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# R&D Newsletter

Dibrugarh University



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# DIBRUGARH UNIVERSITY

## R&D Newsletter

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**This issue covers Research & Development activities of Dibrugarh University for the Period of 1st January-31st of December, 2023.**

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8. Mrinnoy M Gohain, Kalyan Bhuyan, *Non-singular solutions in  $f(R, T)$  gravity coupled with a bulk viscous fluid*, **The European Physical Journal Plus** 138 (3), 1-21.
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208. T Jamatia, S Das, Malay K Das, *Topical delivery of methoxsalen co-loaded curcumin using hybrid nanocarrier based polymeric hydrogel for synergistic therapy in the treatment of psoriasis*. **Journal of Pharmaceutical Innovation**.
209. Ashis Kumar Goswami, Neelutpal Gogoi, Hemanta Kumar Sharma, *Validated High-Performance Thin-Layer Chromatography-Mass Spectrometry Method and Stability Study of Linalool in the Volatile Oil of the Rhizomes of *Homalomena aromatica* Schott*, **Journal of Chromatographic Science** **61** (3), **269-278**.
210. Hmar EBL, Paul S, Sharma HK, *An Insight into the Combination of Probiotics and their Implications for Human Health*, **Endocrine, Metabolic & Immune Disorders Drug Targets**. **2024** ;**24**(1):**1-12**.
211. Md Asad Quasim, Abhishek Kumar Karn, Sujata Paul, El Bethel Lalthavel Hmar, Hemanta Kumar Sharma, *Herbal rodent repellent: a dependable and dynamic approach in defiance of synthetic repellent*, **Bulletin of the National Research Centre** **47** (1), **82**.
212. Barnali Gogoi, Manobjyoti Bordoloi, Hemanta K Sharma, *Ethnomedicinal, phytochemistry, pharmacological, and clinical uses, of *Cinnamomum bejolghota* (Buch.-Ham.) Sweet*, **Journal of Herbal Medicine**, **100721**.

213. B Gogoi, KJ Tamuli, S Saikia, N Lhouvum, M Bordoloi, HK Sarma, *Antioxidant, angiotensin converting enzyme inhibitory and anthelmintic activities of bark essential oil of Cinnamomum bejolghota (Buch.-Ham.) Sweet from North East India*, **Vietnam Journal of Science and Technology** 61 (5), 759-779.
214. Prakash Rajak, Lila Kanta Nath, Biman Bhuyan, *pH Switchable LLC Nanoparticles Targeting Colon: Optimization Using D-Optimal Design*, **Journal of Pharmaceutical Innovation** 18 (1), 128-143.
215. Prakash Rajak, Rofiqul Islam, Arka Karmakar, Biman Bhuyan, *Aquasomal drug delivery system: A special emphasis on the formulation techniques and applications*, **Ars Pharmaceutica (Internet)** 64 (4), 359-375.
216. Prakash Rajak, Rofiqul Islam, Arka Karmakar, Biman Bhuyan, *Aquasomal drug delivery system: a special emphasis on the formulation techniques and applications*, **Ars Pharmaceutica (Internet)** 64 (4), 359-375.
217. Prasun Banik, Ranjan Phukan, Ranjan Kumar Sarmah, Minati Das, *Investigation on Barail Formation Coals of Upper Assam with reference of Coal Bed Methane (CBM)*, **Journal of the Geological Society of India** ,99:99-104.

## Conference Papers

1. Bhargabjyoti Saikia, Vijaya Gunturu, P. Rajani Kumari, S. M. Chithra, Rajesh Singh, Devesh Pratap Singh, *The Emerging Role of the Knowledge Driven Applications of Wireless Networks for Next Generation Online Stream Processing* , **IEEE, 11th International Conference on System Modeling & Advancement in Research Trends (SMART), 2022, Moradabad, India, 16-17 December 2022.**
2. Maitreyee Sharma , *ADI-MINYONG MENOPAUSAL WOMEN IN ARUNACHAL PRADESH: A CROSS-SECTIONAL STUDY ON THEIR MORBIDITY PATTERNS*, **19th IUAES-WAC World Anthropology Pre-Congress “ANTHROPOLOGY IN/OF THE FUTURE” 2-3 August 2023.**

3. Bhat H.R., Ghosh S.K., Shakya A., Singh U.P., Patgiri S.J., *Design, synthesis, and antimalarial evaluation of pyrazole 1,3,5-triazine derivatives.* in **Three Days National Seminar on ``Nanotechnology in biotherapeutics: advancement in drug discovery, development and delivery systems``**, at Department of Pharmaceutical Sciences and Center for Biotechnology and Bioinformatics, Dibrugarh university, Assam on **November16-18, 2023.**
  
4. Bhat H.R., Ghosh S.K., Shakya A., Singh U.P., Patgiri S.J., *Hybrid pyrazole s-triazine derivatives: Design, synthesis and antimalarial evaluation in* **Two days International Seminar on Emerging trends in Chemical Science (ETCS-23)** at Department of Chemistry, H.V.M. (P.G.) College, Raisi, Haridwar, U.K., **March 17, 18, 2023.**
  
5. Dutta S., Choudhary A., Ghosh S.K., Bhat H.R., *LDL-C Target in CVS disease is promised by inclisiran in* **Two days 2<sup>nd</sup> National Seminar on Novel Innovations in Biomedical Sciences (NIBS)-2023.** at Department of Pharmacy, NEMCARE group of institutions, Gauhati, Assam, **March 14, 15, 2023. NIBS/23/PP/005.**
  
6. Kalita T., Ghosh S.K., Bhat H.R., *In silico screening of novel triazine derivatives as possible anti-alzheimer's agents in* **Two days 2<sup>nd</sup> National Seminar on Novel Innovations in Biomedical Sciences (NIBS)-2023.** at Department of Pharmacy, NEMCARE group of institutions, Gauhati, Assam, **March 14, 15, 2023. NIBS/23/PP/067.**

7. **B.B.Kakoti, *Functional Foods and Nutraceuticals: Unveiling Clinical Insights and Outcomes in Pharmaceuticals fusing with Nutraceuticals Ensuing Healthy Lives and promote Wellbeing: Global Trend* organized by: Faculty of Pharmaceutical Sciences, AdtU in association with AdtU-Centre for Research on Ethnomedicine of NE India(AdtU-CREM),Guwahati on 13<sup>th</sup>-14<sup>th</sup>October, 2023.**
8. **B.B. Kakoti, *Unveiling Nature's Pharmacy: The Evergreen reservoir of Innovative Drug Discoveries in Interface of Chemistry, Material Chemistry and Pharmaceutical Sciences (ICMCPS-2023); 9<sup>th</sup> to 11<sup>th</sup> November 2023 at Royal Global University and Cotton University, Guwahati, Assam.***
9. **B.B. Kakoti, *Ethnopharmacology for Sustainable development and Commercialization: Objectives and Potentials in Ethnopharmacology for Bio-economy: The New Paradigm (EBNP-2023) in association with Society for Ethnopharmacology (SFE), India on 28-30 November, 2023 at CSIR-North East Institute of Science and Technology, Jorhat, Assam.***

### **Books/ Book Chapters**

1. **Arup Borgohain, Madhusmita Baruah, Mridusmita Sarmah, Jiban Saikia, Diganta Deka, Harisadhan Malakar, Puja Khare, Tanmoy Karak, *Biochar-Based Hydrogel Nanocomposites: An Innovative Technique for Contaminant-Free Environment in Biochar-Based Nanocomposites for Contaminant Management: Synthesis, Contaminants Removal, and Environmental Sustainability, Pages 33-46, Springer International Publishing.***
2. **Mridusmita Sarmah, Arup Borgohain, Jiban Saikia, Diganta Deka, Harisadhan Malakar, Puja Khare, Tanmoy Karak, *Physical Activation and Nanoscale Transformation of Biochar Using Different Mechanochemical Techniques in Biochar-Based Nanocomposites for Contaminant Management: Synthesis, Contaminants***

