced and studied a new graph theoretic structure associated with a finite commutative ring, called Nil clean divisor graph. ● We have introduced and studied the concept of nilpotent graph of a finite commutative ring.
N. D. Baruah	<ul style="list-style-type: none"> ● Found several new results on vanishing coefficients in infinite product expansions related to the Rogers-Ramanujan Continued Fraction. ● Proved some conjectural congruences for k-regular partitions with designated summands proposed by R. da Silva and J. A. Sellers. Also found several new congruences for the same partition function modulo 8.
P. K. Das	<ul style="list-style-type: none"> ● Necessary and sufficient conditions for existence of detecting, and correcting linear/integer codes dealing with burst error, repeated burst error, key error, periodic random error along with hamming and homogeneous weights.
R. Haloi	<ul style="list-style-type: none"> ● Existence and uniqueness of solutions to the damped Navier-

	<p>Stokes equations with Navier boundary conditions for three dimensional incompressible fluid are obtained.</p> <ul style="list-style-type: none"> ● Existence of solution to the Navier Stokes equations with Navier-Slip boundary conditions for three dimensional incompressible fluid are found. ● Weighted inequalities for one-sided fractional minimal function are established. ● Mixed type of weighted integral inequalities for Hardy-Steklov operators are prov
R. K. Nath	<ul style="list-style-type: none"> ● <i>After studying several properties of Solvable Graphs of finite groups we obtain a relation between solvable graph and solvability degree of finite groups. We also prove the non-existence of finite non-solvable groups whose solvable graphs are planar, toroidal, double-toroidal, triple-toroidal or projective.</i> ● <i>Various spectra and energies of commuting graphs of certain classes of finite non-commutative rings have been computed and showed that the commuting graphs of those rings are neither super hyperenergetic nor super borderenergetic.</i> ● <i>We obtain several bounds for relative autocommutativity degree and characterize some finite groups.</i> ● <i>The concept of commuting probability of finite rings been generalized and introduced r-commuting probability of a finite ring. We obtain a computing formula, some bounds and characterizations of some classes of finite rings through this probability.</i>
S. Dutta	<ul style="list-style-type: none"> ● Asymptotic bias, variance and limiting distribution of the empirical and kernel estimators based on positive length biased data are obtained. ● For the kernel estimator, based on length biased data, the asymptotically optimal bandwidth in the presence of length bias is calculated and rule of thumb bandwidths are proposed. ● A suitably truncated kernel estimator of the df in the presence of length bias is proposed and we prove the strong uniform, and L_2 consistency of this estimator. ● Simulations reveal the improved performance of the truncated kernel estimator in estimating tail probabilities based on length biased data. ● A probability model for long term asset loss is proposed and long term Value at Risk estimated
S. Sen	<ul style="list-style-type: none"> ● <i>Further development of higher order compact schemes in time varying domains.</i> ● <i>Development of low dispersive spatial discretization.</i>

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators
On Algebraic Connectivity and Laplacian Spectral Radius of Graphs	DST-SERB	₹6.6 Lakhs	3Years (2019-2022)	D. Kalita
On pareto eigenvalue of distance matrix of connected graphs	DST-SERB	₹6.6 Lakhs	3Years (2019-2022)	M. Nath
A study on exact generating functions and congruences for partition functions associated to Ramanujan's mock theta functions and other related functions	DST-SERB	₹6.6 Lakhs	3Years (2019-2022)	N. D. Baruah
A Study of controllability of Navier-Stokes Equations with Navier boundary conditions.	DST-SERB	₹6.6 Lakhs	3Years (2019-2022)	R. Haloi
A Study of Navier-Stokes Equations with Navier boundary conditions.	NBHM	₹12.9 Lakhs	3Years (2019-2022)	R. Haloi
Point and interval estimation of some functionals of the distribution function of identically distributed random variables and their sums with applications.	DST-SERB	₹6.6 Lakhs	3Years (2019-2022)	S. Dutta
Development of dispersion, dissipation characteristics preserving finite difference schemes for fluid flow problems	DST-SERB	₹6.6 Lakhs	3Years (2018-2021)	S. Sen

PUBLICATIONS**Journal Publications**

- Baruah N. D. & Kaur M. A Note on Some Recent Results of Da Silva and Sellers on Congruences for k-regular Partitions with Designated Summands. *Integers*. 20: #A74. 2020.
- Baruah N. D. & Kaur M. Some results on vanishing coefficients in infinite product expansions. *The Ramanujan Journal*. 53:551-568. 2020.
- Basnet D. K. Sharma A. & Dutta R. Nilpotent Graph, *Theory and Applications of Graphs*. Vol. 8: Iss. 1 DOI: 10.20429/tag.2021.080102. 2020
- Bhowal P., Nongsiang D. & Nath R. K. Solvable graphs of finite groups. *Hacettepe Journal of Mathematics and Statistics*. 49(6):1955-1964. 2020.

- Borah J. & Bora S. N. Non-instantaneous impulsive Fractional Semilinear Evolution Equations with Finite Delay. *Journal of Fractional Calculus and Applications*.12(1). 2021.
- Das P. K. & Kumar S. Correcting key errors blockwise and correcting low density key errors. *International Journal of Mathematical, Engineering and Management Sciences*. 5(6):1234-1248. 2020.
- Das P. K. & Kumar S. Bounds on linear codes capable of detecting, locating and correcting of repeated burst errors prevailing in multiple sub-blocks. *Proyecciones Journal of Mathematics*. 39(6): 1577-1596. 2020.
- Das P. K. and Kumar S. Location and weight distribution of key errors. *Mathematicki Vesnik*. 73(1), 43-54. 2021.
- Deka D. & Sen S. A new transformation free generalized (5,5) HOC discretization of transient Navier-Stokes/Boussinesq equations on nonuniform grids. *International Journal of Heat and Mass Transfer*. vol. 171. 2021.
- Devi D., Chutia D., & Haloi R. Rothe's method for solving semilinear differential equations with deviating arguments. *Electronic Journal of Differential Equations*. (120), 1-10. 2020
- Dutta P. & Nath R. K. Some bounds for relative autocommutativity degree. *Proyecciones Journal of Mathematics*. 39(3):679-691. 2020.
- Dutta P. & Nath R. K. On r-commuting probability of finite rings. *Indian Journal of Mathematics*. 62(3):287-297. 2020.
- Fasfous W. N. T., Sharafadini R. & Nath R. K. Various spectra and energies of commuting graphs of finite rings. *Hacettepe Journal of Mathematics and Statistics*. 49(6):1915-1925. 2020.
- Giri S. & Sen S. A new class of diagonally implicit Runge-Kutta methods with zero dissipation and minimized dispersion error. *Journal of Computational and Applied Mathematics*. 376:112841. 2020.
- Haloi R. On solutions to abstract Volterra integro-differential equations with iterated deviating arguments. *The Journal of Analysis*. 28:235-260. 2020.
- Hazarika H., Basnet D. K. & Cohen S.D. The existence of primitive normal elements of quadratic forms over finite fields. *Journal of Algebra and Its Application*. <https://doi.org/10.1142/S0219498822500682>. 2020.
- Hazarika M. Minimal reducing subspaces of compression of a slant weighted Toeplitz operator. *Indian J. Math.*. Vol. 63(1), 103-125. 2021.
- Hazarika M. & Marik S., Toeplitz and slant Toeplitz operators on the polydisk. *Arab J. Math. Sci*. 27(1), 73-93. 2021.
- Pal S. & Haloi R. Existence and uniqueness of solutions to the damped Navier–Stokes equations with Navier boundary conditions for three dimensional incompressible fluid. *Journal of Applied Mathematics and Computing*. 66 (1), 307-325. 2021.
- Sharma A. & Basnet D. K. Nil clean divisor graph. *Transactions of National Academy of Sciences of Azerbaijan. Series of Physical-Technical and Mathematical Sciences, Issue Mathematics*. 41 (1), 146-153. 2021.
- Sharmah A. & Hazarika D. On some properties of I^K convergence. *Journal of Mathematical and Computational Science*. 11(2):1528-1534. 2021.

Conference Proceedings

- Chutia D. & Haloi R. Weighted Norm Inequality for General One-Sided Vector Valued Maximal Function. Proceedings of the Sixth International Conference on Mathematics and Computing, Singapore, 2021.
- Haloi R. Some existence results on impulsive differential equations. Proceedings of the Sixth International Conference on Mathematics and Computing, Singapore, 2021.

Other Publications

- N. D. Baruah, RAMANUJAN AARU TEUR GONIT: A collection of articles written in Assamese on the Indian Mathematical genius Srinivasa Ramanujan and a glimpse of his mathematics, Sanjwan Prakashan, Guwahati, Assam (ISBN: 978-81-950015-3-8).

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w'ps/sym.	Organized by	Date/Period, year	Place/institute/venue
D. Hazarika	Effective and Efficient Online Teaching in the Age of Corona	Teaching Learning Centre (ICT)	16 May 2020.	IIT, Bombay (Online)
	Hands on Workshop on Integration of Basic ICT tools in Teaching Pedagogy	TLC, Tezpur University	8-9 June 2020.	TLC, Tezpur University (Online)
J. Borah	International Webinar Series on "Advances in Mathematics"	Tata Institute of Social Sciences, Tuljapur	22-27 July 2020.	Tata Institute of Social Sciences, Tuljapur (Online)
	Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	Tezpur University	8-22 October, 2020.	TLC, Tezpur University (Online)
P.K. Das	26 th International Conference of International Academy of Physical Sciences on Advances in Algebra and Analysis	Marwadi University, Rajkot, Gujrat, India	18-20 December 2020.	Gujrat (Online)
	National Conference on Application of Mathematical Tools in Social Sciences and Sciences	Zakir Husain Delhi College, University of Delhi, India	17-18 October 2020	Delhi, (Online)
R. K. Nath	One Week Online Training on R Programming and LaTeX Typesetting	Department of Statistics, Institute of Science, Banaras Hindu University, Varanasi.	05-10 January 2021	Banaras Hindu University, Varanasi, India. (Online)
	International Conference in Algebraic Graph Theory and Applications (ICAGTA 2020)	Department of Mathematics, Presidency University, Kolkata	21 -22 November 2020.	Presidency University, Kolkata, India (Online)

R. K. Nath	International Conference of Mathematical Modeling in Applied Sciences (ICMMAS 2020)	Department of Mathematics, Dibrugarh University	28-30 June 2020.	Dibrugarh University, Assam, India. (Online)
S. Dutta	International Virtual Conference on Advanced Statistical Techniques in Business And Industry, A Regional Virtual Conference of International Society for Business and Industrial Statistics (ISBIS),	Department of Statistics, Cochin University of Science & Technology, Kerala,	28-30 December 2020	Online, hosted by Statistics department Cochin university (Online)
S. Sen	Online Basic Training on Use of ICT in Teaching	Tezpur University India	20-21 April 2020.	Tezpur University (Online)
	Effective and Efficient Online Teaching in the Age of Corona, A Hands On Workshop	IIT Bombay India	23-26 May 2020.	IIT Bombay (Online)
	Academic Integrity with Turnitin	Tezpur University India	3 June 2020	Tezpur University (Online)
	Integration of Basic ICT Tools in Teaching Pedagogy	Tezpur University India	8-9 June 2020.	Tezpur University (Online)
	The Bodhi Tree and SAFE Tools for Effective Online Teaching: A Hands-On Workshop	IIT Bombay, India	20-22 June 2020.	IIT Bombay (Online)
	International Conference on Computational Sciences: Modelling, Computing and Soft Computing (CSMCS 2020)	NIT Calicut, India	10-12 September 2020	NIT Calicut (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
D. K. Basnet	Invited Talk on 'CARDINALITY OF SETS'.	12 June 2020	University of Science and Technology, Meghalaya (Online)

D. K. Basnet	Invited Talk (Webinar) on 'CONSTRUCTION OF REAL NUMBERS'.	21 June 2020	University of Science and Technology, Meghalaya (Online)
	National Workshop on Analysis and Linear Algebra (NWALA2020)'	23-24 July 2020	D.H.S.K. College, Dibrugarh, Assam (Online)
	Invited Talk : Motivation for Mathematics	16 August 2020	IQAC, Arya Vidyapeeth College, Guwahati (Online)
	Online Foundation Course in Mathematics	04 - 24 October 2020	MTTS Trust and funded by the NBHM, DAE, India. (Online)
N. D. Baruah	Pi: The King of Constants, an online talk organized by Gonit Sora	22 July 2020	Cardiff University, Cardiff CF10 3AT, United Kingdom (Online)
	Ramanujan and a glimpse of his mathematics, an online invited talk organized by Royal Global University, Guwahati, Assam	29 July 2020	Royal Global University, Guwahati (Online)
	The Story and History of Pi: a mathematical constant, An online invited talk organized by Golaghat Commerce College, Assam	27 August 2020	Golaghat Commerce College, Assam (Online)
	Glimpses of Life and Work of Ramanujan, an online invited talk organized by Vigyan Prasar, DST, Govt. of India	18 September 2020	Vigyan Prasar, DST, New Delhi (Online)
P.K. Das	1st National Conference on "Application of Mathematical Tools in Social Sciences and Sciences"	17-18 October 2020	Zakir Husain Delhi College, University of Delhi, India (Online)
R. K. Nath	Group Theory Sangam, A Confluence of Group Theorists in India	23 February 2021	IISER, Pune (Online)
S. Dutta	One week online Workshop on Statistical Inference	24-28 August 2020	Department of Statistics, Dibrugarh University, Dibrugarh, Assam (Online)
	Introduction to Test of Hypothesis	14 August 2020	Department of Mathematics, GIMT –Tezpur and Assam Science and Technology University, Dekargaon, Tezpur

			(Online)
S. Sen	International Conference on Advances in Mathematics, Science and Technology	2 September 2020	Rajiv Gandhi University, Itanagar (Online)
	International Conference on Computational Sciences: Modelling, Computing and Soft Computing (CSMCS 2020).	11 September 2020	NIT Calicut, India. (Online)
	Alumni Symposium on Mathematics and Computing.	19 September 2020	IIT Guwahati, India (Online)

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- UGC-SAP (DRS-II) 2018 to 2023

NUMBER OF STUDENTS QAULIFIED NET-JRF /GATE/SLET

- NET-JRF 01
- NET-LS 09
- TOEFL 01
- GRE 01
- GATE 13

NOTABLE PLACEMENTS

Name	Designation	Organization
Dr. Pearl Sanchayeta Gogoi	Assistant Professor	Arya Vidyapeeth College
Binandita Barman	Assistant Professor	Goalpara College
Swatilekha Nag	Assistant Professor	PDUAM Behali
Nijora Konch	Assistant Professor	B.Boruah College
Dr. PallabiSaikia	Assistant Professor	N. N. Saikia College
Dr. Binod Chetry	Assistant Professor	Digboi College
Dr. Ajay Sarmah	Assistant Professor	Sadiya College
Dr. Biswajit Das	Assistant Professor	Digboi College
Dr. Deepjyoti Borgohain	Assistant Professor	B.P. Chaliha College
Dr. Junali Hazarika	Assistant Professor	THB College
Dr.Nilufar Mana Begum	Assistant Professor	Debraj Roy College
Dr. Jayanta Bhattachayrya	Assistant Professor	Jaya Gogoi College
Dr.Porinita Dutta	Assistant Professor	Tinsukia College
Rupam Gogoi	Assistant Professor	Sadiya College
Himangshu Hazarika	Assistant Professor	Behali Degree College
Sujata Gowala	Assistant Professor	Gargoan College
Pankaj Borah	Assistant Professor	Namrup College
BarnaliSaikia	Assistant Professor	Sadiya College
Satyajit Gayan	Assistant Professor	Silapathar College
Dr.Azizul Haque	Assistant Professor	Rangapara College
Parishmita Boruah	Assistant Professor	Rangapara College

THE FACULTY MEMBERS AND STAFF

Professors

Nayandeep Deka Baruah, Ph.D. (Tezpur University)
Specialization: Number Theory, Ramanujan's Mathematics
E-mail: nayan@tezu.ernet.in

Debajit Hazarika, Ph.D. (Jamia MiliaIslamia)
Specialization: General Topology, Fuzzy sets & applications
E-mail: debajit@tezu.ernet.in

Munmun Hazarika, Ph.D. (Tezpur University)
Specialization: Operator Theory, Functional Analysis
E-mail: munmun@tezu.ernet.in

Milan Nath, Ph.D. (IIT Guwahati)
Specialization: Ordinary Graph Spectra, Inverse eigenvalue problem
E-mail: milan@tezu.ernet.in

Santanu Dutta, Ph.D. (Tezpur University)
Specialization: Statistics (Non-parametric)
E-Mail: sdutta@tezu.ernet.in

Dhiren Kumar Basnet, Ph.D. (Dibrugarh University)
Specialization: Ring Theory, Finite Field Theory
E-Mail: dbasnet@tezu.ernet.in

Associate Professors

Bhim Prasad Sarmah, Ph.D. (Gauhati University)
Specialization: Theoretical Physics
E-mail: bhim@tezu.ernet.in

Shuvam Sen, Ph.D. (IIT Guwahati)
Specialization: Computational Fluid Dynamics
E-Mail: shuvam@tezu.ernet.in

Rajib Haloi, Ph.D. (IIT Kanpur)
Specialization: Analysis
E-Mail: rhaloi@tezu.ernet.in

Assistant Professors

Bipul Kumar Sarmah, Ph.D. (Tezpur University)
Specialization: Theory of Partitions; Ramanujan Mathematics
E-Mail: bipul@tezu.ernet.in

Rajat Kanti Nath, Ph.D. (NEHU)
Specialization: Group Theory; Character Theory
E-Mail: rknath@tezu.ernet.in

Debajit Kalita, Ph.D. (IIT Guwahati)
Specialization: Algebraic Graph Theory
E-Mail: kdebajit@tezu.ernet.in

Deepjyoti Goswami, Ph.D. (IIT Bombay)
Specialization: Finite Element Method
E-Mail: deepjyoti@tezu.ernet.in

Pankaj Kumar Das, Ph.D. (University of Delhi)
Specialization: Coding Theory
E-Mail: pankaj4@tezu.ernet.in

Jayanta Borah, Ph.D. (IIT Guwahati)
Specialization: Fractional Differential Equations, Mathematical Control Theory
E-Mail: jba@tezu.ernet.in

Technical staff

A. K. Bhattacharyya, Ph.D. (Tezpur University)
System Analyst
Email: anjan@tezu.ernet.in

K. Das, Ph.D. (Tezpur University)
Technical Assistant
Email: krishnadas@tezu.ernet.in

Office staff

P. K. Roy
Office Assistant
Email: roydkjm@tezu.ernet.in

N. Ali
MTS

DEPARTMENT OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

THE DEPARTMENT

The Department of Molecular Biology and Biotechnology (MBBT) established on 24th July 1997 has completed Twenty-four glorious years. The flagship programme, MSc in Molecular Biology and Biotechnology is supported by DBT, Govt. of India since 1998. Department also offers 5 year Integrated MSc in Life Sciences and PhD programme in various fields of Modern Biology. The department is supported by DBT, DST-FIST and UGC-SAP II. In this year one of the notable achievements of the department is placement of students in reputed biotechnological and pharmaceutical companies of the country. Like the earlier years, this year too several students had qualified in the national level test such as NET-JRF, DBT-JRF and GATE got admitted in PhD programme of reputed research institutions such as IISc, IGIB, NCCS, NISER, NBRC, IICB, IMTECH etc. In term of research, 35 extramural research projects, an International collaborative project and a consultancy project is being carried out in the department. Forty eight research publications have come in high impact journals such as International Journal of Biological Macromolecules, FEBS, Journal of Biomolecular Structure and Dynamics, ACS Omega, J. Virology, Dalton Transactions etc.

Academic Programmes and Student intake

Programme	Intake
M. Sc.	30
Int. M. Sc.	25
Ph.D.	Variable, 22 in the 2020-21

Major Facilities and Equipment Available

- Flow Cytometer
- DNA sequencers (4 capillary)
- Bioanalyzer
- Quantitative PCR
- Fast protein Liquid Chromatography (FPLC)
- UHPLC systems
- Ultracentrifuge
- HPLC
- FTIR
- Spectrofluorometer
- Fluorescence microscope
- Animal cell culture facility
- Plant tissue culture facility
- Microbiology lab
- Bioinformatics infrastructure facility
- ONGC CPBT Centre For Petroleum Biotechnology

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
A. Kumar	<ul style="list-style-type: none"> • Annotation of regulatory regions in the genome is crucial for complete understanding of functional genomics. Sequence based approaches are generally found to be less effective (result in to more false positives) and most importantly they are organism specific in nature. In contrast, DNA structural properties have been found to be present distinctly in the regulatory regions and also, they are found to be universal in nature, across the domains of life. Hence, we are working towards the development of algorithms on annotation of regulatory regions based on DNA structural features.
A. K. Mukherjee	<ul style="list-style-type: none"> • Unveiling the venom proteomes of eastern India Naja naja and western India Russell's Viper.
A.N. Jha	<ul style="list-style-type: none"> • Studies from our lab led to the atomic level understanding of interactions and effect of Zinc Oxide/Silver nanoparticles with different structural proteins.
A. Ramteke	<ul style="list-style-type: none"> • To understand the molecular basis of carcinogenesis and prevention in multiple cancer types including breast, lung and head and neck cancer, through intervention of phytochemical. We are primarily involved in understanding mechanistic effect of phytochemical on the signaling molecules involved in tumor progression, metastasis and drug resistance using in vitro and in vivo pre-clinical cancer models (breast, lung and colon cancer). • We are also conducting research on the development of nanocomposite/nanoparticles from biopolymers for delivery of drug/therapeutic agents to the cancer cells.
B. K. Konwar	<ul style="list-style-type: none"> • Design of potential IKK-β inhibitors using molecular docking and molecular dynamics techniques for their anti-cancer potential. • Leveraging microalga feedstock for biofuel production and wasteland reclamation using remote sensing remote sensing and ex situ experimentation
E. Kalita	<ul style="list-style-type: none"> • Development of Iron oxide Permeated Mesoporous rice-husk nanobiochar (IPMN) mediated removal of dissolved arsenic (As) • Development of Nanocellulose Iron Oxide Nanobiocomposites (NIONS) from rice husk and sugarcane bagasse derived nanocelluloses for adsorptive removal of arsenic. • Isolation of microcrystalline cellulose (MCC) from Saccharum spontaneum through an environment friendly and sustainable method using mild acids and chlorine-free bleaching • Optimizing In vitro Culture Conditions for the Biotrophic Fungi Exobasidium vexans
J. P. Saikia	<ul style="list-style-type: none"> • We studied protein precipitation by tea polyphenols, in-silico analysis of its bioavailability, and binding to sars-cov-2.
M. Mandal	<ul style="list-style-type: none"> • Isolated 3 novel bacteria for biodegradation of crude oil in contaminated soil. • Few probiotic yeast and bacterial strains were identified the strains have been found suitable for commercial use.

	<ul style="list-style-type: none"> • Indigenous medicinal plants were screened out for control of microbial biofilm formation. • One oleaginous yeast strain has been characterized which can synthesize carotenoids in addition to biodiesel production from bio-waste
N. D. Namsa	<ul style="list-style-type: none"> • Rotaviruses are the most common cause of severe diarrhoeal disease in young children worldwide. Understanding the circulating geographic specific genotypes of rotavirus strains is crucial to evaluate the impact of rotavirus vaccination. Our laboratory has identified several unusual genotypes of rotavirus isolates and whole genome sequence is under progress in the laboratory. • Scrub typhus is caused by an obligate intracellular bacterium <i>Orientia tsutsugamushi</i> and is transmitted by the trombiculid mite called chiggers which serve as a vector and reservoir. We have identified several B-cell epitopes of TSA-56kDa and designed a single chimeric TSA56 antigen to develop user-friendly point-of-care test against scrub typhus.
P. Barah	<ul style="list-style-type: none"> • Determined molecular signatures and transcription factors correlated with Gallbladder Cance development. • Identified systems level molecular signatures from Glioblastoma Multiforme-derived Extracellular Vesicles • Identified 7 putative Sheath Blight resistant genes that are altered in rice upon <i>R. solani</i> infection.
R. Doley	<ul style="list-style-type: none"> • The proteome profile of <i>Naja kaouthia</i> venom from North East India has been deciphered. • Identified and characterized a <i>Naja kaouthia</i> venom protein, named as Nk-CRISP. This venom protein upregulates inflammatory gene expression in human macrophages. • Assessment of Indian polyvalent antivenom by third generation antivenomics reveals that <i>Naja kaouthia</i> venom can be immunodepleted • Identified and isolated a thrombin like protein from the venom of <i>Trimeresurus</i> of North East Origin. • Designed and validated DNA aptamer which inhibits the biochemical and biological activities of snake venom PLA2 enzyme.
R. Mukhopadhyay	<ul style="list-style-type: none"> • A novel role of ribosomal protein L22 (RPL22) in cancer progression has been investigated. Our laboratory has previously showed anti-inflammatory function RPL22 during LPS induction in macrophage cells. In a separate study we found deletion of RPL22 in breast cancer cells MCF7 by genome editing process increased proliferation, expression of EMT markers and colony forming ability of the cells suggesting a critical role of RPL22 in cancer progression. • Our study on the role of high salt in cancer progression showed treatment of tumor-associated macrophages (TAMs) with high salt reduced proliferation, migration/adhesion and expression of EMT markers in breast cancer cells. Co-culture macrophages and cancer cells also revealed presence of specific secretory proteins from high salt-treated macrophages responsible for the inhibition.
S. Baruah	<ul style="list-style-type: none"> • The incidence of anti cardiolipin positivity was found to be 26.19 % in the overall obstetrics population which is higher than the global average range (1-7%) as per literature wherein it affected

	<p>25 % of RPL cases. Though, net inhibitory receptor gene content was high (KIR2DL3>2DL2>2DL1) in RPL cases as compared to the non RPL cases the frequency of KIR2DS1 was found to be high compared to KIR2DL1 in RPL cases.</p> <ul style="list-style-type: none"> The allelic diversity of KIR2DL1 gene and its cognate ligand HLA-C was assessed in the population of Assam, North-East India. We found KIR2DL1*003 at highest frequency of 79.1%. The nucleotide diversity of KIR2DL1 alleles and of HLA-C gene suggested substantial variability in the population. We also identified 9 HLA-C alleles in the study population. The binding affinity study of alleles found on centromeric A and B KIR motif of the 2DL1 gene with HLA-C gene was investigated where a stronger binding affinity of KIR2DL1*003 with HLA-CW4 as compared to KIR2DL1*004 and KIR2DL1*005 was found.
S. Dasgupta	<ul style="list-style-type: none"> Investigating the macrophage-adipocyte crosstalk in obesity-induced insulin resistance and type 2 diabetes, we have found that cyclophilin-A impairs adipocyte functions by targeting CD147 activation. A novel TLR4 signaling inhibitor was discovered which effectively attenuates LPS-induced inflammation in THP-1 macrophages. We involved in research to find out novel exercise-induced myokines and their role on adipose tissue remodeling and insulin sensitivity.
S. K. Ray	<ul style="list-style-type: none"> Bacterial wilt: <i>Ralstonia solanacearum</i> causes a lethal wilt disease in many plants belonging to 54 different families. We are studying its virulence functions specifically involved while infection is occurring through root but through shoot. We have isolated mutants that are deficient in causing disease by root inoculation but proficient in causing disease by shoot inoculation. We are now characterizing these mutants. Molecular evolution: Genome composition in bacteria is generally thought as result of mutation bias in organisms and cited as a classical example of neutral theory of molecular evolution. Collaboration study with Dr. S. S. Satapathy in CSE, Prof. R. C. Deka in Chem Sc. And Dr. N. D. Namsa in MBBT we have come to the conclusion that selection on codon usage bias is a major factor for the genome composition in bacteria.
S. P. G. Ponnamp	<ul style="list-style-type: none"> Ours is probably the only group working on the molecular genetic analysis of Keratoconus patients from Assam, India. We are also attempting to perform in vitro studies to correct defective region of the CHST6 gene associated with Macular Corneal Dystrophy using the CRISPR-Cas9 system. Currently, both the projects are being actively pursued.
V. S. K. Mattaparthi	<ul style="list-style-type: none"> We have found the efficiency of small molecule inhibitors identified from Indian spices against SARS-CoV-2 Mpro to be higher than the alpha-ketoamide We observed remarkable effect of N501Y, double mutation (L452R and E484Q) in RBD of Spike Protein on its interaction with ACE2 Receptor Prote Used Chemical system biology approach to identify multi-targeting FDA inhibitors for treating COVID-19 and associated health complications Bis- and mixed-ligand copper(II) complexes of nalidixic acid the antibacterial drug: Mode of nalidixate coordination determines DNA binding and cleavage and cytotoxicity

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Characterization of DNA structural features and non B DNA structures in regulatory regions in prokaryotes: an in-silico approach.	DBT	₹ 44.36 Lakhs	3 Years (2019-2022)	A. Kumar	IISc Bangalore
Elucidating the mechanism of action of PehR, a transcriptional regulator in pathogenicity of <i>Ralstonia solanacearum</i> F1C1 (local isolate)	SERB	₹ 63.66 Lakhs	3 Years (2021-2024)	A. Kumar	
Studies on epidemiology, hospital management of snakebite, and standardization of laboratory tests for assessment of efficacy and quality control of commercial antivenom manufactured in India and in ASEAN countries.	DST-SERB (Under ASEAN)	₹ 46.43 Lakhs	3 Years (2018-2021)	A. K. Mukherjee	Dr. C. H. Tan, Department of Pharmacology, Faculty of Medicine, University of Malaya, Malaysia & Dr. L. V. Dong, Vietnam Military Medical University, Hanoi city, Vietnam
Development of functionalized nanoparticles-based novel diagnostic kit for the detection of species-specific snake envenomation	DBT Tata Innovation Fellowship	₹ 18 Lakhs	3 Years (2018-2021)	A. K. Mukherjee	
Studies on signal transduction mechanism(s) of neurotrophin molecules from	SERB, New Delhi	₹ 39.29 Lakhs	3 Years (2018-2021)	A. K. Mukherjee	Dr. R. Doley, Tezpur university, Tezpur, Assam

Indian cobra (Naja naja) and Russell's Viper (Daboia russelii) venoms in cultured neuronal cells and their functional significance					
Search of potent inhibitors against target from L donovani (Visceral Leishmaniasis) using systems biology, virtual screening and molecular dynamics	DBT	₹ 15 Lakhs	2.5 Years (2019- 2021)	A. N. Jha	IIT, Ghy
Biophysical characterization of adenylosuccinate lyase- a potential drug target from Leishmania donovani- a computational and molecular approach	DBT	₹ 70 Lakhs	3.5 Years (2017 - 2020)	A. N. Jha	Central University of Gujrat
Optimization of nanocatalysts for sustainable conversion of food wastes into value added products (PI)	Scheme for Transformational and Advanced Research in Sciences [STARS], Ministry of Human Resource Development, [MHRD, Govt. of India],	₹ 53.80 Lakhs	2 Years (2020-2022)	E. Kalita	
Enhanced production of anticancer flavones- Baicalein, Chrysin and Oroxylin A, from Oroxylin indicum tissue culture and studies on its	DBT	₹ 26.07 Lakhs	3 Years (2019 - 2021)	J.P. Saikia & A. Ramteke	ADP College, Nagaon, Assam.

chemopreventive activities					
Bioconversion of organic wastes and de-oiled algal residue into biodiesel and value added products (carotenoids) using oleaginous microbes	DBT	₹11.99 Lakhs	2 Years (2019-2021)	M. Mandal	IIT Guwahati
Standardization of Indigenous Probiotic based Formulation for Immunity, Glucose and Lipid metabolism	DBT	₹67.57 Lakhs	2 Years (2020-2022)	M. Mandal	Institute of Medicinal and Aromatic Plants, Lucknow
Bioremediation and reclamation of petroleum oil hydrocarbon contaminated soil/water by microaerophilic / anaerobic bacterial consortium	ONGC-CPBT	₹11.34 Lakhs	2 Years (2020-2022)	M. Mandal	INBIGS-ONGC Ltd. Jorhat.
Rotavirus NSP1 degrades interferon receptors (IFNRs) through a PKR-dependent pathway	DST SERB	₹. 50.51 Lakhs	3 Years (2021-2024)	N.D. Namsa	
Identification and characterization of active molecules derived from selected edible medicinal plants of Arunachal Pradesh against rotavirus and clinical isolates of drug resistant E. coli and S. aureus	DBT	₹ 48.63 Lakhs	3 Years (2019-2022)	N.D. Namsa	
A case-control pilot study for identification and validation of Gallbladder cancer biomarkers from	ICMR	₹ 19.38 Lakhs	2 Years (2021-2023)	P. Barah, D. K. Bhattacharyya & A. Sharma	BBCI, Guwahati

North-East Indian population using transcriptomics approach					
Big data and Machine learning based approach to understand combined stress response signatures in multiple cultivating crop plants	DST-SERB	₹ 23.24 Lakhs	2 Years (2019-2021)	P. Barah	
Integrative systems biology approach to identify molecular response signatures in Rice during concurrent biotic (Rhizoctonia solani) and abiotic (heat) stresses.	DBT	₹ 56.3 Lakhs	3 Years (2018-2021)	P. Barah & P.B. Kirti	University of Hyderabad
Integrative approach for understanding the role of noncoding mutations in the evolution of biological systems.	DBT-RLS	₹ 101.1 Lakhs	6 Years (2017-2023)	P. Barah	
Search for novel anti-platelet and anti-thrombin peptides from Indian viper venom (Daboia russelii): Purification, characterization and evaluation of its anti-thrombotic potential	DBT	₹ 60.79 Lakhs	3 Years (2018-2021)	R. Doley	Jamia Millia Islamia University,
Isolation, identification and characterization of marker proteins from the Venom of Naja kaouthia and Bungarus fasciatus of North East India for Development of Rapid Diagnostic Tool for	ICMR	₹ 38.53 Lakhs	3 Years (2017-2020) Extended due to pandemic	R. Doley	

Identification of snakebite in North East India.					
Understanding the role of adipose tissue remodelling in exercise induced insulin sensitivity	DBT	₹ 74.7 Lakhs	3 Years (2018 - 2021)	S. Dasgupta	D. Pal (IIT Ropar)
Studies on genetic and epigenetic alternations on keratoconus patients from Assam, India	DBT, Coordinated by NECBH, IIT-Guwahati	₹ 15.98 Lakhs	2.5 Years (2019-2021)	S. P.G. Ponnam	A.M Limaye, IIT- Guwahati
In vitro studies to investigate the therapeutic approach of editing the defective exon 3 of the human CHST6 gene associated with Macular Corneal Dystrophy through the CRISPR-Cas9 technology.	DST-SERB	₹ 45.94 Lakhs	3 Years (2019-2022)	S. P. G. Ponnam	
Computational Investigation on the membrane-induced self-assembly and aggregation of α -Synuclein	Science and Engineering Research Board (SERB)	₹ 44.78 Lakhs	3 Years (2018-2021)	V. S. K. Mattaparthi	
Development of novel rationally designed ferrocene, glucose and folic acid conjugated lanthanide (III), iron (III) and cobalt (III) complexes as antibacterial and theranostic anticancer agents,	DBT, India	₹ 100.49 Lakhs	3 Years (2019-2022)	V. S. K. Mattaparthi	A.Hussain, Handique Girls' college, Guwahati and Dr. Kandarpa Kr Saikia, Guwahati University

PUBLICATIONS

Journal Publications

- Basu A., Das A. S., Borah P. K., Duary R. K. & Mukhopadhyay R. Biochanin A impedes STAT3 activation by upregulating p38 δ MAPK phosphorylation in IL-6 stimulated macrophages. *Inflammation Research*. 69(11). 2020.
- Bardhan P., Gupta K., Kishor S., Chattopadhyay P., Chaliha C., Kalita E., Goud V. V. & Mandal M. Oleaginous yeasts isolated from traditional fermented foods and beverages of Manipur and Mizoram, India, as a potent source of microbial lipids for biodiesel production. *Annals of Microbiology*. 70(1). 2020.
- Borah P., Sanjeev A. & Mattaparthi V.S.K. Computational investigation on the effect of Oleuropein aglycone on the α -synuclein aggregation. *Journal of Biomolecular Structure and Dynamics*. 39(4). 2020
- Borah P. & Mattaparthi V.S.K. Computational investigation on the role of C-Terminal of human albumin on the dimerization of A β 1-42 peptide. *Biointerface Research in Applied Chemistry*. 10(1). 2020.
- Borah P. & Mattaparthi V.S.K. Effect of Ionic Strength on the aggregation propensity of A β 1-42 peptide: An in-silico study. *Current Chemical Biology*. 14(3).2020.
- Borah P. K., Das A. S., Mukhopadhyay R., Sarkar A. & Duary R. K. Macromolecular design of folic acid functionalized amylopectin- albumin core-shell nanogels for improved physiological stability and colon cancer cell targeted delivery of curcumin. *Journal of Colloid and Interface Science*. 580. 2020.
- Chaliha C., Kaladhar V. C., Doley R., Verma P. K., Kumar A. & Kalita E. Bipartite molecular approach for species delimitation and resolving cryptic speciation of *Exobasidium vexans* within the *Exobasidium* genus. *Computational Biology and Chemistry*. 92. 2021.
- Chowdhury H. A., Barah P., Bhattacharyya D. K. & Kalita J. K. Identification of potential Parkinson's disease biomarkers using computational biology approaches. *Network Modeling Analysis in Health Informatics and Bioinformatics*. 10(1). 2021.
- Das P. & Mattaparthi V. S. K. Computational Investigation on the MDM2-Idasanutlin Interaction using the Potential of Mean Force method. *Current Chemical Biology*.15. 2021.
- Das D., Kakati M., Gracy A., Sanjeev A., Patra S.M. & Mattaparthi V.S.K. Screening of druggable conformers of α -synuclein using molecular dynamics simulation. *Biointerface Research in Applied Chemistry*.10(3). 2020.
- Das P. & Mattaparthi V. S. K. Computational Investigation on the p53–MDM2 Interaction Using the Potential of Mean Force Study. *ACS Omega*. 5(15). 2020.
- Das A. S., Basu A., Kumar R., Borah P. K., Bakshi S., Sharma M., Duary R. K., Ray P. S. & Mukhopadhyay R. Post-transcriptional regulation of C-C motif chemokine ligand 2 expression by ribosomal protein L22 during LPS-mediated inflammation. *FEBS Journal*. 287(17). 2020.
- Deka K., Guleria A., Kumar D., Biswas J., Lodha S., Kaushik S. D., Dasgupta S. & Deb P. Exclusive T2 MRI contrast enhancement by mesoporous carbon framework encapsulated manganese oxide nanoparticles. *Current Applied Physics*. 20(1). 2020.
- Deka A., Sharma M., Mukhopadhyay R., Devi A. & Doley, R. Naja kaouthia venom protein, Nk-CRISP, upregulates inflammatory gene expression in human macrophages. *International Journal of Biological Macromolecules*. 160. 2020.
- Devi Y. D., Devi A., Gogoi H., Dehingia B., Doley R., Buragohain A. K., Singh S., Borah P. P., Rao C. D., Ray P., Varghese G., Kumar S. & Namsa, N. D. Exploring rotavirus proteome to identify potential B- and T- cell epitope using computational immunoinformatics. *Heliyon*. 6(12). 2020.