**Removal, and Environmental Sustainability, Pages 21-32, Springer International Publishing.**

3. **Surajit Borkotokey, Sujata Goala, Rajnish Kumar, *The Probabilistic Games and the Shapley Function* in **Fuzzy Optimization, Decision-making and Operations Research: Theory and Applications, Pages 725-742, Springer International Publishing.****
4. **Palash Dutta, Abhilash Kangsha Banik, *Hyperbolic Fuzzy TOPSIS Method for Multi-Criteria Decision-Making Problems* in **Fuzzy Optimization, Decision-making and Operations Research: Theory and Applications, Pages 319-341, Springer International Publishing.****
5. **Nath D, Chetia D., *Metabolomics: Special Emphasis on Basic Drug Discovery and Development*, in **Drug Metabolism and Pharmacokinetics. IntechOpen; 2023.****
6. **Zothantluanga JH, Paul A, Umar AK, Chetia D., *Drug Repurposing and Computational Drug Discovery for Parasitic Diseases and Neglected Tropical Diseases (NTDs)* in **Drug Repurposing and Computational Drug Discovery. 1<sup>st</sup> ed, Apple Academic Press; 2023. p.77-109, eBook ISBN: 9781003347705.****
7. **Bhattacharjee B., Deka B., Shivavedi N., Bhat H.R., Sinha S.K., Ghosh S.K., Shakya A, *Neuroprotective Role of Medicinal Plants from North Eastern Region of India.* Singh S.P.,Birla H., Keswani C. (eds) **Traditional Medicine for Neuronal Health. Bentham science. Page No. 103-128.****
8. **Deka, B., Bhattacharjee B., Shivavedi N., Singh G.K., Bhat H.R., Ghosh S.K., Shakya A, *Parkinson's Disease: A Phytotherapeutic Prospective. Traditional Medicine for Neuronal Health*, Singh S.P.,Birla H., Keswani C. (eds) **Traditional Medicine for Neuronal Health. Bentham science page No. 1-23.****
9. **Aparoop Das, Kalyani Pathak, ManashPratim Pathak, Urvashee Gogoi, Riya Saikia, *Nrf2 and the Aging Liver*, in **Flavonoids and Anti-Aging, Taylor &Francis.****
10. **Aparoop Das, Kalyani Pathak, ManashPratim Pathak, Riya Saikia, Urvashee Gogoi& Niyati S. Acharya, *Potential of Herbal Drug Delivery in Treating Malaria in :Malarial Drug Delivery Systems, Advances in Treatment of Infectious Diseases, Springer Nature.***



11. Aparoop Das, Manash Pratim Pathak, Kalyani Pathak, Urvashee Gogoi, Riya Saikia, *Changes in the Regulation of Energy Metabolism in Chronic Diseases Using Functional Foods and Nutraceuticals* in **Applications of Functional Foods and Nutraceuticals for Chronic Diseases**, Taylor & Francis.
12. Mohammad Zaki Ahmad, Kalyani Pathak, Devyani Bhatnagar, Shreya Ladhe, Dileep Kumar, Riya Saikia, & Aparoop Das, *Nanotheranostic Approach for Cancer Treatment*, in **Handbook of Cancer and Immunology**, Springer.
13. Aparoop Das, Manash Pratim Pathak, Kalyani Pathak, Urvashee Gogoi & Riya Saikia, *Changes in the Regulation of Energy Metabolism in Chronic Diseases Using Functional Foods and Nutraceuticals* in **Changes in the Regulation of Energy Metabolism in Chronic Diseases Using Functional Foods and Nutraceuticals (Published in January, 2023)**, Taylor and Francis.
14. Das SK, Chakraborty S, Rajabalaya R, Mazumder B, *Zeta potential measurements and analysis for biomedical nanotechnology*, in **Analytical Techniques for Biomedical Nanotechnology**, (pp. 17-1), IOP Publishing. Editors: Ajeet Kaushik, Sessa S Srinivasan and Yogendra Kumar Mishra. Online ISBN: 978-0-7503-3379-5, Print ISBN: 978-0-7503-3377-1.
15. Roy TK, Dasgupta S, Roy A, Mazumder B, *Disease Models in Viral Research*. In **Infectious Diseases Drug Delivery Systems**, (pp. 215-239). Cham: Springer International Publishing. Editors: Ranjita Shegokar, Yashwant Pathak. Hardcover ISBN: 978-3-031-20520-0, Softcover ISBN: 978-3-031-20523-1, eBook ISBN: 978-3-031-20521-7.
16. Singh M, Mazumder B, *Inflammatory Diseases and Prevention and Treatment of Inflammatory Disease Using Functional Foods and Nutraceuticals* in **Molecular Mechanisms of Action of Functional Foods and Nutraceuticals for Chronic Diseases**, (pp. 255-272). CRC Press. Editor: Shima Abdollahi, Syam Mohan, Yashwant V. Pathak. eBook ISBN: 9781003325642.
17. Kamaruz Zaman, Pompy Patowary, Arpita Paul, Nilayan Guha, Madhusmita Gogoi, *Alcoholic and Non-alcoholic Liver Diseases: Biochemical Aspects* in **Current Trends in the Diagnosis and Management of Metabolic Disorders**, 321-334.

18. **Prabwal Jyoti Phukon, Sarbasamiksha Tattva, Publication Division, Dibrugarh University, ISBN: 978-93-84819-17-0.**

### Published Articles

- 1) **Rudrapal M, Bhattacharya S, Chetia D, Boosting Host Immunity to Combat Coronavirus Disease-2019 (COVID-19). Medicinal Plants, Phytomedicines and Traditional Herbal Remedies, 2023; 166-199**
- 2) **Sen, S, Borthakur, MS, Chetia, D, Lawsonia inermis Linn: A breakthrough in cosmeceuticals, Sciences of Phytochemistry. 2023; 2(1):128-158**

### Research Grants/Projects received

1. *Fabrication of polymeric nano-formulations from the lead compounds of Garcinia cowa Roxb.: characterization and anti-diabetic evaluation*

**PI: Dr. Kalyani Pathak**

**Mentor: Prof. Aparoop Das**

**Funding Agency: HRD scheme of the Department of Health Research for “Woman Scientist” (Project Proposal no: 2022-1163, email dated 01.05.2023)**

**Duration of the project: 3 years**

**Amount: Rs 27,14,500.**

2. **Title:** *M@Zno (M= Ag, Ni) binary nanoparticles as Cu-free catalyst for click reaction- An alternative benign approach towards 1,2,3-triazoles synthesis*  
**Funding Agency:** CSIR, New Delhi.

**Duration:** 2021-2024.

**Amount:** 23 Lakhs.

**PI:** Dr. Diganta Sarma.

**Co-PI:** Dr. Kalyanjyoti Deori.

### Conference hosted

1. DST-PURSE Sponsored National Seminar on “*Nanotechnology in Biotherapeutics: Advancement in Drug Discovery, Development and Delivery Systems*”.  
**Conveners:** Prof. Bhaskar Mazumder & Prof. Bibhuti B. Kakoti  
**No. of Participants:** 177  
**No. of Papers Presented:** 141 (Oral-18, Poster-123)
2. “*International Conference on “Recent Advances in Materials Chemistry and Catalysis (RAMCC-2023)”*”,  
March 01-03, 2023.  
**Joint Conveners-** Prof. Diganta Sarma, Dr. Kalyanjyoti Deori.

### Awards and Recognition received by group members

1. Prof. Diganta Sharma: DST Travel Award 2023 to deliver an Invited Talk in the "19th Asian Chemical Congress" at Istanbul Technical University, Turkey during the period 9-14 July, 2023.
2. Prof. Diganta Sharma: Convener, CRSI Local Chapter, North-East Region.