- Devi Y. D., Devi A., Gogoi H., Dehingia B., Doley R., Buragohain A. K., Singh C. S., Borah P. P., Rao C. D., Ray P., Varghese G. M., Kumar S. & Namsa, N. D. Exploring rotavirus proteome to identify potential B- and T-cell epitope using computational immunoinformatics. *Heliyon*. 6(12). 2020.
- Devi A., Namsa N. D. & Doley R. In silico and in vitro neutralization of PLA2 activity of Daboxin P by butein, mimosine and bakuchiol. *International Journal of Biological Macromolecules*. 165. 2020.
- Dey U., Sarkar S., Teronpi V., Yella V. R. & Kumar A. G-quadruplex motifs are functionally conserved in cis-regulatory regions of pathogenic bacteria: An in-silico evaluation. *Biochimie*. 184. 2021.
- Dutta N., Borah P. & Mattaparthi V. S. K. Effect of CTerm of human albumin on the aggregation propensity of A β 1-42 peptide: a potential of mean force study. *Journal of Biomolecular Structure and Dynamics*. 39(4). 2020.
- Dutta M., Deb A., Das D. & Mattaparthi V. S. K. A computational approach to understand the interactions stabilizing the A β 1-42 oligomers. *Biointerface Research in Applied Chemistry*. 11(1). 2021.
- Gohain M., Bardhan P., Laskar K., Sarmah S., Mandal M., Bora U., Kalita M. C., Goud V. V. & Deka D. Rhodotorula mucilaginosa: A source of heterogeneous catalyst for biodiesel production from yeast single cell oil and waste cooking oil. *Renewable Energy*. 160. 2020.
- Goswami S. & Saikia J. P. Protein precipitation by tea polyphenols, in-silico analysis of its bioavailability, and binding to SARS-COV-2. *Journal of Advanced Scientific Research*. 12(1). 2021.
- Jakhmola S., Hazarika Z., Jha A. N. & Jha H. C. In silico analysis of antiviral phytochemicals efficacy against Epstein-Barr virus glycoprotein H. *Journal of Biomolecular Structure and Dynamics*. 39. 2021.
- Kabyashree K., Kumar R., Sen P., Satapathy S. S. & Ray S. K. Ralstonia solanacearum preferential colonization in the shoot apical meristem explains its pathogenicity pattern in tomato seedlings. *Plant Pathology*. 69(7). 2020.
- Kakati M., Das D., Das P., Sanjeev A. & Mattaparthi V. S. K. Effect of ethanol as molecular crowding agent on the conformational dynamics of α -synuclein. *Letters in Applied NanoBioScience*. 9(1). 2020.
- Khatun B., Majumder M., Mukhopadhyay R., Yasmin R., Doley R. & Maji T. K. Effect of Curcumin-Hydroxypropyl- β -Cyclodextrin Complex and the Complex Loaded Gelatin Carrageenan Microparticles on the Various Chemical and Biological Properties. *Journal of Pharmaceutical Innovation*. 16. 2021.
- Majumder M., Sharma M., Maiti S. & Mukhopadhyay R. Edible tuber Amorphophallus paeoniifolius (Dennst.) extract induces apoptosis and suppresses migration of breast cancer cells. *Nutrition and Cancer*. 27. 2020.
- Naik B., Mattaparthi V. S. K., Gupta N., Ojha R., Das P., Singh S., Prajapati V. K. & Prusty D. Chemical system biology approach to identify multi-targeting FDA inhibitors for treating COVID-19 and associated health complications. *Journal of Biomolecular Structure and Dynamics*. 39. 2021.
- Patra A., Banerjee D., Dasgupta S. & Mukherjee A. K. The in vitro laboratory tests and mass spectrometry-assisted quality assessment of commercial polyvalent antivenom raised against the 'Big Four' venomous snakes of India. *Toxicon*. 192. 2021.
- Patowary P., Bhattacharyya D. K. & Barah P. Identifying Critical Genes in Esophageal Squamous Cell Carcinoma using an Ensemble Approach. *Informatics in Medicine Unlocked*. 18. 2020.

- Phukan M. M. & Konwar B. K. Leveraging microalga feedstock for biofuel production and wasteland reclamation using remote sensing remote sensing and ex situ experimentation. *Renewable Energy*. 159. 2020.
- Rather M. A., Gupta K., Bardhan P., Borah M., Sarkar A., Eldiehy K. S., Bhuyan S. & Mandal M. Microbial biofilm: A matter of grave concern for human health and food industry. *Journal of Basic Microbiology*. 61(5). 2021.
- Rather M. A., Gupta K. & Mandal M. Inhibition of biofilm and quorum sensing-regulated virulence factors in *Pseudomonas aeruginosa* by *Cuphea carthagenensis* (Jacq.) JF Macbr. Leaf extract: An in vitro study. *Journal of Ethnopharmacology*. 269. 2021.
- Roy N., Gaikwad M., Bhattacharyya D. K. & Barah P. Identification of systems level molecular signatures from glioblastoma multiforme derived extracellular vesicle. *Journal of Molecular Neuroscience*. 71(6). 2020.
- Sahu A., Das A., Saikia K. & Barah, P. Temperature differentially modulates the transcriptome response in *Oryza sativa* to *Xanthomonas oryzae* pv. *oryzae* infection. *Genomics*. 112(6). 2020.
- Saikia D. & Mandal M. Assessment of probiotic properties of the strain *Lactobacillus paracasei* d6 and its anticandidal activities. *Asian Journal of Pharmaceutical and Clinical Research*. 13(12). 2020.
- Sen A., Namsa N. D., Feng N. & Greenberg H. B. Rotavirus Reprograms Multiple Interferon Receptors and Restricts Their Intestinal Antiviral and Inflammatory Functions. *Journal of Virology*. 94(6). 2020.
- Sharma M., Ganeshpandian M., Sanjeev A., Tamilarasan A., Mattaparthi V.S.K., Islam N.S. & Palaniandavar M. Bis- and mixed-ligand copper(II) complexes of nalidixic acid the antibacterial drug: Mode of nalidixate coordination determines DNA binding and cleavage and cytotoxicity. *Inorganica Chimica Acta*. 504. 2020
- Sharma M., Ganeshpandian M., Majumder M., Tamilarasan A., Sharma M., Mukhopadhyay R., Islam N. S. & Palaniandavar M. Octahedral Copper(II)-diimine Complexes of Triethylenetetramine: Effect of Stereochemical Fluxionality and Ligand Hydrophobicity on CuII/CuI Redox, DNA binding and cleavage, cytotoxicity and apoptosis-inducing ability. *Dalton Transactions*. 49(24). 2020.
- Singh S. P., Hussain I., Konwar B. K., Deka R. C. & Singh C. B. Design of potential IKK- β inhibitors using molecular docking and molecular dynamics techniques for their anti-cancer potential. *Current Computer Aided Drug Design*. 17(1). 2020.
- Yata V. K., Biswas A. D., Deb A., Sanjeev A. & Mattaparthi V. S. K. Identification of *Cucumis Sativus* Urease as a Potential Urea Binding Enzyme by Computational Methods. *Biointerface Research in Applied Chemistry*, 11(2). 2021.
- Yata V. K., Dutta N., Das D. & Mattaparthi V. S. K. An in silico study for the identification of Novel Putative Compounds against the wild and mutant type Penicillin binding protein 2 of *Neisseria Gonorrhoeae*. *Biointerface Research in Applied Chemistry*. 11(2). 2020.
- Yata V. K., Das D., Deb A., Das N., Mahanta G., Arora B. & Mattaparthi V. S. K. An in-silico study of stable and environment-friendly *Oryza sativa* Urease. *Biointerface Research in Applied Chemistry*. 11 (3). 2021.
- Yella V. R., Vanaja A., Kulandaivelu U. & Kumar A. Delving into Eukaryotic Origins of Replication Using DNA Structural Features. *ACS Omega*. 5(23). 2020.

Conference Proceedings

- Basu A., Das A. S., Borah P. K., Duary R. K. & Mukhopadhyay R. IL-6-induced STAT3 activation is regulated by Biochanin A through increased phosphorylation of P38 δ MAPK. Proceedings of the International Conference on JAK-STAT pathways in Health and Disease (virtual), Cold Spring Harbor Laboratory, USA, Nov 18-20, 2020.

Book

- P. Barah, D. K. Bhattacharyya & J. K. Kalita. Gene Expression Data Analysis: A Statistical and Machine Learning Perspective. Chapman & Hall/CRC Press, 2021.

Books Chapters

- A. Das, U. Pathak, S. Rajkhowa & A. N. Jha. Plasmodium falciparum: Experimental and Theoretical Approaches in Last 20 Years. In C. Huang (Ed). Current Topics and Emerging Issues in Malaria Elimination. IntechOpen, London, 2021.
- B. Das, B. Choudhury, A. Kumar & J. Baruah. Genome Instability and DNA Repair in Cancer. In P. Behzadi (Ed.). DNA-Damages and Repair Mechanisms. IntechOpen, London, 2021.
- Eldiehy, S.H. Khalifa, V. Das, D. Borah, M. Mandal & D. Deka. 3 Strategic approaches to enhance lipid accumulation in microalgae for bioprospecting. In A. K. Dalai, V. V. Goud, S. Nanda & V. B. Borugadda (Eds.). Algal Biorefinery: Developments, Challenges and Opportunities. Routledge and CRC Press, London, 2021.
- K. Kabyashree & S. K. Ray. Multidrug Efflux System in the Virulence of Plant Pathogenic Bacteria. eBook: Research Trends of Microbiology. MedDocs Publishers, United States, 2020.
- M. M. Phukan, R. Kumar, K. Gupta, P. Bardhan, N. Bhuyan, L. Gogoi, P. Bora, M. Mandal & R. Katak. Aquatic Microbial Oxygenic Phototrophs: A Short Treatise on Diverse Applications and the Future Biofuel Scenario. In A. Singh, S. Srivastava, D. Rathore & D. Pant (Eds.). Environmental Microbiology and Biotechnology. Springer, Singapore, 2021.
- S. Rajkhowa, Z. Hazarika & A. N. Jha. Systems biology and bioinformatics approaches in leishmaniasis. In F.R. Formiga, Inamuddin & P. Severino (Eds.). Applications of Nanobiotechnology for Neglected Tropical Diseases, Academic Press, United States, 2021.
- Z. Hazarika, S. Rajkhowa & A. N. Jha. Role of Force Fields in Protein Function Prediction. In R.T. Maia(Ed.). Homology Molecular Modeling - Perspectives and Applications. Intech Open, London, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute/venue
N.D. Namsa	Statistical Analysis using R Programming	Dept. of Statistics, Assam University, Silchar, Assam in collaboration with Jorhat Extension Center of NIELIT Guwahati	24 November - 1 December 2020	Assam University, Silchar (Online)
R. Mukhopadhyay	In Vivo Pre-clinical Imaging and Drug Discovery	TATA Memorial Center, ACTREC, Mumbai	7-11 December 2020	Mumbai (Online)
S. Dasgupta	Online Weeklong Workshop on Assessment and Evaluation	Teaching Learning Centre, Tezpur University	14-19 December 2020	Tezpur (Online)

	Webinar on In Vivo Preclinical Imaging and Drug Discovery	Advanced Centre for Treatment, Research and Education in Cancer (ACTREC)	7-11 December 2020	Mumbai (Online)
--	---	--	--------------------	-----------------

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
B. K. Konwar	Webinar on Food, Culture and Practices among the communities of North East India	15 January 2021	Indira Gandhi National Centre for Arts, Uzanbazar, Guwahati (Online)
B. K. Konwar	Webinar Quality parameters towards academic excellence	21 August 2020	Tezpur Law College (Online)
N. D. Namsa	Foe or friend COVID-19: The 21st Century pandemic virus and what is so special about it?	30 July 2020	Royal Global University, Guwahati. (Online)
N. D. Namsa	Host-pathogen interaction: Present and future perspective	24-25 September 2020	Department of Life Science, National Institute of Technology (NIT), Rourkela, Odisha. (Online)
N. D. Namsa	Spiralling Trend of Covid-19 Infection and Reinfection through Modes of Transmission with special reference to Fomites and Epidemiological Strategies for Mitigation to Prevent Greater Health Hazard	16 September 2020	Amguri College, Amguri (Online)
P Barah	National Science Day, 2021	28 February 2021	Tezpur University (Online)
R. Doley	Refresher Course on Life Sciences	15-28 March 2021	UGC-HRDC of Gauhati University (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Nobel Prize in Physiology or Medicine 2020	27 November 2020

DISTINGUISHED VISITORS

- Prof. Bikash Medhi, Coordinator, PGIMER Pharmacovigilance Centre, Chandigarh

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS

Faculty members and Staff

- P. Barah was Selected to participate in the annual Young Investigators' Meeting (YIM 2020) held in Mahabalipuram, organised by India Bioscience.
- S. Dasgupta and P. Barah have been Selected as member of Indian National Young Academy of Sciences (INYAS) established by the Indian National Science Academy (INSA).

Research Scholar/Student

- Dr. Anandita Basu, Research scholar of the department joined Cincinnati Children's Hospital Medical Center, USA as a Postdoctoral Fellow, February 2021
- Dr. Anindhya Sundar Das, Research scholar of the department joined Wexner Medical Center, Ohio State University, USA as a Postdoctoral Researcher, March 2021
- Dr. Kamlakshi Deka, Research scholar of the department joined School of Biological Science (SBS) Nanyang Technological University, Singapore as Post Doctoral Research Fellow, March 2021
- Ms. Archana Sinha, Research scholar of the department is a recipient of Young Scientist, awarded by Department of Health Research- Ministry of Health and Family Welfare, New Delhi

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

Outreach programme organized

- Department of MBBT in collaboration with the CSIR-CIMAP Lucknow have jointly developed a cluster of around 30 farmers of Village Boha, West Kameng District of Arunachal Pradesh during the second phase of CSIR-Aroma Mission project. We have successfully installed a cohobated steam distillation unit for field extraction of essential oils using high value aromatic crops like Geranium, Salvia and Rose at Village Boha on 24th September 2020. A Clevenger based analysis of oil recovery and yield of essential oil extracted from the selected aromatic crops such as Salvia and Geranium have been successfully performed. This field distillation unit can facilitate the farmers to extract oil using the naturally available aromatic plants like Lisea cubeba, Lindera khasiana, and Zanthoxylum armatum. MBBT is mentoring some of the farmers to register a farmers producer organization (FPO) that would provide further linkage to marketing of aromatic produce and to avail the benefits and schemes of Central and State Government.