3. **Dr. Kalyani Pathak: Woman Scientist award for Post Doctoral studies from ICMR-DHR,HRD scheme(Grant no- Project Proposal no: 2022-1163).**
4. **Hans Raj Bhat: Life Member of The Indian Pharmaceutical Association (IPA) (ASS/DIBR/ON/LM/000005).**

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## **Paper published in Journals:**

1. Nath, K., Halder, S., Gogoi, D., Mahanta, B.N., Goswami, T.K., Sarmah, R.K. 2023. Morphometric study of selected river basins from the Meghalaya Plateau — implications for the hydrodynamics of the eastern part of Indian subcontinent, *Arabian Journal of Geosciences*,16:243, 1-19.
2. Sarmah, M., Borah, S.Z., Bezbaruah, D., Goswami, T.K., Baral, U. 2023. The Role of Himalayan Frontal Thrust in the Upliftment of Kimin Formation and the Migration of Sedimentary Basin in Arunachal Himalaya, Around Bandardewa, Papumpare District, Arunachal Pradesh, In: *Advances in Remote Sensing Technology and the Three Poles* (John Wiley & Sons Ltd), 268-282.
3. Baruah, M.P., Kumar, S., Bezbaruah, D., Goswami, T.K.2023. A GIS Based Mapping of Seismic Parameters in Tectonically Active Mikir Massif Region of Assam, India., *Journal of Geography Environment and Earth Science International*, 27(11):29-46, DOI: [10.9734/jgeesi/2023/v27i11725](https://doi.org/10.9734/jgeesi/2023/v27i11725).
4. Saikia, T, Bhuyan, D. Palynology of the Barail Group exposed along Mariani - Changki Road, Mokokchung District, Nagaland, India and its palaeoenvironmental implications.
5. Baruah, M.P, Goswami, T.K, Bezbaruah, D. 2023. Understanding the tectonics of the Mikir massif, northeast India: insights from lineament analysis. DOI:10.1007/s12517-023-11658-w
6. Gogoi, B., Bezbaruah, D., Gogoi, Y. K. 2023. River terraces assessment to evaluate the regional tectonic activity of the fore parts of Mishmi Block and Manabhum Anticline,North-east India: A conjunctive approach using Field Mapping and Satellite imagery. *Disaster Advances*, DOI: 10.25303/1608da039054.

7. Gogoi, Manash Pratim, Borgohain, Pradip ; Gogoi, Yadav Krishna ; Bezbaruah, Devojit, 2023. Petrography, Diagenesis and Hydrocarbon Source Potential of the Barail and Disang Group of Rocks in Parts of the Naga Schuppen Belt and Inner Fold Belt of Assam-Arakan Basin. *Journal of the Geological Society of India*. DOI: 10.1007/s12594-023-2412-z.
8. Rajkonwar, M., Goswami, U., Bezbaruah, D. Goswami, K., 2023. Groundwater Chemistry of the River Terrace Springs along Himalayan Foothills in and around Pasighat, Arunachal Pradesh, India. *Jour. Geol. Soc. India*. 99:875-880, <https://doi.org/10.1007/s12594-023-2395-9>.
9. Borah, P.B. and Longkumer, L. 2023. A Comparative Study on the Socio-Economic Conditions of Harijan Colonies in Four Districts of Upper Assam, India. *Uttar Pradesh Geographical Journal*, 28.
10. Dutta, C.K. 2023. Relief morphology and sediment management of the Upper Jadhwal River Basin, Arunachal Pradesh and Assam, North-East India. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-023-03173-5>.
11. Dutta, C.K. 2023. Geospatial Assessment of Fire Services: Dibrugarh District, Assam, India. *History Research Journal*, 29(05):9-21.

### Conference Papers

1. Title: Diagenetic microstructures of Lower Gondwana Sandstones of Arunachal Pradesh Himalayas, India  
Authors: Mahanta, B.N, Goswami, T.K. Sarmah, R.K  
Conference Name: National workshop on Geodynamics in Himalaya & Disaster Management, GEOHIM-2023, CUHP and Geol Soc India  
Conference Location: Dharamshala, Himachal Pradesh, India.  
Date: 6-8 November, 2023

**2. Title: Flood Hazard Management and Socio-Economy of Jonai Revenue Circle in Dhemaji District, Assam.**

**Authors: Diram Bori, Trisha Deka, Satyabrat Sonowal, Rahul Kakoty, Arijeet Malakar. Conference Name: Conference in Quest of a Sustainable Earth.**

**Conference Location: Sivasagar Girls College, Sivasagar, Assam.**

**Date: 24<sup>th</sup> and 25<sup>th</sup> March, 2023.**

**Proceeding Title: ICSSR Sponsored National Seminar on Conference in Quest of a Sustainable Earth.**

**Editors: Madine Hazarika and Sanjay Das.**

**Publisher: Publication Cell, Sivasagar Girls College. ISBN: 978-81-944013-3-9**

**3. Title: A Study on Problems and Prospects of Orange Cultivation in Tinsukia District, Assam, Sivasagar Girls College,**

**Authors: Preeti Barsha Borah, Bhadrawati Dutta, Sultana Afsana Rahman,**

**Date: 24th and 25th March,**

**Proceeding title: ICSSR sponsored National seminar on Conference in quest of a Sustainable Earth,**

**Editors: Madine Hazarika and Sanjay Das,**

**Publisher: Publication cell, SGC,**

**ISBN: 978-81-944013-3-9.**

**4. Title: Wetland Stability A Case Study: Kohara, Kaziranga,**

**Authors: Ankulin Duwarah, Dr. C. K. Dutta**

**Conference name: In Quest of a Sustainable Earth,**

**Conference Location: Sivasagar Girls College, Sivasagar, Assam.**

**Date: 24th and 25th March, 2023**

**Proceeding title: ICSSR Sponsored National Seminar on In Quest of a Sustainable Earth,**

**Editors: Madine Hazarika and Sanjay Das**

**Publisher: Publication cell, SGC, Sivasagar**

**ISBN # 978-81-944013-3-9.**

**5. Title: Wetland Stability: Impact of Machinery in Paddy Cultivation: A Case Study of PG Student's Geography**



**Authors: Madhusmita Mahanta, Kaustov Kalita and Dr. C. K. Dutta**  
**Conference name: In Quest of a Sustainable Earth,**  
**Conference Location: Sibsagar Girls College, Sivasagar , Assam.**  
**Date : 24<sup>th</sup> and 25<sup>th</sup> March, 2023**  
**Proceeding title: ICSSR Sponsored National Seminar on In Quest of a Sustainable Earth,**  
**Editors: Madine Hazarika and Sanjay Das**  
**Publisher:Publication cell, SGC, Sivasagar**  
**ISBN # 978-81-944013-3-9.**

### **Published Books**

- 1. Book Title: Land Use and Land Cover Change: North-Eastern Perspective.**  
**Editors: Shukla Acharjee, Jyoti Saikia, Diram Bori, Chandra Kumar Dutta, Preeti Barsha Borah.**  
**Publisher: Assam Book Hive, Ghy-1.**  
**ISBN: 978-81-960017-2-8.**
- 2. Book Title: Disaster Management and Preparedness in Assam: A Regional Perspective.**  
**Editors: Dr. Shukla Acharjee, Dr. Chandra Kumar Dutta, Diram Bori, Preeti Barsha Borah, Arpana Handique.**  
**Publisher: Ramdhenu Publisher.**  
**ISBN:978-93-92610-24-0**

## Published Book Chapters

1. Sarma, M., Borah, S.Z., Bezbaruah, D., Goswami, T.K., Baral, U. 2023. The Role of Himalayan Frontal Thrust in the Upliftment of Kimin Formation and the Migration of Sedimentary Basin in Arunachal Himalaya, Around Bandardewa, Papumpare District, Arunachal Pradesh. *In: Advances in Remote Sensing Technology and the Three Poles*. Editors: Manish Pandey, Prem C. Pandey, Yogesh Ray, Aman Arora, Shridhar D. Jawak, Uma K. Shukla. John Wiley & Sons Ltd. ISBN: 9781119787754.
- 2.
3. Bezbaruah, D., Goswami, T.K. and Sarmah, R.K. 2023. The Upper Assam Basin, Its Evolution and Modification: A Review. *In: Handbook on Petroleum Geoscience: Exploration, Characterisation and Exploitation of the Hydrocarbon Reservoirs*. Editors: Soumyajit Mukherjee, Swagato Dasgupta, Chandan Majumdar, Subhandip Mandal, Troyee Dasgupta. John Wiley & Sons Ltd. 9781119679998.
4. Bori,D. 2023.An Overview of Current Status of Socio-Economic Infrastructure in Dhemaji District, Assam. *In Land Use and Land Cover Change: North-Eastern Perspective*. Editors: Shukla Acharjee, S., Saikia, J., Bori,D., Dutta,C.K. and Borah, P.B. 37-43. Assam Book Hive, Ghy-1. ISBN: 978-81-960017-2-8.
5. Borah, P.B.2023. A Review on the Application of Remote Sensing and GIS Monitoring Urban Slum Growth and Land Use Changes. *In Land Use and Land Cover Change: North-Eastern Perspective*. Editors: Shukla Acharjee, S., Saikia, J., Bori,D., Dutta,C.K. and Borah, P.B. 61-65. Assam Book Hive, Ghy-1. ISBN: 978-81-960017-2-8.
6. Dutta, C.K. and Dutta B. 2023. Population and Land use change in Assam and its impact on environment. *In Land use and land cover change: North - Eastern Perspective*. Editors: S. Acharjee, J. Saikia, D. Bori, C. K. Dutta, and P. B. Borah. 23-36. Publisher: Assam Book Hive, Guwahati, Assam, ISBN: 978-81-960017-2-8.
7. Borah, P.B.2023. Growth of Slums and Precarity Faced by Women: A Study of Upper Assam with Special Reference to Dibrugarh District. *In:Contemporary Issues in Geography: North Eastern Perspective*, Editors: Prof. Sailajananda Saikia, Jyoti Saikia, Bikash Jyoti Gautam, Assam Book Hive, Ghy-1, ISBN: 978-93-80247-23-6
8. Borah, P.B. and Longkumer, L. 2023. Disaster Management and its Mitigation Techniques in India: An Overview. *In: Disaster Management and Preparedness in Assam: A Regional Perspective*, Ramdhenu Publisher, Dibrugarh, ISBN:978-93-92610-24-0.

## Research Grants/Projects received

- 1. Project title: Sedimentation Model, Diagenetic Heterogeneity and Reservoir Properties of Tura Formation (Upper Paleocene- Lower Eocene) of Upper Assam Basin.**

**Co-PI: Dr. D. Bhuyan & Dr. D. Bezbaruah**

**Funding Agency: DST -SERB**

**Duration of the project: 36 months**

**Amount: Rs. 38,54,820.00/-**

### **Awards and Recognitions**

- 1. Prof. Kalpana Deka Kalita, Professor, Department of Applied Geology, D.U. as a Resource person of International Fossil week on 17th and 19th October, 2023. The lecture series are:**
  - : Lecture 2: " Fossils, their preservation and importance". (17.10.2023)**
  - : Lecture 3: " Fossils and its importance to unfold history of the earth". (19.10.2023)**
- 2. Prof. Tapos Kumar Goswami, Professor, Department of Applied Geology, D.U.**
  - (a) Invited as External Expert: Geological Survey of India NER, Shillong to the Term Review meeting on December 4-5, 2023**
  - (b) Invited as a Resource person:Orientation Course for Geologists (OCG), Geological Survey of India NER, held at Pashighat, East Siang District Arunachal Pradesh, from 18-20 November, 2023.**
- 3. Dr. Devojit Bezbaruah, Assistant Professor, Department of Applied Geology, D.U. as a Resource person of International Fossil week on 19th October, 2023. The lecture topic is:**
  - : Lecture 3: " Fossils and it's importance to unfold history of the earth".(19.10.2023)**
- 4. Dr. Pranjit Kalita, Assistant Professor, Department of Applied Geology, D.U.**
  - Invited as a Resource person: E-lecture series on Structural Geology and Tectonics**

**Title of the topic: Variation of deformation intensity across the Lesser Himalayan Bomdila Geniss in western Arunachal Himalaya, India on 30th November, 2023.**

### **Awards and Recognition received by group members**

- 1. Mr. Pranjit Kalita, Department of Applied Geology Dibrugarh University, Assam, was awarded Ph. D. degree on the topic entitled "Deformation and Metamorphism of the Lesser Himalayan Sequence along Dedza-Bomdila-Dirang Section, West Kameng District, Arunachal Pradesh, India" on 02. 01.2023 under the guidance of Prof. Tapos Kumar Goswami, Professor, Department of Applied Geology, Dibrugarh University, Assam.**
- 2. Ms. Archana Singh, Department of Applied Geology, Dibrugarh University, was awarded Ph. D. degree on the topic entitled "Study of morphotectonics and impacts of Ranganadi and Lower Subansiri Dams in the downstream of Ranganadi, Dikrong and Subansiri Rivers, Assam- Arunachal Pradesh" on 01. 06.2023 under the guidance of Dr. Devojit Bezbaruah, Assistant Professor, Department of Applied Geology, Dibrugarh University, Assam.**
- 3. Ms Deepsikha Bhuyan, Department of Applied Geology, Dibrugarh University was awarded Ph. D. degree on the topic entitled " Reservoir Characterization and Depositional history of the Barail Group of Rocks in parts of Upper Assam Basin and adjoining Belt of Schuppen, Nagaland" on 03.07.2023 under the Prof. Pradip Borgohain, Professor, Department of Petroleum Technology, Dibrugarh University, Assam.**



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## **Paper published in Journals:**

1. Borah, H. and Bora, D.S. 2023. Study on Ovitrap Surveillance and Molecular Phylogeny of Dengue Vectors (*Aedes aegypti* and *Aedes albopictus*) based on Cytochrome C Oxidase Subunit I (COI) Genes from Different Habitat Types of North Eastern, India. *Asian journal of biological and life sciences*.2(1) DOI: 10.5530/ajbls.2023.12.21
2. B. Narzary, Kashyap, J.T. Bordoloi, M. and Bora, D.S. 2023. Antihypertensive and antioxidant activities of *Oldenlandia diffusa* (Willd.) Roxb. essential oil from Assam, India. *Advances in bio research*. 14(2)103-111
3. Borthakur, S. and Bora, D.S. 2023. Identification of chemical cues of *Camellia sinensis* (Ericales: Theaceae) and alternate host plants for preference by tea mosquito bug *Helopeltis theivora* (Hemiptera: Miridae). *International journal of science and research archive*.08(01),710–719 DOI: <https://doi.org/10.30574/ijrsra.2023.8.1.0123>
4. Borah, S., Bora, D.S. and Bhorali, P. 2023. Molecular dissection of *Odoiporus longicollis* infested *Musa paradisiaca* transcriptome reveals key genes involved in defense. *Plant Molecular Biology Reporter*. <https://doi.org/10.1007/s11105-022-01368-0>.
5. Saikia, P. Neog, B., Borgohain, B. Gogoi, N. and Gogoi, D. 2023. Distribution of volatile compounds of traditional aromatic Joha rice (*Oryza sativa* L.) of upper Assam, India. *Thai J. Agric. Sci.*56(2):115–126.

6. Borthakur, A. and Neog, B. 2023. Current Research On *Myrica esculenta* Buch.-Ham. Ex D. Don and the need for its conservation. *J. Mountain Res.* 18(1): 117-125.
7. Gogoi, N., Gogoi, A., Neog, B. and Singh, K.D. 2023. Hepatoprotective effect of *Garcinia xanthochymus* and *Garcinia lanceifolia* against carbon tetrachloride-induced hepatic damage in rat. *Bangladesh J Pharmacol* ,18: 91-96
8. Gogoi, I., Borthakur, A. and Neog, B. 2023. Ethnomycological knowledge, nutritional and nutraceutical potential of wild edible macrofungi of Northeast India. *Studies in Fungi* 8:(12).
9. Saikia, P. Neog, B. Borgohain, B. Baruah, D., Gogoi, N., Borthakur, A. and Gogoi, A. 2023. Quantification of 2-acetyl-1-pyrroline in joha rice and its correlation with agromorphological characters with special reference to upper Brahmaputra valley, Assam, India. *Flora and Fauna* 29(1):3-10 .
10. Dutta, M., Gogoi, N., Neog, B., Lekharu, K., Sonowal, S. and Phukan, H. 2023. Morphology and Genetic Diversity of *Garcinia cowa* (Roxb.) in Upper Brahmaputra Valley of Assam, *Asian J. Biol. Life Sci.* 12(1): 80-86.
11. Pal P. and Neog, B. 2023. Review of the antioxidant properties and nutritional factors of lemons. *Journal of Chemical Health Risks*, 13(4.)
12. Challeng, N., Begum, T., Dutta, P.P., Chetia, P., Sen, S., Dey, B.K., Talukdar, N.C. and Tamuly, C. 2023. Antidiabetic potential of *Amomum dealbatum* Roxb. flower and isolation of three bioactive compounds with molecular docking and *in vivo* study. *Natural Product Research*.
13. Challeng, N., Hazarika, M., Sonia, H., Dihingia, A., Manna, P., Puzari, M., Chetia, P. and Tamuly, C. 2023. Anti-diabetic and anti-urease potential of *Osbeckia nutans* Wall. Leaves, *Natural Product Research*.