Geranium



NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

CSIR-NET-JRF: 11
 DBT-JRF: 02
 ICMR- JRF: 01
 GATE: 24

NOTABLE PLACEMENTS

Name	Designation	Organization
Arnav Saha	Ph.D.	IISER Pune
Antara Chakraborty	Ph.D.	IISER Pune

Komal Rani	Ph.D.	JNU Delhi
Krishna Pradhan	Ph.D.	IISER Kolkata
Pawan Kumar	Ph.D.	CDRI Lucknow
Subhradip Nath	Ph.D.	Saha Institute of Nuclear Physics, Kolkata
Pallav Sengupta	Ph.D.	IIT Guwahati
Anahita D. Choudhury	Ph.D.	ACTREC, Mumbai
Usashi Guha Roy	Ph.D.	IIT Gandhinagar
Anushree Roy	Ph.D.	IASST, Guwahati
Sristilekha Nath	Ph.D.	Kanazawa University, Japan
Tangkam R Marak	Ph.D.	University of Nottingham, UK
Ankit Sahoo	Ph.D.	Leibniz Institute of Plant Genetics and Crop Plant Research
Kangkana Barman	Recruited as trainee staff	Bharat Biotech International Ltd., Hyderabad
Sourav Ganguly	Recruited as trainee staff	Bharat Biotech International Ltd., Hyderabad
Biswanath Jana	Recruited as trainee staff	Bharat Biotech International Ltd., Hyderabad
Subhadeep Paul	Recruited as trainee staff	Syngene International Limited, Bangalore
Navamallika Dutta	Recruited as trainee staff	Bioinformatics support specialist at Pieriandx
Bandana Singha	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Ria Lodh	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Minu Thapa	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Sonali Singh	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Sudem Boro	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Usashi Guha Roy	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Priya Joshi	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Ujjayita Chowdhury	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Angshuman Das	Recruited as trainee staff	Dr Reddy's Laboratories Ltd, Hyderabad
Niharika Das	Recruited as trainee staff	Havells India Ltd, Noida
Priya Joshi	Recruited as Technical Editor	Cactus Communications Pvt. Ltd

THE FACULTY MEMBERS AND STAFF

Professors

Bolin Kumar Konwar, Ph.D. (Imperial College, London), DIC

Specialization/Areas of interest: Petroleum Biotechnology, Plant Biotechnology, Genetic Engineering- Metagenomics, Bioenergy

E-mail: bkkon@tezu.ernet.in

Ashis Kumar Mukherjee, Ph.D. (Burdwan University)

Specialization/Areas of interest: Snake Venom Biochemistry and Microbial Biotechnology

E-mail: akm@tezu.ernet.in

Shashi Baruah, Ph.D. (PGIMER, Chandigarh)
Specialization/Areas of interest: Molecular Immunology
E-mail: sbaruah@tezu.ernet.in

Suvendra Kumar Ray, Ph.D. (CCMB-Hyderabad)
Specialization/Areas of interest: Plant-Microbe Interactions; Molecular Evolution
E-mail: suven@tezu.ernet.in

Anand Marcus Ramteke, Ph.D. (JNU, New Delhi)
Specialization/Areas of interest: Cancer Genetics and Chemoprevention
E-mail: anand@tezu.ernet.in

Manabendra Mandal, Ph.D. (IGIB-Delhi)
Specialization/Areas of interest: Microbial Biotechnology
E-mail: mandal@tezu.ernet.in

Robin Doley, Ph.D. (Tezpur University, Tezpur)
Specialization/Areas of interest: Molecular Toxinology
E-mail: doley@tezu.ernet.in

Assistant Professors

Eeshan Kalita, Ph.D. (NIPGR, New Delhi & Gauhati University) (on lien)
Specialization/Areas of interest: Plant-Pathogen-environment interactions, Nanobiotechnology, Environmental engineering, Bioenergy
E-mail: ekalita@tezu.ernet.in

Surya Prakash Goud Ponnamp, Ph.D. (LVPEI, degree awarded by University of Hyderabad)
Specialization/Areas of interest: Human Molecular Genetics & Synthetic Biology
E-mail: suryap@tezu.ernet.in

Anupam Nath Jha, Ph.D. (IISc-Bangalore)
Specialization/Areas of interest: Computational Biophysics, Bioinformatics
E-mail: anjha@tezu.ernet.in

Rupak Mukhopadhyay, Ph.D. (IACs & Jadavpur University, Kolkata)
Specialization/Areas of interest: Inflammation biology, cancer Biology
E-mail: mrupak@tezu.ernet.in

Nima Dondu Namsa, Ph.D. (IISc-Bangalore)
Specialization/Areas of interest: Molecular Virology and Scrub typhus
E-mail: namsa@tezu.ernet.in

Suman Dasgupta, Ph.D. (Visva-Bharati University, West Bengal)
Specialization/Areas of interest: Molecular Biology/ Disease Biology/Cellular metabolism
E-mail: suman@tezu.ernet.in

Venkata Satish Kumar Mattaparthi, Ph.D. (IIT Guwahati)
Specialization/Areas of interest: Computational Biotechnology and Bioinformatics
E-mail: venkata@tezu.ernet.in

Jyoti Prasad Saikia, Ph.D. (Tezpur University, Tezpur)
Specialization/Areas of interest: Plant Biology
E-mail: jyoti06@tezu.ernet.in

Aditya Kumar, Ph.D. (IISc, Bangalore)
Specialization/Areas of interest: Bioinformatics
Email: aditya@tezu.ernet.in

Pankaj Barah, Ph.D. (Norwegian University of Science and Technology, Trondheim, Norway)
Specialization/Areas of interest: Computational Systems Biology
Email: barah@tezu.ernet.in

Technical staff

Kalyan Kumar Hazarika, Ph.D. (Tezpur University, Tezpur)
Technical Officer
E-mail: kalyan@tezu.ernet.in

Naba Kumar Bordoloi, Ph.D. (Tezpur University, Tezpur)
Senior Technical assistant
E-mail: nabakb@tezu.ernet.in

Pranab Mudoi, M.Sc. (Dibugarh University, Dibrugarh)
Junior Technical assistant
E-mail: pmudoi@tezu.ernet.in

Office staff

Pranita Saikia Talukdar
Assistant
E-mail: pranita@tezu.ernet.in

Guna Das
MTS
E-mail: gdas@tezu.ernet.in

DEPARTMENT OF PHYSICS

THE DEPARTMENT

Twenty three years since its commencement in January 1998, Department of Physics has stridden out not only in its post-graduation teaching but also in new frontiers of research. To keep pace with the advancement in science and technology, new special papers have been included with adaptation to new developments within the course content. The areas of specialization for post-graduation are: Condensed Matter Physics; Electronics and Photonics; High Energy Physics; Astrophysics; Plasma Physics and Nano Science. To develop the students from the graduate level, the Department also started an Integrated M.Sc. in Physics in 2009. Keeping in mind the need of teachers at the school level, the Department has also been running a B.Sc.-B.Ed. programme since July 2011.

Major thrust areas of research of the Department are, Astrophysics, High Energy Physics, Nanoscience, Neutrino Physics, Optoelectronics, Plasma Physics, Microwaves and Solid State Ionics.

Academic Programmes and Student intake

Programme	Intake
Ph.D.	22
M.Sc.	38
Int. M. Sc. in Physics	25
Int. B.Sc.-B.Ed. in Physics	13

Major Facilities and Equipment Available

- Field Emission Scanning Electron Microscope (FESEM)
- Scanning Electron Microscope (SEM)
- LB Film Depositor
- FTIR (Shifted to SAIC)
- Millipore water Purification system
- UV-VIS Spectrophotometer
- Fluorescence Spectrometer
- XRD
- CNC Milling Machine
- Optical Microscope
- Nd-Yag Laser
- High Vacuum Coating Unit

MAJOR RESEARCH AND DEVELOPMENT FINDINGS

Principal Investigator	Salient Research Findings
M. K. Das	<ul style="list-style-type: none"> • We are currently studying various seesaw frameworks, one of them is minimal extended seesaw (MES), which is an extension of type-I seesaw framework to address sterile neutrino with mass ranging from eV to keV. • Discrete non-Abelian flavour symmetries like A_4, S_4 are widely used in our studies to construct various mass models. • We work on the minimal Scotogenic model which is basically a model connecting neutrino and dark matter (DM) phenomenology. We analyze thermal and non thermal production of DM and also verify the parameter

	<p>space satisfying baryon asymmetry of the Universe.</p> <ul style="list-style-type: none"> • We are also trying to construct different texture zero Yukawa coupling matrices from an A4 symmetric Scotogenic model as well as minimal tree level seesaw models. This can be further implemented in studying which texture zero matrices is more favourable in satisfying various bounds on NDBD, BAU and LFV. Scalar DM study can also be consecutively carried out. Also texture zero study can give suitable bounds on the mixing parameters. • We also propose various dark matter candidates in our study. Among them, real and complex singlet scalar, fermion (sterile neutrino) dark matter within various minimal model and study DM phenomenology. • Baryogenesis explained by thermal and resonant leptogenesis are also studied. Impact of heavy sterile neutrinos on low energy processes like LFV and NDBD has also been studied in our works so far.
N. Das	<p>Based on Linear Response Theory and Molecular Dynamics simulation, phase transition and transport of dust particles in a streaming magnetized plasma are studied. The results show that dust particles exhibit anomalous transport behavior. The study may be applicable in various laboratory as well as astrophysical plasma environment.</p>
P. Deb	<ul style="list-style-type: none"> • Fabricated a biodegradable material based on 2D graphitic nanosheets which has promising applications as a sustainable and smart food packaging alternative to plastics. • Dynamic spin freezing and prominent magnetic memory effect observed in ensembles of interacting anisotropic magnetic nanoparticles. • Developed a composite system of reduced Graphene oxide and magnetite nanoparticles as a multifunctional smart adsorbent for Arsenic removal from drinking water and dye removal from wastewater. • Investigated the time-varying spin-current and magneto transport behavior in a model semiconducting MoS₂/phosphorene van der Waals heterostructure at the nanoscale using first principles simulations. • An Indian Patent Grant entitled “Multifunctional nanoparticles and methods for synthesis thereof.” (Granted Patent No. 351940) has been awarded in November 2020..
P. Nath	<ul style="list-style-type: none"> • The ICMR sponsored research project entitled, “Smartphone based optical microscope for clinical applications” is envisaged to develop low-cost field-portable optical microscope with magnification of 400x or better that can be used in resource poor settings where access to lab-grade microscope is limited. • A smartphone optical microscope with optical magnification 520x has been designed. • Also, dark-field microscopy in two different modalities namely- total internal reflection (TIR) illumination and oblique illumination have been demonstrated using a smartphone. • Using the designed set-up imaging of optical translucent micro particles could be imaged reliably. • ASTEC sponsored project entitled, “Design of smartphone platform fluorescence microscopic system for resource poor regions” aims to develop low-cost fluorescence microscopic system using smartphone.

	<ul style="list-style-type: none"> The BIRAC-SRISTI sponsored project entitled, "Smartphone Based Instrumentation for Water Quality Monitoring with Reference to Resource Poor Region" focuses to convert the demonstrate work on monitoring of various important parameters in water using a smartphone. Several papers have been published and a patent has been filed related to the project work
R. Biswas	<ul style="list-style-type: none"> Development of a volatile liquid sensor through electrical for subsequent use as a breathalyzer for drunken drivers An Inexpensive and Novel Optical Scheme of Assessing Adulterants in Emulsions is designed. Atypical electrical behavior of few layered WS₂ nanosheets based platform subject to heavy metal ion treatment is investigated. Ultrasensitive Trace Determination of Cadmium Through a Green Synthesized Hybrid PVA-Chitosan Nanocomposite Inexpensive Hetero-core Spliced Fiber Optic Setup for Assessing Strain Through seismic ambient noise, the subsurface of Kopili fault and neighboring region is delineated. Adulteration in fossil fuels is investigated through a inexpensive optical set-up.

RESEARCH PROJECTS: ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Investigators	Collaboration
Departmental Project UGC-SAP-DRS-II	UGC	₹ 89.51 Lakhs	5 Years 2016-2021	D. Mohanta	
Evaluation of rheological and visible emission responses of nano WS ₂ /C-dot as additives.	CSIR, New Delhi	₹10.33 Lakhs	3 Years (2018-2021)	D. Mohanta	
Effect of energetic γ -photons and ion beams on structural, opto-electronic and rheological property of tungsten dichalcogenide-based composites.	UGC-DAE, Kolkata	₹11 Lakhs	3 Years (2019-2022)	D. Mohanta	
Neutrino mass, Lepton number violation, baryogenesis, dark matter and related cosmology within Beyond Standard Model	SERB-DST	₹ 21.09 Lakhs	3 Years (2018-2021)	M. K. Das	
A study on laser-driven ion acceleration from plasma target and generation of large scale	SERB-DST	₹ 25.56 Lakhs	3 Years 2019-2022	N. Das & G. A. Ahmed	

magnetic field in relativistic laser plasma interaction					
Departmental Project DST-FIST-II	DST	₹192 Lakhs	5 Years 2017-2022	P. Deb	
Efficient oil recovery as conventional energy using smart graphitic nano-composite.	DBT, Govt. of India	₹15 Lakhs	3 Years (2019-2022)	P. Deb	
Study of interactions of Ionic Liquid ions with unsaturated metal centers in Metal Organic Framework based polymer electrolyte nanocomposites incorporated with Ionic Liquids through Neutron Scattering and Raman Spectroscopy	UGC-DAE-CS R	₹10.71 Lakhs	3 Years 2018-2021	P. Nath	
Design of smartphone platform fluorescence microscopic system for resource poor regions	ASTECC, Guwahati	₹ 2.41 Lakhs	2 Years (2019-2021)	P Nath	
Smartphone Based Instrumentation for Water Quality Monitoring with Reference to Resource Poor Region	SRISTI	₹ 15 Lakhs	2 Years (2019-2021)	P. Nath	
Stability analysis of astrophysical complex plasmas	SERB	₹ 17 Lakhs	3 Years (2018-21)	P. K. Karmakar	
A multiwavelength study of Active Galactic Nuclei and X-ray sources	CSIR	₹ 13.23 Lakhs	3 Years (2017-2020.)	R. Gogoi	IUCAA
Study of the Abundance and Characteristics of Interstellar Dust	DST-SERB	₹ 19.65 Lakhs	3 Years (2018-2021)	R. Gogoi	BHU
The AstroSat view on understanding the nature of synchrotron spectrum in blazars	ISRO	₹ 16.84 Lakhs	3 Years (2019-2022)	R. Gogoi	IUCAA
Identification of electroactive materials for batteries	SERB DST	₹32 Lakhs	3 Years (2018-21)	S. K. Das	

PUBLICATIONS

Journal Publications

- Baruah J., Chaliha C., Kalita E. & Nath B. K., Field A., Deb P. Modelling and optimization of factors influencing adsorptive performance of agrowaste-derived Nanocellulose Iron Oxide Nanobiocomposites during remediation of Arsenic contaminated groundwater. *International Journal of Biological Macromolecules*. 164. 2020.
- Behera S. K. & Deb P. Spin-transfer-torque mediated quantum magnetotransport in MoS₂/Phosphorene vdW Heterostructure based MTJs. *Physical Chemistry Chemical Physics*. 22. 2020.
- Behera S.K. & Deb P. Realizing the Majorana Quasiparticle fermionic dynamics in $\{(1+1)\}$ dimensional Topological Quantum. *Materials Bulletin of the American Physical Society*. 65.2020.
- Bora N., Biswas R. & Srinivassan V. CodaQback- A simplified Python Code facilitating auto-windowing for estimating Seismic Coda attenuation parameter, *International Journal of Geotechnical Earthquake Engineering*. 12(1). 2020.
- Boruah B. S., Biswas R. & Neog U. Ultrasensitive Trace Determination of Cadmium Through a Green Synthesized Hybrid PVA-Chitosan Nanocomposite. *Plasmonics*. 15. 2020.
- Bora N., Biswas R. & Malischewsky P. Imaging Subsurface Structure of an Urban Area Based on Diffuse-Field Theory Concept Using Seismic Ambient Noise. *Pure Appl. Geophys*. 177. 2020.
- Borah M. J., Sarmah H.J., Bhuyan N., Mohanta D., Deka D. Application of Box-Behnken design in optimization of biodiesel yield using WO₃/Graphene Quantum dot (GQD) system and its kinetics analysis. *Biomass Conversion and Biorefinery*. 11(4). 2021.
- Boruah B. S., Gogoi D. & Biswas R. Bio-inspired finger like Cu-electrodes as an effective sensing tool for heavy metal ion in aqueous solution. *Journal of Electrochemical Society*. 167 (2). 2020.
- Boruah B. S., Biswas R. & Ojah N. Bio-inspired localized surface plasmon resonance enhanced Sensing of Mercury through Green synthesized Silver nanoparticle. *Journal of Lightwave Technology*. 38(7). 2020.
- Biswas R., Saha D. Probing volatile liquid through an electrical sensor with up gradation to a breathalyzer for drunken drivers. *Applied Physics A*. 126:313. 2020.
- Biswas R. Are Men More Vulnerable to Covid-19 as Compared to Women? *Biomed J Sci& Tech Res*. 27(2). 2020.
- Biswas R., Karmakar P. K. An Inexpensive and Novel Optical Scheme of Assessing Adulterants in Emulsions. *Biointerface Research in applied Chemistry*.10(6). 2020.
- Biswas R. Inexpensive Hetero-core Spliced Fiber Optic Setup for Assessing Strain. *Sens Imaging*. 21(38). 2020.
- Biswas R. Nanosponges: a viable option for combating Covid-19. *J Clinical Research and Reports*. 5(4). 2020.
- Biswas R. Wearable bio-sensors: a gigantic leap in health care system. *Int J Biosen Bioelectron*. 6(4). 2020.
- Biswas K., Mohanta Y.K., Kumar V.B., Hashem A., Abd Allahd E.F., Mohanta D., Mohanta T.K. Nutritional assessment study and role of green silver nanoparticles in self-life of coconut endosperm to develop as functional food. *Saudi Journal of Biological Sciences*. 27(5).2020.
- Das P., Paul S., Bhattacharya S. S., and Nath P., Smartphone-Based Spectrometric Analyzer for Accurate Estimation of pH Value in Soil. *IEEE Sensors Journal*.21(3). 2021.
- Das P. & Das M. K. Phenomenology of keV sterile neutrino in minimal extended seesaw. *Int.J.Mod.Phys.A*. 35. 2020.
- Das P., Das M. K. & Khan N. Phenomenology study of neutrino mass, dark matter and baryogenesis within the framework of minimal extended seesaw. *JHEP*. 03. 2020.