14. Gogoi, I., Puzari, M. and Chetia, P. 2023. Porin-Mediated Carbapenem Resistance in *Klebsiella pneumoniae*: an Alarming Threat to Global Health. *Current Clinical Microbiology Reports*. 10(3).
15. Bora, D., Nasrin, T. and Borkataky, M. 2023. Studies on Urban Soil pollution at Dibrugarh, Assam. *Indian journal of Natural Sciences*, 14(81):66149-66154.
16. Nath, R., Sharma, G.D. and Barooah, M. 2023. Phosphate solubilization, siderophore production and extracellular enzyme production activities of endophytic fungi isolated from tea (*Camellia sinensis*) bushes of Assam, India. *Research journal of Biotechnology*,18(6): 49-57.
17. Gogoi, A., Borah, N. and Nath, R. 2023.Plant Growth-Promoting Bacteria (PGPB): A Potent Source of Heavy Metal Stress Management in Plants. *Current World Environment*,18(3): 1298-1311.
18. Khataniar, A.,Das, A., Baruah, M.J., Bania,K.K., Rajkhowa, S., Al-Hussain, S.A. and Zaki, M.E.A. 2023. An Integrative Approach to Study the Inhibition of *Providencia vermicola* FabD Using C2-Quaternary Indolinones. *Drug Design, Development and Therapy*, 2023; 17:3325-3347.
19. Gogoi, U., Gogoi, N., Rajkhowa, S., Khan, S.A., Daffa Alla Omer Hajedris, N., Hoshani, N.A., Al-Shouli, S.T.and Das, A. 2023. Expanding the therapeutic arsenal against cancer: a computational investigation of hybrid xanthone derivatives as selective Topoisomerase 2 $\alpha$  ATPase inhibitors. *Journal of Biomolecular Structure and Dynamics*, 1-30.

20. Gohain, B.B., Gogoi, U., Das, A. and Rajkhowa, S.2023. Enhancing cancer drug development with xanthone derivatives: A QSAR approach and comparative molecular docking investigations. *South African Journal of Botany*, 163:294-310.
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21. Zothantluanga, J.H., Umar, A.K., Aswin, K., Rajkhowa, S. and Chetia, D. 2023. Revelation of potential drug targets of luteolin in Plasmodium falciparum through multi-target molecular dynamics simulation studies. *Journal of Biomolecular Structure and Dynamics*,: 1-17.
22. Baassi, M., Moussaoui, M., Soufi, H., Rajkhowa, S., Sharma, A., Sinha, S. and Belaouad, S. 2023. Towards designing of a potential new HIV-1 protease inhibitor using QSAR study in combination with Molecular Docking and Molecular Dynamics Simulations. *Plos One*, 18(4): e0284539.
23. 6. Nath, H., Khataniar, A., Bania, K.K., Mukerjee, N., Al-Hussain, S.A., Zaki, M.E.A and Rajkhowa,S.2023. Nano-functionalization and evaluation of antimicrobial activity of Tinospora cordifolia against the TolB protein of Pseudomonas aeruginosa – An antibacterial and computational study. *Frontiers in Microbiology*, 14:984.
24. Akash, S., Bayl, I., Rahman, M.A., Mukerjee, N., Maitra, S., Islam, M.R., Rajkhowa, S., Ghosh, A., Al-Hussain, Zaki, M.E.A., Jaiswal, V., Sah, S., Barbora, J.J. and Sah, R. 2023. Target specific inhibition of West Nile virus envelope glycoprotein and methyltransferase using phytochemicals: an in-silico strategy leveraging molecular docking and dynamics simulation. *Frontiers in Microbiology*,14:1189786.
25. Zothantluanga, J.H., Chetia,D., Rajkhowa, S. and Umar, A.K. 2023. Unsupervised machine learning, QSAR modelling and web tool development for

streamlining the lead identification process of antimalarial flavonoids. *SAR and QSAR in Environmental Research*, 34 (2): 117-146.

26. Sinha, S., Sharma, S., Johari, S., Sharma, A. and Rajkhowa, S. 2023. Design and Development of Hydrophobicity and Net charge Based Artificial Neural Network Model for IDP/IDPR Prediction. *Procedia Computer Science*, 218:438-448.

### Conference Papers

1. Title: Prevalence, antibiotic resistance profiling and molecular characterization of Extended-Spectrum  $\beta$ -lactamase producing *Acinetobacter baumannii* isolated from North East, India.

Conference Name: Oral presentation in Research & Industrial Conclave-Integration, 2023 organized by IITG held on 14-16<sup>th</sup> May, 2023.

Authors: Shyamalima Saikia, Mohan Sharma, Minakshi Puzari and Pankaj Chetia.

2. Title: Prevalence and distribution pattern of AmpC  $\beta$ -lactamases in extended-spectrum  $\beta$ -lactamases producing clinical isolates of *Klebsiella* spp.

Authors: Indrani Gogoi, Mohan Sharma, Minakshi Puzari and Pankaj Chetia

Conference Name: Presented on 4<sup>th</sup> International conference on contemporary antimicrobial research (ICCAR-2023) organized by Advanced level institutional biotech hub, Assam University, Silchar on 16-18 November, 2023.

3. Title: Molecular characterization of Carbapenem mediated antibiotic resistance pattern in *Acinetobacter baumannii* strains isolated from North East India.

Authors: Shyamalima Saikia, Mohan Sharma, Minakshi Puzari and Pankaj Chetia.

Presented on 4<sup>th</sup> International conference on contemporary antimicrobial research (ICCAR-2023) organized by Advanced level institutional biotech hub, Assam University, Silchar on 16-18 November, 2023.

4. **Title:** Study of Antibiotic Resistance and Efflux Activity in multidrug-resistant *Serratia marcescens*, isolated from the mid-gut of *Antheraea assamensis* Helfer.

**Authors:** Mregangka Dowara, Ashim Jyoti Pathak, Minakshi Puzari and Pankaj Chetia.

**Conference Name:** Presented on 4<sup>th</sup> International conference on contemporary antimicrobial research (ICCAR-2023) organized by Advanced level institutional biotech hub, Assam University, Silchar on 16-18 November, 2023.

5. **Title:** Prevalence of multidrug resistance in Enterobacteriaceae isolates and identification of plant-based efflux pump inhibitors of MDR *Shigella* spp.

**Authors:** Pankaj Chetia

**Conference Name:** Delivered an invited talk on 4th International conference on contemporary antimicrobial research (ICCAR-2023) organized by Advanced level institutional biotech hub, Assam University, Silchar held on 16-18 November, 2023.

### Published Book Chapters

1. Saikia, S., Puzari, M., and Chetia, P. 2023. Molecular Docking in Drug Designing and Metabolism. *In: Industrial Microbiology and Biotechnology: Emerging concepts in Microbial Technology*. Ed. Pradeep Verma. Pub. Springer Inc. ISBN 978-981-99-2815-6, ISBN 978-981-99-2816-3.
2. Chetia, P., Dey, D., Puzari, M. and Dutta Choudhury, M. 2023. Bioactive Compounds and Biological Activities of *Dipteris wallichii*. *In: Bioactive Compounds in Bryophytes and Pteridophytes*. Eds. Hosakatte Niranjana Murthy. Pub. Springer Inc. Reference Series in Phytochemistry ISBN 978-3-031-23242-8, ISBN 978-3-031-23243-5
3. Saikia, S., Puzari, M. and Chetia, P. 2023. System Biology and Livestock Gut Microbiome. *In: Systems Biology, Bioinformatics and Livestock Science (96-128)*. Eds. Anupam Nath Jha, Sandeep Swargam, Indu Kumari. Pub. Bentham Science. eISBN: 978-981-5165-61-6, 2023, ISBN: 978-981-5165-62-3.