- Das P., Das M. K. & Khan N. A new feasible dark matter region in the singlet scalar scotogenic model. *Nuclear Physics B*. 964. 2021.
- Devi K., Nag A., Paul J., Karmakar P.K. Dynamics of sheath evolution in magnetized charge-fluctuating dusty plasmas. *Chinese Journal of Physics*, 65 (405-411) 2020.
- Deka K., Guleria A., Kumar D., Biswas J., Lodha S., Kaushik S. D., Dasgupta S. & Deb P. Exclusive T2 MRI contrast enhancement by mesoporous carbon framework encapsulated manganese oxide nanoparticles. *Current Applied Physics*. 20. 2020.
- Gautam N. & Das M. K. Phenomenology of keV scale sterile neutrino dark matter with S4 flavor symmetry. *JHEP*. 01. 2020.
- Goswami P., Sahayanathan S., Sinha A. & Gogoi R. Unfolding the X-ray spectral curvature of Mkn 421 for further clues. *Monthly Notices of the Royal Astronomical Society*. 499 (2). 2020.
- Goswami P., Sinha A., Chandra S., Misra R., Chitnis V., Gogoi R., Sahayanathan S., Stalin C.S., Singh K. P. & Yadav J. S. Unravelling the unusually curved X-ray spectrum of RGBJ0710 + 591 using AstroSat observations *Monthly Notices of the Royal Astronomical Society* 492 (1) 2020.
- Haloi A., Karmakar P.K. Astromodal wave dynamics in multifluidic structure-forming cloud complexes. *Pramana-Journal of Physics*, 95(17) 2021.
- Hazarika S. J., Kulriya P. K. & Mohanta D. Observable vibronic modes, visible emission, and de-wetting response mediated via increased roughness due to splitting of WS2 nano-sheets by energetic Xe⁺ ions. *Physica Status Solidi B*. 257(8). 2020.
- Hatiboruah D., Devi D., Namsa D. N. & Nath P. Turbidimetric analysis of growth kinetics of bacteria in the laboratory environment using smartphone. *Journal of biophotonics*. 13(4). 2020.
- Hatiboruah D., Das T., Chamuah N., Rabha D., Talukdar B., Bora U., Ahamad K.U., Nath P. Estimation of trace-mercury concentration in water using a smartphone. *Measurement*, 154(15). 2020.
- Itay R., Szabo P. Z., Koltman G., Devi M. M., Shutman M., Landsman H. & Budnik. DIREXENO—an apparatus for measuring correlated scintillation signatures in liquid xenon. *JINST*. 15 T06001. 2020.
- Kalita D., Karmakar P.K. Analyzing the instability dynamics of spherical complex Astro clouds in a magnetized meanfluidic fabric. *Physics of Plasmas*, 27(2). 2020.
- Khatoon R., Shah Z., Misra R., Gogoi R. Study of long-term flux and photon index distributions of blazars using RXTE observations. *Monthly Notices of the Royal Astronomical Society* 491 (2). 2020.
- Konwar K., Kaushik S. D., Sen D. & Deb P. Dynamic spin freezing and magnetic memory effect in ensembles of interacting anisotropic magnetic nanoparticles. *Phys. Rev. B*. 102. 2020.
- Konwar K., Kaushik S., Sen D. & Deb P. Demagnetizing field dependent dynamic spin freezing model with random easy axes orientation in nanoparticles ensembles. *Bulletin of the American Physical Society* 65.2020.
- Nandi S., Das S.K. An electrochemical study on bismuth oxide (Bi₂O₃) as an electrode material for rechargeable aqueous aluminum-ion battery. *Solid state Ionics*, 347. 2020
- Neog A., Deb S. & Biswas R. Atypical electrical behavior of few layered WS₂ nanosheets based platform subject to heavy metal ion treatment. *Materials Letters*. 268, 127597, 2020.
- Ojah N., Borah R., Ahmed G. A., Mandal M., Choudhury A. J. Surface modification of electrospun silk/AMOX/PVA nanofibers by dielectric barrier discharge plasma: physiochemical properties, drug delivery and in-vitro biocompatibility. *Progress in Biomaterials*. 9(29). 2020.
- Phukan P., Sarma J. K. Small x phenomenology on gluon evolution through the BFKL equation in light of a constraint in multi-Regge kinematics. *Communications in Theoretical Physics*, 72(2). 2020.

- Phukan A., Bhattacharyya N. S. Low-density foam as an adhesion facilitator between silicone rubber and copper sheet for use in flexible microwave antennas. *Materials Research Express*. 6 (12). 2020.
- Pradhan S. S., Konwar K., Ghosh T. N., Mondal B., Sarkar S. K. & Deb P. Multifunctional Iron oxide embedded reduced graphene oxide as a versatile adsorbent candidate for effectual arsenic and dye removal. *Colloid and Interface Science communications*. 39. 2020.
- Pu Z., Xie Z. C., Sarmah R., Chen Y., Lu C., Ananthakrishna G. & Dai L. H. Spatio-temporal dynamics of jerky flow in high entropy alloy at extremely low temperature. *Philosophical Magazine*. 101(2). 2020.
- Rabha D., Biswas S., Chamuah N., Mandal M., Nath P. Wide-field multi-modal microscopic imaging using smartphone. *Optics and Lasers in Engineering*, 137. 2021.
- Sarmah H. J., Mohanta D. Impetuous exfoliation of tungsten disulfide into a few-layer nanoscale form due to super active collagenase biomolecules. *Mat. Chem. Phys.* 250(1). 2020.
- Sarmah H. J., Mohanta D. & Saha A. Perceptible exciton-to-trion conversion and signature of defect mediated vibronic modes and spin relaxation in nanoscale WS₂ exposed to γ -rays. *Nanotechnology*. 31(28). 2020.
- Sarmah H.J., Mohanta D. Emergence of Raman active D- band and unusually suppressed conductivity mediated by nanoscale defects in pencil-lead graphitic systems under 80 keV Xe⁺ ion irradiation. *Nuclear Instrumentation and Methods in Physics Research B*. 463(15). 2020.
- Sarma L. & Das M. K. Scalar dark matter and leptogenesis in the minimal scotogenic model. *Nuclear Physics B*. 963. 2021.
- Sharma A., Tripathi D., Erdélyi R., Gupta G. R., Ahmed G. A. Wave amplitude modulation in fan loops as observed by AIA/SDO. *Astronomy & Astrophysics*. 638. 2020.
- Shukla N., Ahmed G. A. Sb₂Te₃ an optically potent topological insulator: A density functional. *Materials Today: Proceedings*. 18. 2021.
- Talukdar M., Nath O. & Deb P. Enhancing barrier properties of biodegradable film by reinforcing with 2D heterostructure. *Applied Surface Science*. 541. 2021.
- Talukdar M., Behera S. K. & Deb P. Proficient quantum energy storage for in-plane microsupercapacitor using hybrid nanocomposite. *Bulletin of the American Physical Society* 65.2020.

Conference Proceedings

- Bora M., Behera S.K. & Deb P. Dynamic coalescence and implosion of internal microbubbles in immobile droplet. *AIP Conference Proceedings* 2265, 2020.
- Behera S. K. & Deb P. First principle understanding on electronic and magnetic behaviour in vacancy induced black phosphorous monolayer. *AIP Conference Proceedings*. 2276, 2020.
- Das P. and Karmakar P.K. Nonlinear nucleus-acoustic waves and possible equivalent conservation laws. Proceedings book of the 1st National Conference on Advances in Nuclear Physics and Condensed Matter, 2020.
- Das P., Mukherjee A. & M. K. Das. Active and Sterile neutrino phenomenology with A4 based minimal extended seesaw. *Springer Proceedings in Physics*. 261. 2020.
- Dutta P., Karmakar P.K. Evolution of conjugational hybrid mode in partially ionized astropasmas. Proceedings book of the 1st National Conference on Advances in Nuclear Physics and Condensed Matter, 2020.
- Haloi A., Karmakar P.K. Gyrokinetic influence on star-forming bimodal cloud stability. Proceedings book of the 1st National Conference on Advances in Nuclear Physics and Condensed Matter, 2020.

- Konwar K., Kaushik S.D. & Deb P. Easy axes orientation dependent model for collective magnetic behaviour of zinc ferrite nanoparticles assembly. *AIP Conference Proceedings* 2265, 2020.

Book Chapters

- B. S. Boruah & R. Biswas. Recent developments of allied techniques of qualitative analysis of heavy metal ions in aqueous solutions with special reference to modern mass spectrometry. In A. Rahman (Ed.). *Advances in Modern Mass spectrometry*, Bentham Publishers, 2020.
- R. Biswas. A brief overview of IoT architecture and relevant security protocols. In P. Karthikeyan (Ed.). *Internet of Things*, CRC Press Taylor and Francis, 2021.
- R. Biswas. Role of Radon as a Precursor to Earthquakes: An Appraisal, In R. C. Tiwari (Ed.). *Radon: Detection, Exposure and Control*, Nova Publisher, 2020.
- R. Deb & P. K. Karmakar. A New Simplistic Equation of a Macroscopic Equilibrium State for Degenerate Neutron stars, In S. Kaothekar (Ed) *Molecular clouds and star formation*, Nova Publishers, USA, 2020.
- R. Deb & P.K. Karmakar. A New P@-Relationship for Stellar structures, In S. Kaothekar (Ed.). *Molecular clouds and star formation*, Nova Publishers, USA, 2020.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Nobel prize in physics	9 November 2020
Cosmic Dust	5 November 2020

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title	Organized by	Date/Period, year	Place/institute /venue
R. Biswas	Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	Teaching Learning Centre, Tezpur University	15 February -1 March 2021	Tezpur (Online)
	Online FDP on Development of E-Module with Four Quadrant Approach	Teaching Learning Centre, Tezpur University	11-21 December 2020	Tezpur (Online)
	QIP Programme on Spectroscopy and Characterization of New Generation Materials	Dept. of Physics, IIT, roorkee	14-18 December 2020	Roorkee (Online)
S. K. Das	6th International Conference on Nanoscience and Nanotechnology	Dept. of Physics and Nanotechnology, SRMIST, Chennai, India	1-3 February 2021	Chennai (Online)
	Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	Teaching Learning Centre, Tezpur University	8-22 October 2020	Tezpur (Online)

AWARDS & HONOURS/ NOTABLE ACHIEVEMENTS**Faculty members and staff**

- P. Deb received the “VASVIK Award for Material & Metallurgical Science & Technology in 2020

Research Scholar/Student

- Sunny Nandi, 1st Prize in Oral presentation, Awarded by Research Conclave 2020. (NIT, Meghalaya)
- Sunny Nandi, 1st Prize in Oral presentation, Awarded by International e-conference on Recent Advances in Physics and Materials Science, Kurseong College, West Bengal
- Sunny Nandi, International Best Poster award, Awarded by International Poster Presentation Competition, NYAB, INYAS, SLAYS and TYSA, held in Bangladesh, India, Sri-Lanka, Thailand
- Meenakshi Talukdar, CSIR- Senior Research Fellowship, CSIR-Delhi, India

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

- DST-FIST : 192 LAKHS
- UGC-SAP-DRS II : 89.51 LAKHS

NUMBER OF STUDENTS QAULIFIED NET-JRF/GATE/SLET

- NET : 11
- GATE : 11

NOTABLE PLACEMENTS

Name	Designation	Organization
Mr. Debananda Nath	Circle Officer	Civil Service, Govt. of Assam
Mr. Madurjya Lalung	Asst. Prof.	Nagaon College, Nagaon
Mr. Pragyan Phukan	Asst. Prof.	Moran College, Moran
Dr. Dhruvajyoti Gogoi	Asst. Prof.	Nalbari College, Nalbari
Dr. Deep Kr. Kuri	Asst. Prof.	Digboi College, Digboi
Dr. Anup Kumar Nath	Asst. Prof.	Cotton University, Guwahati
Dr. Anil Hazarika	Asst. Prof.	Cotton University, Guwahati
Dr. Happy Borgohain	Asst. Prof.	Silapathar College, Silapathar, Dhemaji
Dr. Bijoy Sankar Baruah	Asst. Prof.	Rangapara College, Rangapara, Sonitpur
Dr. Gautam Saikia	Asst. Prof.	North Guwahati College, Amingaon
Dr. Dhruvajit Kalita	Asst. Prof.	North Guwahati College, Amingaon
Ms. Bhagyalakhi Baruah	Asst. Prof.	Duliajan College, Duliajan
Ms. Nomita Ojah	Asst. Prof.	Nagaon Girls College Nagaon, Assam
Dr. Sauravjyoti Hazarika	Asst. Prof.	Dindayal Upadhyay College, Bongaigaon, Assam
Dr. Anup Kumar Nath	Asst. Prof.	Cotton University, Guwahati, Assam
Dr. Dimpri Paul	Asst. Prof.	Patharkandi College, Karimganj, Assam

THE FACULTY MEMBERS AND STAFF**Professors**

Jayanta Kumar Sarma, Ph.D. (Gauhati University)
Specialization: High Energy Physics, Particle Physics
 E-mail: jks@tezu.ernet.in

Nidhi Saxena Bhattacharyya, Ph.D. (Delhi University)
Specialization: Microwave, Material Devices and Antennas
E-mail: nidhi@tezu.ernet.in

Nilakshi Das, Ph.D. (Gauhati University)
Specialization: High Energy Physics, Plasma Physics
E-mail: ndas@tezu.ernet.in

Pritom Deb, Ph.D. (Jadavpur University)
Specialization: Nanoscience and Technology
E-mail: pdeb@tezu.ernet.in

Mrinal Kumar. Das, Ph.D. (Gauhati University)
Specialization: High Energy Physics, Neutrino Physics
E-mail: mkdas@tezu.ernet.in

Pabitra Nath, Ph.D. (Gauhati University)
Specialization: Fibre Optics
E-mail: pnath@tezu.ernet.in

Associate Professors

Gazi. A. Ahmed, Ph.D. (Gauhati University)
Specialization: Laser Physics
E-mail: gazi@tezu.ernet.in

Dambarudhar Mohanta, Ph.D. (Tezpur University)
Specialization: Nanotechnology & Condensed Matter Physics
E-mail: best@tezu.ernet.in

Pralay Kumar Karmakar, Ph.D. (Gauhati University)
Specialization: Theoretical Plasma Physics
E-mail: pkk@tezu.ernet.in

Ng. K. Francis, Ph.D. (Gauhati University)
Specialization: High Energy Physics (Theoretical)
E-mail: francis@tezu.ernet.in

Assistant Professors

Rajib Biswas, Ph.D. (NEIST, Jorhat)
Specialization: Electronics & Condensed Matter Physics, Seismology
E-mail: rajib@tezu.ernet.in

Rupjyoti Gogoi, Ph.D. (Gauhati University)
Specialization: High Energy Physics
E-mail: rgogoi@tezu.ernet.in

Shyamal Kumar Das, Ph.D. (IISc, Bangalore)
Specialization: Materials Science
E-mail: skdas@tezu.ernet.in

Ritupan Sarmah, Ph.D. (IISc, Bangalore)
Specialization: Condensed Matter Physics
E-mail: ritupan@tezu.ernet.in

Moon Moon Devi, Ph.D. (TIFR, Mumbai)
Specialization: Astro Particle Physics
E-mail: devimm@tezu.ernet.in

Technical staff

Kishor Baruah, Ph.D. (Gauhati University),
Technical Officer
Email: kiba@tezu.ernet.in

Palash Dutta, B.Sc. (Dibrugarh University)
Laboratory Assistant
duttapk@tezu.ernet.in

Mrinmoy Gohain, Diploma in E&T (AICTE)
Laboratory Assistant
Email: mgohain@tezu.ernet.in

Biju Boro, B.Sc. (Dibrugarh University)
Laboratory Assistant
Email: bbiju@tezu.ernet.in

Dhruba Deka, B.Sc. (Gauhati University)
Laboratory Assistant
Email: ddeka@tezu.ernet.in

Office staff

Umesh Patir, B.Sc. (Gauhati University), PGDTM (Tezpur University), P.G. (IGNOU)
Assistant (oftg.)
Email: patir@tezu.ernet.in

Narayan Sarma
MTS

CENTRE FOR DISTANCE AND ONLINE EDUCATION (Erstwhile CENTRE FOR OPEN AND DISTANCE LEARNING)

The Centre for Distance and Online Education (erstwhile Centre for Open and Distance Learning) was established in the year 2011 with an aim to disseminate and impart education through open and distance mode in chosen areas. The Centre offers various post-graduate, undergraduate, diploma and certificate programmes in emerging areas of science & technology, social sciences, management and humanities with flexible system to cater to the needs of the learners facing difficulty in availing regular mode of education. Ongoing programmes under the Centre are M.A. in Mass Communication and Journalism, M.A. in English, and M.A. in Sociology. The Centre, in its endeavor to offer more and more upcoming courses, is supported by international organization like UNICEF and a Post Graduate Diploma in Child Rights and Development is sponsored by the organization. The Centre has also completed its official formalities for launching one year Diploma Programme in Panchayati Raj and Rural Development in collaboration with State Institute of Panchayat and Rural Development under State Institute of Rural Development, Government of Assam. In near future the Centre visions to connect itself to a wide range of learners through new and skill-based programmes.

Academic Programmes and Student intake

Programme	Intake
M.A. English	23
M.A. Sociology	31
M.A. Mass Communication and Journalism	17

Major Facilities and Equipment Available

- Dedicated Student Library with ample collection of books over various subject areas.
- Fully Furnished dedicated Conference Room with 24*7 LAN and Projector facilities.

Book Chapters:

- M. Boruah. Social Media Fanaticism in the post truth era and critical media literacy. In A. Sharma (Ed.). 175 years of media in Assam and beyond. Power shift publisher, Guwahati 2021.
- S. Goswami. Spacing Memories: Private and Public selves in Easterine Iralu's A Terrible Matriarchy. In M. Baruah (Ed.). Women and Urbanity: Cultural Memory of North-East India. Tezpur University, Tezpur, 2020.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w'ps/sym.	Organized by	Date/Period, year	Place/institute/venue
M. Boruah	Faculty Development Programme on Managing Online Classes and Co-creating MOOCS,	Teaching Learning Centre, Tezpur University	02-16 June 2021	TLC, Tezpur University (Online)

S. Goswami	Moodle Learning Management System	Assam Women's University & IIT-B	22-26 June 2020	AWU, Jorhat (Online)
	Development of E-module in Four Quadrant Approach	Teaching Learning Centre, Tezpur University	11-21 December 2020.	TLC, Tezpur University (Online)

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
R. K. Doley	International Seminar on Issues and Challenges to Post-Covid Higher Education: Possible Solutions.	23 August 2020	Raha College, Assam (Online)
S. Goswami	Basics of IPR and Patent	28-29 October 2020	North Lakhimpur College, Assam (Online)
	Protecting Regional Products: Geographical Indications of Goods	27 February 2021	National Law School and Judicial Academy, Assam. Guwahati (Online)
	One Day Workshop on Intellectual Property Rights	30 January 2021	Guwahati College, Assam (Online)

THE FACULTY MEMBERS AND STAFF

Director

Dr. Rajeev K Doley, Ph.D. (IIT Guwahati)

Specialization / Research area: Sociolinguistics, Communication Skills, Child Rights

E-mail: rkdoley@tezu.ernet.in

Assistant Professors

Dr. Suchibrata Goswami, Ph.D. (Dibrugarh University)

Specialization / Research area: American Literature, Postcolonial literature

Email: suchitu@tezu.ernet.in

Dr. Madhusmita Boruah, Ph.D. Tezpur University,

Specialization / Research area: Advertising and Public Relation

Email: madhu@tezu.ernet.in

Ms. Ankita Bhattacharyya, MA (NET-JRF), Tezpur University,

Sociology of Health and Illness

Email: ankita@tezu.ernet.in

Technical staff

Kalpadroom Almany, BCA
Email: kalpa01@tezu.ernet.in

Office staff

Mr. Partha Pratim Kalita, Assistant Registrar
Email: parthap@tezu.ernet.in

Mrs. Anita Ghosh, Office Assistant
Email: anitag_ta@tezu.ernet.in

Mr. Mohan Saikia
MTS

TEACHING LEARNING CENTRE

THE CENTRE

The Teaching Learning Centre (TLC), Tezpur University was formally inaugurated on January 28, 2016 as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) scheme. The scheme was launched by Department of Higher Education, Ministry of Education (formerly MHRD), Govt. of India. TLC envisages developing and promoting a responsive and relevant teaching-learning system for higher education communities and contributing to excellence in teaching and learning as an innovative and resourceful Centre through reflective research-based practice and the optimal use of technology. Due to the unprecedented situation created by COVID19 pandemic, TLC had to switch to fully online training programs. Besides keeping in view the need of the teaching community TLC conducted several ICT training programs to enable the teaching community for online teaching. Two such programs focusing on ICT were conducted for capacity building of Tezpur University teaching fraternity only. Altogether the Centre has conducted 16 online training programmes in this financial year and trained more than 1300 teachers and prospective teachers from across the country. Through these programmes, TLC has been providing assistance and support for promoting best practices in teaching learning environment among higher education communities. Focus areas of the conducted activities are teaching learning pedagogy, curriculum development, training on ICT based pedagogy, assessment and evaluation. Two interdisciplinary Refresher Course were also conducted during this period in online mode.

Major Facilities and Equipment Available

- ICT LAB with 25 PCs

PUBLICATIONS

Journal Publications

- Bora S. Kripabori Bezbarooahar Xobdor Nirmiti. *Satsori*. 16(1). 2020.

CONSULTANCY

Consultants	Title/Nature of the consultancy work	Client	Amount
S. Bora & I. H. Ahmed Under TLC Group	Capacity Building of Faculty Member on Use of ICT for Online Teaching	Dr. R. K. B. Law College	24,999.00
S. Bora & I. H. Ahmed Under TLC Group	Capacity Building of Faculty Member on Use of ICT for Online Teaching	Suren Das College	29,500.00
S. Bora & I. H. Ahmed Under TLC Group	Capacity Building of Faculty Member on Use of ICT for Online Teaching	Handique Girls College	29,500.00
S. Bora & I. H. Ahmed Under TLC Group	Capacity Building of Faculty Member on Use of ICT for Online Teaching	Nowgong College	29,500.00

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
I. H. Ahmed	Online Communication	30 May 2020	Dr. R. K. B. Law College, Dibrugarh (Online)

S. Bora	Open Educational Resources and Digital Learning Platforms	11 August 2020	Dhakuakhana College, Assam (Online)
	Language Learning through ICT Tools	19 September 2020	Assam Jatiya Bidyalaya, Guwahati (Online)
	Open Educational Resources and Digital Learning Platforms for Students	18 October 2020	GIMT, Tezpur (Online)
	Bloom's Taxonomy Based Question Paper	12 December 2020	Poona College of Pharmacy, Bharati Vidyapeeth Deemed University (Online)

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
Online Basic Training on Use of ICT	20-23 April 2020
Two Day Online Hands on Workshop on Integration of Basic ICT Tools In Teaching Pedagogy (in collaboration with IQAC, TU)	8-9 June 2020
Faculty Development Programme on Teaching Pedagogy (in association with Dr. Rohini Kanta Barua Law College, Dibrugarh)	22-28 June 2020
Online Workshop on ICT Based Pedagogy (in association with Suren Das College, Hajo)	7-8 July 2020
Two Day Online Workshop on ICT Based Pedagogy (in association with Handique Girls' College, Guwahati)	13-14 July 2020
Workshop on Discipline Specific Curriculum Development for Professional Development of Teachers (in association with Dept. of Assamese, Tezpur University)	17 July 2020
Online Workshop on ICT Based Pedagogy (in association with Nowgong College, Nagaon)	13-14 August 2020
Online Weeklong Workshop on Assessment and Evaluation	24-29 August 2020
Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy	8-22 October 2020
Online Weeklong Workshop on Assessment and Evaluation	14-19 December 2020
Special Workshop for Tezpur University Faculty on Development of E-Module with Four Quadrant Approach	11-21 December 2020
Online Faculty Development Program (FDP) in Assamese (in association with dept. of Assamese, Tezpur University)	28 December 2020 - 2 January 2021
Online Training on Basic Use of ICT Tools in Teaching (Medium of Instruction: Assamese)	27 January- 2 February 2021
Pedagogical Aspects in Development of Women Studies Curriculum	24 February 2021
Online Interdisciplinary Refresher Course on Curriculum and Pedagogy	15 February - 1 March 2021
Online Weeklong Faculty Development Program (FDP) in Emerging Trends of Pedagogy in Higher Education (In Collaboration with Dibrugarh University)	15-20 March 2021

DISTINGUISHED VISITORS

- Amita Dhanda, Professor, NALSAR University of Law
- Khanindra Pathak, Professor, IIT, Kharagpur
- Lopita Nath, Professor, University of the Incarnate Word, San Antonio, Texas
- Poonam Batra Professor, Delhi University
- R. Meganathan Professor, NCERT, New Delhi
- Sandeep Grover, Professor, JC Bose University of Science & Technology, Faridabad
- Shakila Shamsu Formerly OSD (NEP), Dept. of Higher Education, GoI
- Shyam Menon, Professor, University of Delhi
- Sibnath Deb, Director, Rajiv Gandhi National Institute of Youth Development

THE FACULTY MEMBERS AND STAFF

Director (Honorary)

Subhrangshu Sekhar Sarkar, Ph.D. (Tezpur University)

Specializations/Areas of interest: Financial Management, Accounting & Taxation

Email: subh@tezu.ernet.in

Deputy Director (Honorary)

Bipul Kumar Sarmah, Ph.D. (Tezpur University)

Specializations/Areas of interest: Theory of Partitions, Ramanujan Mathematics

E-Mail: bipul@tezu.ernet.in

Assistant Professors

Ikbal Hussain Ahmed, M. Phil (Delhi University)

Specialization/research Area: Symbolic Logic, Evolutionary Ethics, Philosophy of Education, Sufi Philosophy and Culture

Email: ikbal@tezu.ernet.in

Assistant Professors

Swapnarani Bora, Ph.D. (Dibrugarh University)

Specialization/Areas of Interest: Folklore, Sociolinguistics, Pedagogy of Assamese

E-mail: swapnabora@tezu.ernet.in

CENTRAL FACILITIES

Central Library

Centre for Inclusive Development

Centre for Innovation, Incubation and Entrepreneurship

Computer Centre

Engineering Cell

Health Centre

Horticulture Cell

Internal Quality Assurance Cell

International Office

Sophisticated and Analytical Instrumentation Centre

THE CENTRAL LIBRARY

THE LIBRARY

The Central Library, Tezpur University was established in 1994 along with the establishment of the University. The library holds its goal to achieve the height as an ideal University library in the region as well as in the country. Central Library has a diverse collection of more than one lakh books and journals etc. The Library is fully computerized with the KOHA Open source software, which is an integrated multi-user library management system that supports all its in-house operations. The Library maintain the faculty research publications in Institutional Repository and Theses & Dissertations in Electronic Theses & Dissertations Lab.

The collection of the library covers the latest information resources on all areas of Engineering, Science, Management, Social Science, Humanities. Library is providing access to e-resources & databases through the e-Shodh Sindhu Consortia of INFLIBNET Centre and Del Con Consortium. Library is also member of DELNET and utilizing its services.

Library users can access book database, thesis, journal database, e-journals and other e-resources from any computer within the University campus. Remote Access facility is also available due to Covid-19 pandemic situation. We have made the remote access to OPAC and other e-resources. The Central Library is an invaluable resource for students, researchers and faculties of the University. The library delivers innovative information products, services and programmes of the highest quality that are integrated with teaching, learning and research activities. The library occupies a unique place in academic and research activities of the university. The mission of the Library is to support and supplement learning, teaching and research programmes.

The Library is housed at the center of the University campus in an aesthetically built three storied building occupying an area of 4734 sq m

OPENING HOURS

The Library is open from 9.00 am–1.00am midnight throughout the year.

COLLECTIONS OF THE LIBRARY

Books	107280
Books added during	11038
Print Journals	214
E-Journals	10360
Back Volumes of Journals	10280
Online databases	41
Theses	797
Dissertations	1765
CDs	2807
VCDs	81
VHS Cassettes	36
Newspaper/Magazines	10
Manuscripts	32

LIBRARY SERVICES

The Library is providing the following services:

- Remote access of Library e-Resources.
- Book Lending Facility.
- Book Bank Facility for EWS.
- Reference Services.
- OPAC/WebOPAC /CD Lib. Catalogue
- EBooks with remote access facility.
- Current Awareness Service (Monday Morning, InfoJ, InfoGranth)
- New Arrival of Books.
- Training cum Demo on Electronic Resources
- Online Renewal and Reservation of Books
- Photocopy Services
- Children section
- Library & Information Services to Outsiders on Request
- Research Support Services
- Plagiarism Check (Urkund/Turnitin).
- Document Delivery Services (DELNET, JCCC).

VISITORS TO THE LIBRARY 2020-2021

Visitor category	Student	Research Scholar	Faculty member	Staff	Outsider	Total
Average daily visitor (Physical)	45	11	11	2	0	69
Average Virtual Visitors						456

LIBRARY STAFFS

Mukesh Saikia, MLISc, Ph.D (NEHU)

Librarian

E-mail: mukesh@tezu.ernet.in

MonawwerEqbal, MLISc, MA, Ph.D (AMU)

Deputy Librarian

E-mail: meqbal@tezu.ernet.in

Jitu Mani Das, MLISc (GU), UGC-NET

Assistant Librarian

E-mail: jmdas@tezu.ernet.in

Mr.DipakSarma,MLISc (GU), UGC-NET

Professional Assistant

E-mail: dsarma@tezu.ernet.in

Mr. AnjanGohain,MA, MLISc, MPhil (VMU), UGC-NET
Professional Assistant
E-mail: anjang@tezu.ernet.in

Mrs. Monmi Choudhury,BA, MLISc, PGDELT (IGNOU)
Semi Professional Assistant
E-mail: monmi@tezu.ernet.in

Mr. Dipak Kumar Gogoi, BA, MLISc (IGNOU)
Semi Professional Assistant
E-mail: dkgogoi@tezu.ernet.in

Mr. Rajesh Sharma,BA, DLISc (KKHSOU)
Library Assistant
E-mail: rajesh@tezu.ernet.in

Mr. Ijaz Ahmed,BA, BLISc (IGNOU)
Library Assistant
E-mail: ijazah@tezu.ernet.in

Mr. Saurav Kumar Mahanta, MLISc (CUH)
Library Assistant
E-mail: souravk@tezu.ernet.in

Mr. PinchuBasumatary, BA, BLISc (SHIATS)
LDC
E-mail: pinchu7@tezu.ernet.in

Mr. Hiranya Sarmah, BA (GU)
LDC
E-mail: hsarmah@tezu.ernet.in

Mr. Mahendra Kr. Nath, BA (GU)
Library Attendant
E-mail: mknath@tezu.ernet.in

Mr.ManjitTamuli,HSSLC (AHSEC)
Library Attendant
E-mail: mtamuli@tezu.ernet.in

Md. Derajuddin Ahmed
MTS
E-mail: deraj@tezu.ernet.in

Md Ahmed Ali
MTS
E-mail: dinesh@tezu.ernet.in

Mrs. Kanaka Das
MTS

Other Activities of the Library

1. **National Librarians' Day** is observed on 12 August every year to commemorate the birth anniversary of Padmashri Dr. S. R. Ranganathan (1892-1972), who is considered as father of Library Science in India. Dr. Ranganathan dedicated his entire life to library profession in India leaving a rich legacy. On 127th birth anniversary of Dr. S. R. Ranganathan, the Central Library of Tezpur University celebrated National Librarian's Day on 13 August 2020.
2. **Webinar: Central Library organized the following webinars during Covid-19 Pandemic situation last year:**

Title	Date/Period, year
<i>Bibliometrix-Biblioshiny: An Open-Source Software for Bibliometrics and Scientometrics Data Analysis</i>	23 rd May, 2020
<i>Academic Integrity with Turnitin</i>	3 rd June 2020
<i>Live EBSCO's on Evolution of Discovery</i>	09 th June, 2020
<i>Academic & Research Support Service with ProQuest</i>	17 th June, 2020
<i>Plagiarism Detection Software (PDS)-ShodhShudhi</i>	27 th June, 2020
<i>Strategies for Searching IEEE Explore</i>	2 nd July, 2020
<i>Books or ebooks: which is the new Normal</i>	9 th July, 2020
<i>Use of Web of Science and EndNote in Research</i>	22 nd July, 2020
<i>HOW TO PUBLISH WITH OXFORD JOURNALS</i>	4 th August, 2020
<i>Research Productivity Measurement And Evaluation</i>	14 th October, 2020

FUTURE PLANS

- RFID implementation.
- Establishment of manuscripts archival section/museum.

CENTRE FOR INCLUSIVE DEVELOPMENT

THE CENTRE

Established in 2013, the Centre for Inclusive Development, among other things, combines the activities of the Equal Opportunity Cell and the SC/ST Cell that have a functional commonality. The primary objective of the Centre is to play a catalytic role in uplifting the underprivileged students of the University through education, training, engagement and counseling. The Centre makes efforts to identify areas of intervention and takes appropriate measures. Additionally, the Centre reaches out to the community outside the University's periphery and extends support to the needy people, particularly children and youths, through resource sharing, intellectual support and counseling. The Centre also offers P.G Diploma programme in Child Rights and Governance. The Centre envisions to engage with the issues pertaining to development of the marginalised sections of the society, particularly in north-east India, in future.

Academic Programmes and Student intake

Programme	Intake
Post Graduate Diploma in Child Rights & Development	22

Major Facilities

- Computer Laboratory with 13 Desktop Computers
- Seminar Hall (80 seater)
- Multi-media projection system

PUBLICATIONS

Books

- A.K. Sarkar & S. Dhar (Eds.). Contextualizing Peace: Experiences of Contemporary India and Neighbouring Countries, Manak Publications Pvt. Ltd., New Delhi, 2021.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the faculty member	Title (of the semi./conf./w'ps/sym.	Organized by	Date/Period, year	Place/institute/venue
S. Dhar	Online FDP on Development of E-module with Four Quadrant Approach	Teaching and Learning Centre, Tezpur University	11-21 December 2020	Tezpur University

TALKS BY THE FACULTY MEMBERS ABROAD AND IN INDIA

Name of the faculty member	Event	Date/Period, year	Place/institute/venue
S. Dhar	Lockdown and its Impact on Children	28 May 2020	USTM, Meghalaya

	Success and Challenges of Online Education with Special Focus on MSW course	23 November 2020	NEISSR, Dimapur-Nagaland
R. K. Doley	International Seminar on “Issues and Challenges to Post-Covid Higher Education: Possible Solutions”.	23 August 2020	Raha College, Assam (Online)

COACHING PROGRAMME/WEBINAR ORGANISED

Title	Date/Period, year
UGC Scheme for Remedial Classes for SC/ST/OBC (Non-Creamy layer) & Minority Community students.	1 December 2020 - 15 March, 2021
UGC Scheme for Coaching for Entry into Services for SC/ST/OBC (Non-Creamy layer) & Minority Community students.	4 January - 15 March, 2021
Webinar on “Job Opportunities in the Public Sector: Scope and Avenues”.	22 March, 2021
Webinar on “How to Prepare for Various Competitive Exams.:	23 March, 2021
Webinar on “Job Opportunities in the Private Sector”.	24 March, 2021

DISTINGUISHED VISITORS

- Mr. Amit Singh, Faculty, Vivekananda Civil Service Academy

NOTABLE PLACEMENTS

Name	Designation	Organization
Deekshita Gohain	Social Worker, Ujjwala Scheme, Under Ministry of Women and Child Development. A Comprehensive scheme for Prevention of Trafficking & Rescue, Rehabilitation & Reintegration of Victims of Trafficking & Commercial Sexual Exploitation	Ministry of Women and Child Development
Sangita Chutia	Data Entry Operator, UNICEF-Assam	UNICEF-Assam

THE FACULTY MEMBERS AND STAFF

Professors

Rajeev K. Doley, Ph.D. (IIT, Guwahati)

Specialization / Research area: Sociolinguistics, Communication Skills, Child Rights

E-mail: rkdoley@tezu.ernet.in

Assistant Professors

Subhrangshu Dhar, Ph.D. (Visva-Bharati, West Bengal)

Specialization/Research area: Women and Child Welfare and Child Rights

Email: sdhar@tezu.ernet.in

Krishna M. Bordoloi (Visiting Faculty) LLM (Human Rights) Gauhati University
Specialization/Research area: Human Rights and Social Development
Email: krishnabordoloi123@gmail.com

Technical staff

Bhanu Pangging Gogoi, Ph.D. (Dibrugarh University)
Specialization/Research area: Social and Cultural Anthropology
Email: bhanubj@tezu.ernet.in

Office staff

Mohan Saikia
Email: mohans@tezu.ernet.in

CENTRE FOR INNOVATION INCUBATION AND ENTREPRENEURSHIP

THE CENTRE

The Centre for Innovation, Incubation and Entrepreneurship was established in September 2013 which was merged with the Entrepreneurship Development Cell (EDC) initially funded by AICTE. The objectives of the cell are to:

- Create awareness among the students of the University and the educated unemployed youths of North east India regarding entrepreneurship as a career option.
- Conduct training programmes in the field of entrepreneurial skill development.
- Develop entrepreneurship related course curriculum to incorporate in management and engineering programmes.
- Provide guidance and facilities to first time entrepreneurs during gestation.
- Explore the possibility of commercialization of some of the potential technologies developed by the faculty members and students of TU.
- Form a Technology Development group in Tezpur University comprising enthusiastic former students of the university and thereby motivating towards self-employment.

Major facilities and equipment available

Facility	Number
Laboratory	01
TUNOVATION (A display room for developed research items)	01

Activities and Participation

- Hosting of a Hackathon in association with IIM Calcutta Innovation Park on 4-5 March, 2020
- Signing of MoU with the NRDC for the establishment of NRDC-IFC at Tezpur University, in March 2020.
- Holding online activity by student's Innovation Council (TU-IIC), inter-institutional debate competition "Combat of Intellects" on 21.11.2020, taken part by 23 debaters.

THE PERSONNEL OF THE CENTRE

Head

Manuj Kumar Hazarika
 Professor, Department of Food Engineering and Technology
E-mail: headciie@tezu.ernet.in

Office staff

Uttam Roy, (on time – sharing basis)
 UDC

Jiban Chandra Das, (on time – sharing basis)
 STA, as caretaker for Tunovation

COMPUTER CENTRE

THE CENTRE

The Computer Centre (CC) serves the whole university with ICT services. It is the main ICT resource centre for the whole University. Computer centre maintains and offers two well-equipped Computer Laboratories with modern computational capabilities. Computer laboratories maintained by Computer Centre are used by students and university employees alike for purposes like classes, assignments, workshops, online interviews, computational needs, etc.