4. Bora, D., Kakoti, N., Tamuly, D., Nath, R. and Borkataky, M. 2023. Some Invasive Alien species of Assam and their impact on terrestrial and aquatic ecosystems. *In: Emerging Research Trends in Bio-Sciences*. Editors: M. Islam, B.K. Das and M.C. Das. Ashok Publication, Ghy, Assam. ISBN: 978-93-89491-88-3: 98-105.
5. Kakoti, N., Bora, D. and Borkataky, M., Tamuly, D. and Nath, R. 2023. Effect of Rhizosphere microorganisms on production of plant secondary metabolites. *In: Emerging Research Trends in Bio-Sciences*. Editors: M. Islam, B.K. Das and M.C. Das. Ashok Publication, Ghy, Assam. ISBN: 978-93-89491-88-3: 106-131.
6. Bora, D. and Borkataky, M. 2023. Impact of agrochemicals on tea and soil health of tea gardens. *In: Recent trends in Life Sciences*. Editors: S. Baruah, G. Bhuyan and B.K. Pegu. Published by department of Zoology, MDU, Narayanpur, Lakhimpur, Assam in collaboration with LORIYOLI. ISBN: 978-93-95794-04-6: 51-57.
7. Borah, N., Sonowal, S., Gogoi, A., Buragohain, K. and Nath R. 2023. Molecular approaches in microbial taxonomy. *In: Recent trends in Life Sciences*. Editors: S. Baruah, G. Bhuyan and B.K. Pegu. Published by department of Zoology, MDU, Narayanpur, Lakhimpur, Assam in collaboration with LORIYOLI. ISBN: 978-93-95794-04-6: 160-172.
8. Pathak, U., Das, A., Bora, P.K. and Rajkhowa, S. 2023. Applications and Future. *In Systems Biology, Bioinformatics and Livestock Science*. Bentham Science Publishers.

### **Research Grants/Projects received**

1. **Title of the Project:** Design, Development and Deployment of Deep Learning (Ensemble) Model for Lung Cancer Detection: A Retrospective Study

**Name of PI:** Dr. Subrata Sinha

**Name of Co-PI:** Dr. Sanchaita Rajkhowa

**Funding agency:** ICMR

**Duration of Project:** 3 years

**Amount:** 30 Lakhs

## **Awards and Recognition:**

- 1. Prof. D.S. Bora, department of Life Sciences was received international travel support from DST, Govt. of India for delivering talk on " A case study on resistance status of *Aedes* species in Assam, India and strategy for reducing insecticide use in " Entomology 2023" held on 5-8 November, 2023 in National Harbour, Maryland, Washingto DC, organized by Entomological Society of America. Vide No. ITS/2023/004707 dated 4.10.2023.**
- 2. Patent granted to Prof. D.S. Bora and Urbbi Devi, Department of life Sciences on one Indian patent No. 425028 dated 14/03/2023 on "Formulation of *Zanthoxylum nitidum* bark against larvae of *Aedes aegypti* and *Aedes albopictus* and process for preparation there of".**
- 3. Patent granted to Subrata Sinha, Manjusha Devi, Surabhi Johari, Sanchaita Rajkhowa, Rubul Kumar Bania, Pranjal Kumar on UK Patent, Design No. 6318123 dated 17.10.2023 on "Pesticide Spraying Drone with Integrated Crop Disease Detection System".**
- 4. Patent published by Subrata Sinha, Saurav Mali, Damoni Rabidas, Trishna Dehingia, Damini Neog, Avinash Sonar, Sanchaita Rajkhowa on Indian patent No. 202331008960 A dated 17.02.2023 on "A Deep Convolution Neural Network Model for Detection of Disease in Potato".**
- 5. Patent published by Subrata Sinha, Saurav Mali, Amit Pathak, Surabhi Johari, Sanchaita Rajkhowa, Ashwani Sharma on Indian patent No 202331001597 A dated 13.01.2023 on "A System of Deep Convolution Neural Network and Method for Detecting Brain Tumor".**
- 6. Dr. Sanchaita Rajkhowa, Assistant Professor, Centre for Studies in Biotechnology and Bioinformatics was received first prize in Bioideathon at the National Seminar on Biological Sciences: A North East India Perspective Organized by Department of Biotechnology & Bioinformatics, North-Eastern Hill University, Shillong, Meghalaya, India In Collaboration with Bio-Resources Development Centre (BRDC), Shillong & BioNEST Biocubator facility, NEHU, Tura campus, Tura, Meghalaya, on February 28, 2023 – March 1, 2023.**

## **Awards and Recognition received by group members**

1. **Phalgun Chetia, Department of Life Sciences was awarded Ph. D. degree under the guidance of Prof. D.S. Bora on “A study on diversity, molecular characterization and phylogenetic analysis of the Spiders in Kaziranga National Park, Assam”**
2. **Ranjida Ahmed, Department of Life Sciences was awarded Ph. D. degree under the guidance of Prof. D.S. Bora on “Study of soil acarine fauna in conventional organic and biorational tea plantation of upper Assam”**
3. **Trisha Rajguru, Department of Life Sciences was awarded Ph.D. degree under the guidance of Pro. D.S. Bora on “A study on antiplasmodial activity of non-petidic carbaldehydes”**
4. **Sri. Dibyojyoti Baruah, Department of Life Sciences was awarded Ph. D. degree under the guidance of Prof. Bijoy Neog.**
5. **Miss. Aandrishha Borthakur, Department of Life Sciences was awarded Ph. D. degree under the guidance of Prof. Bijoy Neog.**
6. **Miss Shyamalima Saikia, Research Scholar, doing Ph.D. under the guidance of Dr. Pankaj Chetia, Department of Life Sciences was received second position in oral presentation in Research & Industrial Conclave- Integration, 2023 organized by IITG.**  
**Title of the paper: Prevalence, antibiotic resistance profiling and molecular characterization of Extended-Spectrum  $\beta$ -lactamase producing *Acinetobacter baumannii* isolated from North East, India.**





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**SOCIAL SCIENCES**

## Papers Published in Journals

1. **Obja Borah Hazarika**, *Look (Act) East Policy and Northeast India: Reimagining the Space Through Institutional, Physical and Social Connectivity*, **International Studies, SAGE, 60(2), 2023, 176-196.**
2. **Obja Borah Hazarika**, *Everyday sexism in higher education: narratives of women in Indian academia*, **Journal of Gender Studies, Taylor and Francis, 2023, 1-12.**
3. **Kakoli Gogoi**, *Agrarian History of Pre-Colonial Assam: A Fresh Look Through the Travellers' Account*, **Shodhak: A Journal of Historical Research (ISSN-03029832) UGC Care Group-1. Vol.53, issue 01, no.05, Jan-April, 2023.**
4. **Kakoli Gogoi**, *Goddess Tradition and Workship of the Divine Feminine in Assam*, **Rabindra Bharati Journal of Philosophy, ISSN-09730087 (UGC Care), Vol XXIV, no-09.**
5. **Abhilash Boruah**, *Impact of social media on Political Discourse and Shaping Public Opinion: A Comprehensive Study on the Students of Dibrugarh University*, **International Journal for Multidisciplinary Research (IJFMR), E-ISSN: 2582-2160, Volume 5, Issue 5, September-October 2023.**

## Published Book Chapters

1. **Chandan Kumar Sarma**, *Vaishnavite Occult Practices in Medieval Assamese Society: A History of Acceptance and Defiance* in **Sajal Nag (ed.) Black Magic, Witchcraft and Occultism: Secret Cultural Practices in India, Routledge, 2023, pp. 35-60.**
2. **Jahnabi Gogoi Nath**, *Society, Belief and Practice: Witchcraft and Witch-Hunting in Assam* in **Sajal Nag (ed.) Black Magic, Witchcraft and Occultism: Secret Cultural Practices in India, Routledge, 2023, pp. 407-424.**
3. **Obja Borah Hazarika**, *The social, political, and institutional context of sustainability: a study of Indian agriculture*, in **M. Farooq et al. (ed.)**

*Sustainable Agriculture and the Environment*, Elsevier, 2023, pp.439-453, ISBN: 978-0-323-90500-8.