ICT services across the whole campus of university is served by Computer Centre through its dedicated team. Computer Center team comprises of technical staff of various levels and directions of skills. Computer Centre also serves as the support system for the University Community in the terms of Computing Hardware, Software and Network related activities and there is a constant endeavour to envisage better services under its umbrella. The campus-wide Local Area Network (LAN) is equipped with 10Gigabit backbone and high speed Switching Network Devices. Most of the components in its Local Area Network (LAN) are Internet Protocol (IP) based and therefore has its manageability mostly centralized. All departments, offices, hostels, facilities have already been connected under LAN, while process of connecting quarters of officials and faculties via WiFi have started.

There are a number of medium to high range of servers and storages which run on a 24x7 schedule on a dedicated air-conditioned server room. The Website, Email and Internet services are fully hosted in-house with its own set of servers and storages and run on a 24x7 basis. A number of applications developed in-house by the Computer Centre Staff are used extensively in automation projects of Administration, Academic Departments and other user departments. Most of such applications are also self hosted in-campus. Computer Centre is currently adding new infrastructure to enable cloud-based servers in-campus in a step to modernize its server infrastructure.

The Computer Centre has a multifunctional 70-seater state-of-the-art Video Conferencing facility for Online Meetings, Interviews, conferences and Virtual Classes etc. Furthermore, a recording studio cum virtual classroom is also under construction to aid in recording and preparation of audio/video lectures activities and conducting online classes of University.

Other important services rendered by the Computer Centre are the Campus Telephony System and the Video Surveillance System which runs over the Campus's LAN. The Internet facility is being facilitated through the high performance 1Gbps link of National Knowledge Network (NKN).

The *Campus Connect WiFi* Scheme of the MHRD has been operational since 2017 mostly covers academic complexes, administration, student hostels and student activity areas with a user base of 4300. The WiFi services under this scheme is fully maintained and managed by dedicated company engineers.

SERVICES PROVIDED BY THE COMPUTER CENTRE

The primary goal of the Computer Centre is to provide quality ICT services including computational and internet facilities to the University community. In addition to maintenance of computational infrastructure, the following services are supported by the Computer Centre:

- Email & Internet Services
- Credit/audit practical courses of different Departments
- Organizing practical sessions for various workshops and refresher courses of various Academic Departments.
- Organizing training programmes for the University Employees
- Assist Administration in selection and procurement of computing resources
- Providing maintenance services for computers/peripherals to the Faculty/Staff /Departments
- Maintaining and monitoring the Campus LAN.
- Maintaining and monitoring various Internet Links.
- System Administration, Network Administration and monitoring of various servers - Email, Web, Application, Database, Proxy, Firewall, etc.
- Maintaining University Website and intranet portal.
- Develop, procure and maintain software for administration and others sections of the University.
- Software maintenance Services.
- Providing presentation assistance in the auditorium and conference halls.
- EPABX system administration and maintenance.
- IP CCTV Surveillance Management.

Academic Programmes and Student intake

Programme	Student Intake
DOEACC 'O' Level Diploma	30
DOEACC 'A' Level Diploma	20

Major facilities and equipment available

SL	Particulars	Hardware (Make/Model)	Qty
1	Video Conferencing System	Polycom 8000 Series	1
2	VoIP Telephony Server with 1200 Extension capacity	Avaya S8500 with Avaya Media Gateways G650 (2Nos), G450(2Nos), G700(5Nos), G430(2Nos)	1
3	Core Switch with 64 10G Ports	Cisco C6807-XL	1
4	Distribution Switch with 32 10G Ports	Cisco WS-C3850-24XS	16
5	Access Switches	Cisco WS-C2960X-24TD-L	80
		Extreme X350 48T	56
		Extreme X350 24T	19
		Allied Telesis AT-x510L-28GT	11
		Allied Telesis AT-x510L-52GT	3
		HP 2520G	9
10	Firewall	Huawei Eudemon 200E-X7	1
11	Router (NKN)	Cisco ASR 1000	1

Servers

SL	Server Particulars	Hardware (Make/Model)	Operating System and Application Platform
1	Secondary Storage Server	HP StoreEasy 1650	Windows Storage Server 2012
2	Email cum DNS Server	Dell PowerEdge R730xd	CentOS 6.4/ Sendmail, Bind
3	Proxy/NAT/Firewall Server	Dell PowerEdge R730xd	CentOS 6.4/ Squid Proxy 4.0
4	Email Storage Server	Dell NX 3230	Windows Storage Server 2012 R2
5	Proxy Storage Server	Dell NX 3230	Windows Storage Server 2012 R2
6	Application Server	Dell PowerEdge 540	Windows 2019 Server/ xampp
7	Database Server	Dell PowerEdge R740xd	Windows 2019 Server/ MySql
8	Oracle 10g Database	IBM/X3560	Windows 2008 R2 Server/ Oracle 10g DB
9	Application Server	IBM/X3560	Windows 2008 R2 Server/ MySql-XAMPP
12	Video Streaming Server with Storage	IBM/X3650 + IBM/DS3524	Windows 2008 R2 Server/ Adobe Media Server 5
13	Web Server	IBM/X3560	RHEL 6/Apache

Computer Terminals & Peripherals Available

Unit No	Unit Name/Location	Terminals & Peripherals
Unit-0	Central Computer Centre (Academic Building -2)	Terminals = 60(Core i5 /Windows 7 Pro./Windows 10 Pro. Desktops) Scanner = 2 Projector =1
Unit-1	Computer Centre-Cluster-1 (SoE Complex)	Terminals = 100 (Core i5 / Windows 10 Pro. Desktops) Laser Printer =1 Scanner = 1 Projector = 1

Software Subscriptions

SN	Packages	Renewal Period
1	Microsoft Campus Agreement	Yearly
2	Kaspersky Total Space Security	Yearly

OTHER IMPORTANT ACTIVITIES OF THE CENTRE

- Setting up and Use of G-Suite for Education account of Tezpur University to cater the need of an LMS (mainly Google classroom, Google meet) for online teaching-learning activities from academic session Autumn 2020. More than 5000 user accounts are created already.

- To cope with pandemic and growing need to work from home, Computer Centre has started rolling out WiFi services to quarters of Teaching Staffs and Other Officials.
- Computer Centre has also stepped into world of cloud computing with ongoing installation of infrastructure
- A recording studio cum virtual classroom is also being built to aid Tezpur University in Audio/Video lectures recording and editing activities, and conducting online classes.

THE PERSONNELS OF THE CENTRE

Director

Nityananda Sarma, PhD (IIT Guwahati)
Professor, Department of Computer Science & Engineering
Specialization/Areas of Interest: Ad Hoc Networks, Mobile Computing
E-mail: nitya@tezu.ernet.in

Technical staff

Computer Engineer

Dhiraj Kumar Sarma, BE(DU),MS (Tezpur)
Specialization/Areas of Interest: Computer Networks and Security
E-mail: dhiraj@tezu.ernet.in

Junior Programmer

Dipak Chandra Choudhury, MCA (Tezpur)
E-mail: dcc@tezu.ernet.in

Jamil Ahmed, MTech(CSE) (NIT, Meghalaya)
E-mail: jamil@tezu.ernet.in

Senior Technical Assistant

Abani Kumar Das, Diploma in Engg. (CSE)
E-mail: abani@tezu.ernet.in

Nirnajan Kumar Deka, Diploma in Engg. (Electronics & Telecommunication)
E-mail: niranjan@tezu.ernet.in

Technical Assistants

Manjul Baruah, Diploma in Engg (CSE)
E-mail: manjul@tezu.ernet.in

Prandeep Borah, DOEACC-A Level, MS(IT)
E-mail: prandeep@tezu.ernet.in

Raghvendra Choudhary, Diploma in Engg (CSE), CCNA
E-mail: raghav@tezu.ernet.in

Milan Jyoti Deka, BTech(GUIST)
E-mail: milan16@tezu.ernet.in

Other Support Staff

Multi Tasking Staff: 03

EPABX Technicians: 01 (Contractual)

ENGINEERING CELL

The Engineering Cell of the university was established in March 1995. The cell is entrusted with the responsibility of developing and maintaining the infrastructure in the University campus, covering an area of about 262 acres of land. The following are the major duties and responsibilities entrusted on the Engineering Cell :

1. Allotment and execution of construction projects involving civil, electrical, water supply and sanitary works.
2. Maintenance and repairing of buildings and roads.
3. Maintenance of power supply to the university campus.
4. Maintenance of water supply to all the buildings including hostels and canteens.
5. Preparing of agenda notes and writing minutes of Building Committee meetings.
6. Maintenance and development of the University campus.

CONSTRUCTION ACTIVITIES ACCOMPLISHE DURING 2020-21

1. Construction of RCC 3storied 180 capacity Girls Hostel
2. Repairing of 02 nos. of Basket ball court.
3. Repairing of Lawn tennis court.

WORKS DONE WITH TENDER PROCESS DURING 2020-21

The following projects have already started

1. Nine building projects including Academic Buildings & Hostels under HEFA funding is in construction stage under Assam PWD.
2. Renovation of Academic Building No. I & II
3. Repairing and Restoration of damaged portion of Boundary Wall.

POWER SUPPLY

The Govt. of Assam has sanctioned 2 MW of power to Tezpur University. This power is released to the university by APDCL as per the load demand . Currently, the university is drawing 1500 KW (1.5MW) from the 132/33 KV Depota Grid Sub-Station of APDCL through a 13.50 KM long dedicated power line. This power is received at the university end through a 2 x 2.5 MVA, 33/11KV Sub-Station constructed by the university and is distributed through an 11KV H.T. Ring Main connected to 4 Sub-station of capacity 2 x 315 KVA, 11KV/0.433 KV located at peak load centres inside the campus. During 2020-21, the total hours of interruptions in supply of power to the university was 214.50 hours. Out of this maintenance shut down availed by the university was 18 hours , which was rather insignificant considering the present power crisis in Assam.

SOLAR POWER

The University has 1MW capacity Roof top Solar panels installed at different laocations within the campus. The electricity generated from solar is directly feeded to the APDCL grid . This system resulted in reduction of Electricity bill served by APDCL. The net saving in amount of electricity bill plus payment made to the Solar Company is about Rs. 39.86 lakh for the said year.

WATER SUPPLY

Four deep tube well, each 102 meters deep, associated with submersible pumps were installed in the University campus to access ground water. The treatment plant consisting of aretor , flush mixture, sedimentation tan , filter unit , chlorination , underground clear water constructed for proper treatment of raw water.

Two overhead reservoir (OHR) of capacity 3.0 lakh liter and 3.50 lakh liters were constructed to store treated water. Water from the OHR reaches the consumer points through a pipe-line network under the gravity flow.

The present requirement of water in the university campus is more than 10.00 lakh liters per day . The demand is likely to increase with the increase of new Academic Buildings , Hostels and Residential Buildings. There was no instance of interruption in supply of treated water during the concerned year.

PROPOSALS

Planning and designing of the following projects have been taken up and construction works of these projects are awaited as these are placed under HEFA

1. 07 nos. of Extension projects in the School of Engineering and 01 of Management Sc. For EWS has been sanctioned under HEFA Funding.
2. A Multipurpose hall

PERSONAL OF THE CELL

Executive Engineer

R.R. Hazarika BE (REC, Silchar)
E-mail- rrrhz@tezu.ernet.in

Assistant Engineer

J.C. Nath
G. Kalita

Junior Architect

R. Dutta

Junior Engineer

D. Borkotoki
S. Goswami
S. Talukdar

Assistant

D. Kalita

Electrician

P. Nath
H. Khataniar

Pum Operator

S. Dutta
M. M. Das

MTS

T. Das
P. Keot
M. C. Handique
M. B. Chetry
Md. Ali

HEALTH CENTRE

Health Centre of Tezpur University has been functioning since 1995. It provides health care services mainly to the students, faculty members, staff along with their families and others those who are involved with the University. At present we have over 6000 beneficiaries.

Services /Facilities available :

Health Centre offer OPD services and ten beds are also available to provide initial care to the indoor patients including emergency cases.

OPD services:

The OPD timings are as follows :

Session	Morning	Evening
April to September	8.30AM to 12.30PM	4 PM to 6 PM
October to March	8.30AM to 12.30PM	3 PM to 6 PM
Saturdays and Sundays- From 10 AM to 12 NOON		

One Medical Officer is always available for **24hrs emergency duty**. The cases requiring hospitalization are referred to the referral Hospitals at Tezpur. Ambulance service is available round the clock and is provided free of cost for students. There are three ambulances available at present and one ambulance is specifically for the PWD candidates to attend to their classes with a payment of nominal charge.

A stock of common medicines including lifesaving drugs are maintained and are supplied free of cost. Routine laboratory investigations are also done.

An **Autoanalyser** (fully automatic) and a **Hormone Analyser (Mini-Vidas)** is available for doing the investigations. **ECG** and **X-ray** facilities are also made available at the Health Centre for the benefit of the University community.

We also keep a set of appliances for person with disability.

Visit by Specialists:

The University has engaged **Specialists of different disciplines (Paediatrics, Obstetrics and Gynaecology)** who visits the Health Centre on different days of the week on regular basis for the benefit of the University community.

A **Clinical Psychologist** also visits the University thrice a week for offering counselling on stress related problems. A **Physiotherapist** visits the health centre twice a week for offering physiotherapy to the differently abled students as well as other patients.

Important activities :

- The Medical Officers give visits to the hostels and canteens for assessing the prevailing hygiene of the dining hall and the drainage system of the surroundings to check for any outbreak of waterborne diseases.
- Fogging in the campus was done to prevent any outbreak of mosquito borne diseases.

- A TD (Tetanus and Diphtheria) vaccination camp was done for the Children age group of 10 yrs and 15 yrs on 21-12-2020.
- Dr. Rupam Boro attended KV, TU as a selection committee member to select Counsellor and Nurse.
- During Covid -19 Pandemic period various suggestions and advices were given to the TU Covid-19 Task Force and patients.
- Pulse Polio Immunization camp was organized in the campus as per directive of the Govt. on 31-01-2021
- Covid -19 screening was done as per direction of the district authority for the Tezpur University community as well as for guests who visited Tezpur University.

OFFICES AND STAFF

Medical Officers

Dr. (Mrs.) J.S. Goswami, MBBS, DLO, CMO

Dr. R. Boro, MBBS
MO (Contractual)

Dr. B. Barman, MBBS
MO (Contractual)

Staff

Pranab Baruah, D. Pharm
Pharmacist

Eliza H. Barla, GNM
Nurse

Amrita Purty, GNM Nurse

Anuj Baruah, BA, CMLT
Lab Technician

Niramoni Das, ANM
Lab. Technician

Hiten Debnath, DMRT
Radiographer (Contractual)

Manoj Kr. Saikia
MTS

Jiten Rajbongshi
MTS

THE HORTICULTURE SECTION

The Horticulture Section of Tezpur University is entrusted to carry out plantation, landscaping and beautification activities inside the University campus. The Assistant Horticulturist employed at Horticulture Section looks after the whole horticultural/ landscaping activities under the guidance of a Campus Horticultural Committee with a faculty as Coordinator. He is assisted by two supervisors along with 28 daily wage labourers and a tractor driver. The annual horticultural activities during 2020-21 are as follows.

PLANTATION PROGRAMS

A total of 571 plant saplings of different species (like ornamental plants/shrubs, fruit trees and medicinal plants etc.) were planted in different parts of the University campus, which include the Tezpur University Botanical Garden, Cafeteria, Guest House, Auditorium, Additional plot, School of Engineering, School of Management Science, along roads of residential area and other locations, Citrus garden near Subansiri Women Hostel and Academic Building I, along the boundary wall etc. through routine and special plantation program organized by the Horticulture Section, Tezpur University on various events/occasions with active participation from university communities.



Plantation in front of Cafeteria on the occasion of World Environment Day, 2020

MAINTENANCE OF TREES

Apart from the maintenance of gardens, all previously planted trees (like road side and other plantations) in different locations of the University campus were regularly nurtured by cleaning, fertilization, and watering etc.



MAINTENANCE OF THE GARDENS

Essential maintenance works on all the flower gardens which are located in the front of the Administrative Building, the Auditorium, the Guest House, the Library, the Community Hall, the Health Centre, the Student Activity Centre, Swimming Pool, Dept. of Energy, Dept. of Chemical Science, Dept. of MBBT, Dept. of Environmental Sciences, Dept. of Mass Communication and Journalism, HSS Building, Dept of Business Administration, Academic Buildings I and II, School of Engineering, VC's residence, Garden near waterbody, the Cafeteria, the Sophisticated Analytical Instrumentation Centre, the Chandraprabha Saikianee Bhaban, the Shopping Complex, the Day Care Centre, the Car parking area near Administrative Building, Takshashilla Vidyapeeth, Kendriya Vidyalaya, the Children Park including Botanical Garden, Citrus Garden etc. were carried out throughout the year.

MAINTENANCE OF HOUSE PLANT POTS FOR INDOOR DECORATION

Essential maintenance works were also carried out on all the house plant pots (about 950 in number) placed in the Administration Building, the Academic buildings, the Library, the Guest House, the Community Hall, the KBR Auditorium, the Health Centre, the Student Activity Centre and all other office buildings of the University.

MAINTENANCE OF VERMICOMPOST UNIT

A Vermicompost unit has also been running successfully to fulfill the need of organic manure for plantation/gardening work of the University. Vermicompost is produced entirely from Leaf Litters of the University campus. About 32.95 quintals of vermicompost was produced during the concerned year. Essential maintenance works of the Vermicompost Unit were carried out throughout the year.

MAINTENANCE OF THE DEPARTMENTAL NURSERY

The Horticulture section has a nursery, which is the source of seedlings of ornamental/avenue trees & shrubs, fruit trees, shrubs, valuable timber trees, indoor plants of different types and also some seasonal flowers for the use of the University. It is located within the premise of the Botanical Garden. Essential maintenance works of the nursery were carried out throughout the year.

OTHER ACTIVITIES

In addition to the above, cleaning (by jungle cutting) of different parts of University campus like surroundings of the Administrative Building, different Offices and Academic Buildings, the Library, the KBR Auditorium, the Guest House, the Chandraprabha Saikianee Bhaban, the Community hall, the Shopping Complex/Day Care Centre, the Children park, the Takshashilla Vidyapeeth, the Kendriya Vidyalaya, the Car parking area and both sides of different roads including boundary footpath etc. were done from time to time.