4. **Obja Borah Hazarika**, *Women as Witches, Women as Homo Sacer: A Study of Contemporary Witch Hunting* in **Sajal Nag (ed.) Black Magic, Witchcraft and Occultism: Secret Cultural Practices in India**, Routledge, 2023.
5. **Debajanee Bora**, *Structures of Gender Hierarchy in the Tea Gardens of Assam: Listening to a Few Narratives of Tea Garden Women Workers* in **Dr. K. Velumani (ed.) Changing Status of Women in Post Independence India**, Royal Book Publishing, ISBN: 9789395423298, pp.176-181.

### **Seminar/Workshop Organized**

1. **Department of History** organized an *online international seminar on Buddhism, Meditation and Buddhist Art and Architecture* in collaboration with **Dongguk University, WISE, South Korea** on **5 th December,2023**. **Prof. Park** from **Seon Meditation Centre, South Korea** and **Dr. Rashmi Rekha Bhuyan** and **Dr. Kakoli Gogoi** of the **Department of History, Dibrugarh University** presented papers in the seminar.
2. **Department of History** organized a *four days Field Work cum Workshop* from **5th to 8th May,2023** at **Charaideo archaeological site**.
3. **Department of History** organized *Prof. Sristidhar Memorial lecture* in collaboration with **Matak Autonomous Council** on **24 th February, 2023**.
4. **Department of History** organized a lecture programme on the topic “*Bhakti-Geet tradition of Medieval Assam with special reference to Shri Shri Aniruddhadeva.*” on **10 th May,2023**. The **Chief guest** as well as **speaker** of the lecture programme was **Smt. Tarali Sharma**, a renowned singer of **Assam**.
5. **Department of History** organized a *lecture on the occasion of Assam Divas/ Siu-ka-pha Divas* i.e on **2<sup>nd</sup> December,2023** delivered by **Dr. Sangeeta Gogoi**.
6. **Centre for Social Works Studies** organized *A Two Days Training Programme on Documentary Filmmaking* on **7 & 8 February, 2023**

7. Centre for Social Works Studies organized *A Workshop on Group Processes and Facilitation* by Pradyut Bhattacharjee on 9-11 February, 2023.
8. Centre for Social Works Studies organized *A talk on Community-Based Approaches in Water Works* to celebrate the International Day of Action for Rivers on 14/03/2023 by Mr. Keshab Krishna Chatradhara.
9. Centre for Social Works Studies organized *A Three days' Workshop on "Research Methodology"* from 27-29 March, 2023.
10. Centre for Social Works Studies organized *A talk on "Prakriti Hahityar Prashangikota aru prakriti Sangrakhyan"* by Mr. Soumyadeep Dutta, Director of Nature's Backon on 29/05/2023.
11. Centre for Social Works Studies organized *A Workshop on "Employment Enhancement Techniques"* by Mr. Anjan Choudhury on 8/6/23.
12. Centre for Social Works Studies organized *Workshop on "Basics of Gender and Sexuality"* by Mr. Rituparna Neog, Queer Right Activist on 15/06/23-16/06/23.
13. Centre for Social Works Studies organized *A one-day Inception Workshop on Community Library* on 17/06/23.
14. Centre for Social Works Studies organized *Seven days Training Programme on Water* in collaboration with NEIWT on 19<sup>th</sup>-25<sup>th</sup> June, 2023.
15. Centre for Social Works Studies organized *A talk on 'Mili to Milin- In India and USA'* by Mr. Milin Dutta, Queer Right Activists and Director of Anajori on 21/08/2023.
16. Centre for Social Works Studies organized *Two Days community consultation on environmental issues of Assam* in collaboration with NEADS on 28<sup>th</sup>-29<sup>th</sup> August, 2023.
17. Centre for Social Works Studies organized *A talk on "Disaster Management Work, Importance of Menstrual Hygiene and Rural Development"* by Mr. Iftikar Ahmed from Team Goonj on 30<sup>th</sup> August, 2023.
18. Centre for Social Works Studies organized *Workshop on "Theatre of the Oppressed"* by Ms. Shobha Raghavan, Theatre Activist, Bangalore, 5<sup>th</sup>-9<sup>th</sup> September, 2023.
19. Centre for Social Works Studies organized *Workshop on "Designing the Thought Process: A Survival Strategy"* by Mr. Anjan Choudhury, Director, SKILLFINITY, Guwahati on 15<sup>th</sup>-17<sup>th</sup> November, 2023.
20. Centre for Social Works Studies organized *Faculty Development Programme for the Research Scholars and Faculty members of colleges/universities/other*

*higher learning institutions, organised jointly by-E& ICT Academy, IIT Guwahati and Centre for Social Work Studies on 20<sup>th</sup>-25<sup>th</sup> November, 2023.*

- 21. Centre for Social Works Studies organized Workshop on “Land and Livelihood” in collaboration with Action Aid Association on 20<sup>th</sup>-21<sup>st</sup> November, 2023.**
- 22. Centre for Social Works Studies organized A round table consultation on ‘Climate Action Networking’ in collaboration with Peoples’ Action for Development (PAD).**

## Research Project

### Research Projects in Department of History:

Sl. No	Project Title	Total no. of Funding Agencies	Total Amount Received (Amount in Rupees)
1	Documentation of Built Heritage of the Brahmaputra Valley during Pre-Colonial Period.	Assam Govt.	Rs 11,40,000
2	Buranjir Abhidhan: A Dictionary of Terms & Phrases of the Assamese Buraji Chronicles.	Assam Govt.	Rs 5,60,000
3	Documentation & Timeline on Ahom History	OIL	Rs 6,00,000

## Awards and Recognition

- 1. Objha Borah Hazarika developed 5 credit MOOCS course - Global Politics, BA Political Science- Course Coordinator (60 modules).**
- 2. Objha Borah Hazarika developed 5 Credit MOOCS course- Issues in Contemporary World, BA History-Course Co-coordinator (60 modules).**

- 3. Objha Borah Hazarika received the 'Teacher Award', on 5 September 2023, Upendra Nath Gogoi Memorial, Dibrugarh University Teacher Award, (Humanities and Law, Social Sciences, Commerce and Management Science, Education).**

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## Research Articles Published in Journals

1. **Ritushmita Sharma**, *Of Rambuai and the Unsettling Lifeworlds: An Appraisal of Malsawmi Jacob's Zorami*, **DRISHTI: THE SIGHT (VOL XII, ISSUE I), 2023, ISSN: 2319-8281.**
2. **Ritushmita Sharma**, *"Nature is My Temple": Revisiting the contours of Ecofeminism in Alice Walker's The Temple of my Familiar"* , **SROTASWINI, VOLUME-VI, 2022-2023, ISSN: 2277-5277.**

## Books/ Book Chapters

1. **Ritushmita Sharma**, *"Shifting Paradigms: A Critical Probing into the Dialectics of Representation and Resistance in Khaled Hosseini's A Thousand Splendid Suns"* published in *NEOMA*, edited by **Dr. Chandramallika Hondikoi**, published by **Department of English, Naharkatiya College** , **ISBN: 978-93-92610-89-9.**
2. **Swati Kiran** , *Bharatiya MohilarAtmojivani aru Narir Samajik Awasthan*, **Panchajanya Publication, ISBN: 978-93-93855-94-7.**
3. **Bhagyashree Sarma**, *Tirthakaumudigranthen Pratiphalitani Pracinakamarupasya Bhougaliko padanani – ekam adhyayanam* in *Vagambhrini*, **Page Number: 181-187** , **Publisher: Publication House, Womens college, Tinsukia, ISBN: 978-93-91953-10-2.**



## **Conference hosted**

1. **TWO-DAY INTERNATIONAL CONFERENCE ON “ECOCRITICISM AND THE GLOBAL SOUTH: TRENDS, ISSUES AND CHALLENGES” on 6-7 October, 2023.**