Personnel of the Section

Girindra Hazarika, M.Sc. (Agri) (AAU)

Assistant Horticulturist
Horticulture Section, TU

Dr. Uttam Kr Pegu

Associate Professor, Dept. of MCJ
& Coordinator, Horticulture Section, TU

INTERNAL QUALITY ASSURANCE CELL

As mandated by NAAC (National Assessment and Accreditation Council), Tezpur University Internal Quality Assurance Cell (TU IQAC) is engaged in a series of activities required to foster the spirit of quality among the individuals and Departments/Sections of the University. Besides, working for assured quality assessment for the career advancement of Faculty members, IQAC also carries out capacity building activities to support quality teaching learning and assist feedback and mentoring exercises. IQAC meetings are organized at regular interval for deliberations on major issues concerning quality with appropriate monitoring of the follow-up actions University's annual activities are appropriately accounted in the Annual Quality Assurance Report (AQAR) prepared by IQAC.

Some of the notable activities conducted during the period 2020-2021 are highlighted as below:

1. Hands on Workshop on Integration of Basic ICT Tools in Teaching Pedagogy (for the Teaching fraternity of Tezpur University): Jointly organized with TLC, Tezpur University during 08-09 June 2020.
2. The 2nd meeting of IQAC Committee was held on 17 June 2020 where several important matters were deliberated.
3. Webinar "Quality Research Publications: Hallmark for Higher Education – a special reference to UGC CARE listed publications" – Director, IQAC, Tezpur University deliberated in the event organized by Birjhora Mahavidyalaya, Assam on 22 July 2020.
4. An Orientation Programme on NAAC Assessment and Accreditation Process - A Joint Initiative of National Assessment and Accreditation Council and IQAC, TU was organized on 03 August 2020.
5. Participated Virtual Round Table Discussion on "Quality Assessment in Higher Education – The need of the Hour" organized by QS IGAUGE on 11 December, 2020
6. Webinar on "Professional Ethics/ Academic Ethics and Integrity: Follow and Imbibe": Director, IQAC, Tezpur University deliberated in the event organized by Nagaon Polytechnique on 11 January 2021.
7. A Preparatory meeting for the 4th Cycle of NAAC Assessment and Accreditation of Tezpur University was organized by IQAC, Tezpur University on 03 March 2021.
8. Delegated to the Centre for Internal Quality Assurance (CIQA) for Directorate of Open and Distance Learning (DODL), Dibrugarh University held on 25 March 2021.

THE PERSONNEL OF THE CELL

Director

Prof. D. C Baruah, PhD (PAU)
Professor, Department of Energy
E-mail: baruahd@tezu.ernet.in

Data Entry Assistant

S Mahanta, MA
E-mail: santanu@tezu.ernet.in

THE INTERNATIONAL OFFICE

The International Office of Tezpur University was established in February 2013. The International Office has since then been run by a part-time Director, Professor P.K. Das, Dept. of English. The International Office handles the admission of international students, and organizes talks and seminars on overseas education and research opportunities.

ACTIVITIES

This year the activities of the International Office were severely impacted by the lockdown imposed due to COVID-19. Plans to hold (for the first time) the Tezpur University Entrance Examinations in centres in Bangladesh, Bhutan, and Nepal had to be cancelled. Due to the uncertain situation there was a drastic reduction in the number of applications received from the Indian Council of Cultural Relations (ICCR). Thus, only four foreign, ICCR-sponsored students were admitted: one from Madagascar, one from Guyana, and two from Bangladesh (one ICCR -sponsored, and one self-financing). These students have been attending online classes along with their Indian counterparts. In one case a time difference of ten hours has meant that the relevant course instructors have had to factor this in in their online schedules. There are other issues and difficulties arising out of the fact that the newly-admitted foreign students are physically absent from the university campus.

When the university declared a lockdown, all students were required to vacate the hostels. But the existing foreign students were exempted from this requirement. The International Office has coordinated with university authorities to ensure the welfare of the foreign students, including delivery of essentials to their hostel rooms and reaching out to their parents in their home countries. On November 20, 2020 the International Office organized a meeting of an ICCR delegation with the twenty-eight foreign students on the campus. The delegation, led by Ms. Madhurkankana Roy, Director, ICCR Guwahati expressed its satisfaction with the arrangements and facilities provided to the students.

At ICCR's request, a few foreign students were allowed to participate in the two-day conclave (April 9-10, 2021) organized by ICCR at Dibrugarh University on the occasion of ICCR's foundation day.

PERSONNEL OF THE OFFICE

P. K. Das

Professor

Department of English

Email: prsntdas@tezu.ernet.in /io@tezu.ernet.in

Staff

Kiran Mahalia (UDC)

kiran@tezu.ernet.in

SOPHISTICATED ANALYTICAL INSTRUMENTATION CENTRE (SAIC)

Instrumental methods of analysis form an indispensable aspect of Research and Development. Tezpur University has a number of departments and centres working on areas which require sophisticated analytical equipment. **Sophisticated Analytical Instrumentation Centre (SAIC)** at Tezpur University has been set up to cater to these needs. The centre also extends these facilities to other educational institutions and industries within the north-east region and beyond, as many of them do not have the resources to procure and maintain sophisticated analytical instruments. The Centre also provides demonstration of instruments and their utility in different fields of research to the UG/PG students of colleges.

The SAIC was established in 2010 with two equipment, namely, High-performance liquid chromatography (HPLC) and Gel permeation chromatography (GPC). Thirty nine equipments including Transmission electron Microscope (TEM), Scanning Electron microscope (SEM), Single crystal XRD, Powder XRD, BET (Surface and Pore size) analyzer, Raman Spectrometer, FTIR, HPLC, Atomic absorption spectrometer (AAS), Nuclear magnetic resonance spectroscopy (NMR), bomb calorimeter etc. are currently functional and maintained by SAIC. The centre also focuses to install many sophisticated equipment like XPS, HR-MS, Confocal Microscope etc. in future.

Major Facilities and Equipment Available

- TRANSMISSION ELECTRON MICROSCOPY (TEM)
MODEL: TECNAI G2 20 S-TWIN (200KV)
DATE OF INSTALLATION: 22.10.2013
- SINGLE CRYSTAL XRD
MODEL: AXS SMART APEX-I
DATE OF INSTALLATION: 04.07.2012
- POWDER XRD
MODEL: D8 FOCUS
DATE OF INSTALLATION: 02.11.2012
- BET (SURFACE AND PORE SIZE) ANALYZER
MODEL: NOVA 1000E
DATE OF INSTALLATION: 15.06.2011
- RAMAN SPECTROMETER
MODEL: RENISHAW BASIS SERIES WITH 514 LASERS
DATE OF INSTALLATION: 12.10.2012
- ATOMIC ABSORPTION SPECTROMETER (AAS)
MODEL: AAS-ICE 3500
DATE OF INSTALLATION: 18.09.2012
- HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)
MODEL: UV VISIBLE DETECTION-2489,
REFRACTIVE INDEX DETECTOR-2414, HPLC PUMP-515
DATE OF INSTALLATION: 08.06.2011
- GPC (GEL PERMEATION CHROMATOGRAPHY)
MODEL: UV VISIBLE DETECTION-2489, RI DETECTOR-414, HPLC PUMP-515
DATE OF INSTALLATION: 09.06.2011

- SCANNING ELECTRON MICROSCOPY (SEM)
MODEL: JSM 6390LV
DATE OF INSTALLATION: 18.11.2008
- PHOTOLUMINESCENCE
MODEL: LS-55 LUMINESCENCE SPECTROMETER
DATE OF INSTALLATION: 13.06.2008
- UV-VIS SPECTROPHOTOMETER
MODEL: UV 2450
DATE OF INSTALLATION: 13.06.2008
- NMR (MULTI-NUCLEI)
MODEL: ECS-400
DATE OF INSTALLATION: 08.04.2010
- THERMAL ANALYZER (TGA-DSC)
MODEL: TGA-50 & DSC-60
DATE OF INSTALLATION: 26.05.2006
- CHN ANALYZER
MODEL: 2400 SERIES 2
DATE OF INSTALLATION: 24.09.2006
- GAS CHROMATOGRAPHY –MASS SPECTROMETER
MAKE: PERKINELMER, USA
MODEL NO: CLARUS 600
DATE OF INSTALLATION: 04.02.2009
- GAS CHROMATOGRAPHY
MAKE: CHROMATOGRAPHY & INSTRUMENTCOMPANY, INDIA
MODEL: GC2010
DATE OF INSTALLATION: 22.01.2011
- FOURIER TRANSFORM INFRARED SPECTROMETER
MAKE: NICOLET, USA
MODEL: IMPACT 410
DATE OF INSTALLATION: 29.01.1998
- INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROPHOTOMETER (ICP-OES)
MAKE: PERKIN ELMER, USA
MODEL: OPTIMA 2100 DV
DATE OF INSTALLATION: 04.11.2009
- DNA SEQUENCER
MAKE: APPLIED BIOSYSTEM
MODEL NO: 3130 GENETIC ANALYZERS
DATE OF INSTALLATION: 05.07.2010
- FLUORESCENCE SPECTROMETER
MAKE: PERKIN ELMER
DATE OF INSTALLATION: 12.05.2010

- BOMB CALORIMETER
MAKE: MS. CHANGSHA KAIYUAN INSTRUMENTS CO. LTD.,
CHANGSHA, CHINA
MODEL: SE-1AC/ML
DATE OF INSTALLATION: 02.04.2008
- OXIDATION STABILITY APPARATUS
MAKE: METROHM, USA
MODEL: RANCIMAT 743
DATE OF INSTALLATION: 05.03.2008

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED

Title	Date/Period, year
One day workshop on Dynamic Light Scattering	19 February, 2020
Training program on Analytical Instruments	9-15 March, 2021

PERSONNEL OF THE CELL

Pabitra Nath, Ph.D.

(Gauhati University)

Research areas: Smartphone platform sensing and imaging systems, SERS, Bio-medical instrumentation design.

E-mail: pnath@tezu.ernet.in

Technical staff

Ratan Boruah, Technical Officer

PhD, Tezpur University

Research Area: Surface Plasmon Resonance and Analytical Instrumentation

E-mail: rboruah@tezu.ernet.in, ratanboruah@gmail.com

Prakash Kurmi, Diploma in Electronics

Technical Assistant

E-mail: prakash@tezu.ernet.in

Nava Kr. Gogoi, Diploma in Electronics

Technical Assistant

E-mail: nabag@tezu.ernet.in

Pankaj Bharali, Certificate in Glass Blower

Glass Blower (Contract)

E-mail: pankaj@tezu.ernet.in

Tridib Ranjan Nath, Diploma in Electronics

Technical Assistant (Contract)

E-mail: trnath@tezu.ernet.in

Office staff

Mahendra Das. BA

MTS

E-mail: mohen31@tezu.ernet.in

PROGRAMMES ORGANIZED BY THE UNIVERSITY

129th Birth Anniversary of Dr. B. R. Ambedkar: Due to COVID-19 lockdown, the University could not organize a platform to pay formal tribute to the great man. The University offered tributes to Dr. B. R. Ambedkar as is where is basis on April 14, 2020. A formal floral tribute was organised by Ambedkar Chair of the University.

World Environment Day: Department of Environmental Science celebrated World Environment Day on 5th June 2020 by organizing several activities, such as Online Photography Competition, Painting competition etc. The theme for the year 2020 was “Biodiversity”.

6th International Day of Yoga: Tezpur University observed 6th International Day of Yoga 2020 by organizing activities such as video blogging contest on the topic “My Life My Yoga” (Jeevan Yoga), online quiz. Due to COVID-19 outbreak, the focus was on people performing Yoga at their respective homes with participation of the entire family. Prof. V.K Jain, Hon’ble Vice Chancellor through his video address appealed all to observe the day by practicing Yoga at home with family members

74th Independence Day: Due to COVID-19 pandemic, the University celebrated 74th Independence Day cautiously. Prof. V.K.Jain, Vice Chancellor hoisted the National Tricolour in the KBR auditorium of the University.

Hindi fortnight: Due to COVID-19 pandemic, the University observed Hindi fortnight through online mode during September 01-14, 2020. Online essay, Hindi poem recitation, Quiz completion were organised during the occasion.

National Education Day: The Department of Education along with the Nation celebrated Birth Anniversary of Maulana Abul Kalam Azad, the freedom fighter and first Education Minister of free India as the ‘National Education Day’ on 11th November 2020. Due to COVID-19 situation this year the Programme was organized in virtual mode using the Google Meet Platform.

Fit India Movement Freedom Run and Celebration program on 151st Birth anniversary of the Father of the nation, Mahatma Gandhi and 116th Birth Anniversary of Lal Bahadur Shastri: In line with the Ministry of Education and Ministry of Youth Affairs and Sports Government of India. Tezpur University observed Fit India Movement Freedom Run and Celebrated 151st Birth anniversary of the Father of the nation, Mahatma Gandhi. In addition to these event, the University also observed 116th Birth Anniversary of Lal Bahadur Shastri, Former Prime Minister of India on 2nd October 2020.

71st Constitution Day: The University organised a talk on the occasion of 71st Constitution Day, where Prof. N. Sukumar, a renowned political scientist from the University of Delhi delivered a lecture in the august presence of Vice Chancellor, Prof. V.K Jain and Dr. D.P. Majhi, Director, Dr. Ambedkar Foundation, Ministry of Social Justice & Empowerment, GoI.

Vigilance Awareness Week, 2020: The University organised Vigilance Awareness Week, 2020 through online due to COVID-19 pandemic. All employees were requested to take the pledge as is where is basis.

Remembering Dr. Bhupen Hazarika: Tezpur University organized an online Lecture on the occasion of the 9th death anniversary of Dr Bhupen Hazarika, the Cultural Icon of the State, on November 5, 2020. Mr Syed Saadulla from Dibrugarh, a noted artist and a close associate of Dr Bhupen Hazarika delivered a lecture on the occasion.

65th Mahaparinirvana Diwas of Bharat Ratna Babasaheb Ambedkar– The University observed 65th Mahaparinirvana Diwas of Dr. B.R. Ambedkar by offering Floral Tribute.

Foundation Day: Tezpur University celebrated its 28th Foundation Day on January 21, 2021. Prof. Gautam Baruah, Director, IIIT Guwahati and Former Director IIT Guwahati graced the occasion as the Chief Guest and delivered the Foundation Day oration.

Convocation: Tezpur University conducted its 18th Convocation on January 22, 2021. Hon'ble Prime Minister Shri Narendra Modi alongwith Union Education Minister Shri Ramesh Pokhriyal Nishank and Hon'ble Governor of Assam and Chancellor of Tezpur University, Shri Jagdish Mukhi attended the Convocation virtually. A total of 1218 students received their degrees and diplomas in the Convocation out of which 371 were undergraduate, 725 postgraduate, 36 PG Diploma and 86 were Ph.D.

Republic Day: Due to COVID-19 pandemic, the University celebrated the 72nd Republic Day with great caution. Prof. V.K.Jain hoisted the National Flag at the KBR auditorium of the University. A friendly cricket match by the employees of the University was organised in the afternoon amongst the employees of the University.

“InSCIgnis” organised on the occasion of National Science Day: Due to COVID-19 pandemic, inSCIgnis, the annual mega science fest of Tezpur University organized by the Students' Science Council was held through online mode. InSCIgnis is celebrated on the occasion of National Science Day.

International Women's Day: Chandraprabha Saikiani Centre for Women Studies organised a talk by MS. Nisha Bora (Entrepreneur, Conservationist and Business Consultant) on the occasion of International Women's Day, 2021.

The Year in Figures

Statistics:: Employees

Teaching:

Employees	As on 31.03.2020	Joined during 2020-21	Left during 2020-21	As on 31.03.2021
Professor	80	0	3	77
Associate Professor	37	0	1	36
Assistant Professor	150	1	3	148
Total	267	1	7	261

Non-Teaching:

Employees	As on 31.03.2020	Joined during 2020-21	Left during 2020-21	As on 31.03.2021
Group-A	38	0	3	35
Group-B	55	3	2	56
Group-C	104	5	1	108
Group-C (MTS)	73	0	2	71
Total	270	8	8	270

Statistics: SC/ST Employees, Female / Male Employees (as on 31 March, 2021)

Teaching:

Employees	SC	OBC	ST	Gen	Female	Male	Total
Professor	08	15	05	49	13	64	77
Associate Professor	03	09	03	21	06	30	36
Assistant Professor	23	41	14	70	52	96	148
Total	34	65	22	140	71	190	261

Non-Teaching:

Employees	SC	OBC	ST	Gen	Female	Male	Total
Group-A	05	10	02	18	03	32	35
Group-B	09	20	05	22	10	46	56
Group-C	19	42	12	35	14	94	108
Group-C (MTS)	12	24	05	30	04	67	71
Total	45	96	24	105	31	239	270

STATISTICS: STUDENTS (as on 30th November, 2020)

Total	Male	Female	General		SC		ST		OBC/MOBC		EWS	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
4447	2459	1988	1217	1030	304	232	175	176	643	469	120	81

PWD: (not included in the total being horizontal reservation) male: 22, female: 12.



18th Convocation



18th Convocation



28th Foundation Day



28th Foundation Day



Cheer for India



Awaz Campaign



Constitution day



ICCR Delegation Tezpur University



Fit India Freedom Run



A view of the campus

Compiled and edited by

Dr. Apurba Kumar Das, Professor, Dept. of Environmental Science
Dr. Dipak Nath, Assistant Professor, Centre for Disaster Management
Dr. Nirmali Gogoi, Assistant Professor, Dept. of Environmental Science
Dr. Arindam Karmakar, Assistant Professor, Dept. of Computer Science and Engineering
Dr. Reetamoni Narzary, Assistant Professor, Department of English
Ms. Angel Habamon Syiem, Assistant Professor, Department of Law
Dr. Kalyan Kr. Hazarika, Technical Officer, Dept. of Molecular Biology & Biotechnology

Hindi version

Dr. Kul Pd Upadhyay, Assistant Director (Official Language)
Ms. Rekha Rani Bezbaruah, Junior Translation Officer
Ms. Simimoyee Devi, Hindi Typist

Acknowledgements

Most photographs that appear in this Annual Report were taken by the students of our University. Their contribution is gratefully acknowledged.

Published by

The Registrar
Tezpur University

Printed at

TICOL STYLE TRACK
Kumar Gaon, Tezpur – 784001
Ph : (03712) 224535
Email : ticolpress@gmail.com



TEZPUR UNIVERSITY

Napam, Tezpur 784028, Assam

Phone: 03712-267100

Fax: +91 3712 267005/6

Email: registrartu@tezu.ernet.in

Web: <http://tezu.ernet.in>