**Total number of participants=86**

**Total number of papers presented= 81**

**Convener : Dr. Anurag Bhattacharyya**

**Co-Convener: Ritushmita Sharma**

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## Journal Papers

1. Himadri Barman & Debjani Deb, *Compliance of E-Waste (Management) Rules in the Government of Assam Offices at Dibrugarh, India*, **International Journal of Environment and Waste Management**; Vol. 32, No. 3.
2. Prakrit Saikia and Himadri Barman, *A stepwise audit framework for keyword selection and estimating visibility for low performing websites: a study of cmsdu.org*, Vol. 18, No. 2.
3. Prakrit Saikia and Himadri Barman, *A Systematic Analysis of Higher Educational Content Over Social Media for Engagement Optimization*, Vol. 21, No. 1.
4. Arshad Hussain, Pratim Barua and Tridib Ranjan Sarma, *Supply chain mapping for supply chain visualisation: Muga silk industry in Assam*, **Int. J. Indian Culture and Business Management**, Vol. 28, No. 3, pp.401–424.
5. Seema S. Singha, Lipi Bhuyan, *Bell and Brass Metal Craft : A Socio Economic Condition of Artisans of Assam*, **Journal of Emerging Technologies and Innovative Research**, Volume – 10, issue 7.
6. Seema S. Singha, Parag Gogoi, *Management Thoughts: Thoughts on Business Management Practices with reference to Assamese Proverbs*, **Aadhyatma: A Journal of Management, Spirituality and Human Values**, Volume – 10, issue 2.
7. Seema S. Singha, Angona Kashyap, *Priority Sector Lending with Special Reference to Education Loan*, **IOSR Journal of Business and Management**, Volume – 2, issue 6.
8. Seema S. Singha, Rijumani Kalita, *Training And Development Programme For Competency Development: A Case Study Of Jorhat Irrigation Division, Assam*, **Journal of the Asiatic Society of Mumbai**, Volume – 97, issue 1.
9. Seema S. Singha, Diksha Agarwal, *Tax Saving Avenues: A Study Exploring The Perception Of Individual Assesseees In Tinsukia Town, Assam*, **International Journal of Business and General Management (IJBGM)**, Volume:- 12 (1).

- 10. Kumud Chandra Goswami, Pankaj Sahu, *Achieving Sustainable Development through Financial Literacy of College Students: RBI Initiatives*, **International Management Review** volume:- 19.**
- 11. Kumud Chandra Goswami, Pankaj Sahu, *Private Banks Selling Financial Products: An Ethical Outlook*, **Adhyatma: A Journal of Management, Spirituality, and Human Values** Volume:- 7 No.1.**
- 12. Kumud Chandra Goswami, Pankaj Sahu, *Exploring the Impact of Financial Literacy on Cultivating Saving and Spending Behaviour among the Younger Generation*, **PIMT Journal of Research (PIMT JR)**, Volume:- 15, No. 4.**
- 13. Kumud Chandra Goswami, Pritom Sutradhar, *Financial Mis-selling in India: A regulatory Perspective*, **Pratibha – A Multilingual, Multidisciplinary Peer Reviewed National Annual Journal**, Volume:- VI.**
- 14. Jutimala Bora, Viveka Gupta, *Savings and Investment of Parents - An Analytical Study*, **International Scientific Journal of Journal of Engineering and Management**, Volume:- 2, Issue- 06.**
- 15. Jutimala Bora, Sunil Kumar Gupta, *Awareness among the retailers of Tinsukia Market about the Digital Payment*, **Sanshodak**, Volume:- 1.**
- 16. Jutimala Bora, Sunil Kumar Gupta, *Failure of Public Sectors Enterprises Lead Towards the Growth of Privatization*, **Rabindra Bharati Journal of Philosophy**, Volume:- xxiv, Issue- 03.**

### Conference Papers

- 1. Kumud Chandra Goswami, Pritom Sutradhar, *Credit Risk Analysis of the Microfinance Industry in India*, **National Seminar on “Impact of Co-operative Societies and Microfinance in Economic Development of Assam: Issues and Challenges” Organised By:- Department of Commerce, Sarupathar Collgee, Golaghat, Assam.****
- 2. Jutimala Bora, Sayantan Guha Mazumder, *Efficiency Dynamics in Sustainable Investments: A Data Envelopment Analysis of ESG and Ethical Mutual Funds*, **4<sup>th</sup> International Conference on “The Role of Innovation, Entrepreneurship, and Management for Sustainable Development (ICRIEMSD-2023) Organised By:- O P Jindal University, Raigarh in association with Sohar University, Oman and Jose Maria College, Philippines.****

3. **Jutimala Bora, Sunil Kumar Gupta, *Failure of Public Sectors Enterprises Lead Towards the Growth of Privatization, One Day Multidisciplinary International Conference on “Contemporary Global Challenges & Opportunities in Education, Languages, Science and Humanities” Organised By:- Department of English, I.N.M. PG College, Meerut and ICERT.***
  
4. **Jutimala Bora, Nang Rasami Thamoung, *Women’s Empowerment Through Financial Literacy in India, Two Day National Seminar on G20 and Economic Development Organised By:- Department of Commerce, Pacchung University College, Aizawl, Mizoram.***

### **Published Books**

#### **1. Bipasha Chetiya Barua**

**Title of the Book:- Business Organisation and Management**

**Authors:- (Co-Authors) Sanjay Rizal, Assistant Professor, Department of Commerce, Sarupathar College; Prasanta Poddar, Assistant Professor, Department of Commerce, Sarupathar College.**

**Publisher:-Kalyani Publishers**

**ISBN:-978-93-5540-519-7**

#### **2. Bipasha Chetiya Barua**

**Title of the Book:- Tourism Management**

**Authors:- (Co-Author) Sanjay Rizal, Assistant Professor, Department of Commerce, Sarupathar College**

**Publisher:- Kalyani Publishers**

**ISBN:- 978-935540-523-4**

## Published Book Chapters

1. **Himadri Barman**, *Understanding the Role of UX Design and Core Web Vitals for Engagement Optimization of E-Commerce Websites in India*; **Prakrit Saikia, Himadri Barman and Akash Sarkar**; 219 – 229, in **Current Research in Statistics and Allied Sciences**; **Dhruba Das and Kuki Kalpita Mahanta**; **Dibrugarh University**; **9788195195060**.
2. **Bipasha Chetiya Barua, Suraj Das**, *National Education Policy, 2020: A Review-Based SWOC Analysis in Implementation of NEP – 2020 and HEIs of Assam* **Page Numbers:- 15-27**, **Editors: Dr. Lohit Hazarika, Dr. Dadul Rajkonwar and Dr. Harini Patowary Das**, **Publisher:- Publication cell, Lakhimpur Commerce College, North Lakhimpur, Assam, ISBN:- 978-93-5779-838-9**.

## Awards and Recognition

1. **Prof. Seema S. Singha** received the Fellow Award during the 74<sup>th</sup> All India Commerce Conference hosted by University of Delhi on 15<sup>th</sup> December, 2023.

## Awards and Recognition received by group members

1. **Prakrit Saikia** working under the supervision of Dr Himadri Barman was awarded PhD on September 1, 2023 by Dibrugarh University for the thesis titled, “Social Media Content and Communication Development of Higher Educational Institutions”.

2. **Parag Gogoi** working under the supervision of **Prof. Seema S. Singha** was awarded PhD on 03/07/2023 by Dibrugarh University for the thesis titled, “Management Thoughts in Assamese Saying with Reference to Saying of DAK and Assamese Proverbs”.
3. **Bhaskarjyoti Chakravarty** working under the supervision of **Prof. Kumud Chandra Goswami** was awarded PhD on 01/03/2023 by Dibrugarh University for the thesis titled, “**Role of Tocklai Tea Research Institute in Management of Tea Production in India**”.
4. **Ujjal Bhuyan** working under the supervision of **Prof. Kumud Chandra Goswami** was awarded PhD on 01/06/2023 by Dibrugarh University for the thesis titled, “**Personal Financial Planning of School Teachers: A Study in Jorhat District, Assam**”.
5. **Pritom Sutradhar** working under the supervision of **Prof. Kumud Chandra Goswami** was awarded PhD on 01/11/2023 by Dibrugarh University for the thesis titled, “**Mis-selling of Financial Products: An Empirical Study from Customers’ Perspective**”.
6. **Debanuj Khound** working under the supervision of **Bipasha Chetiyā Barua** was awarded PhD on 01/02/2023 by Dibrugarh University for the thesis titled, “**Impulse Buying Behaviour of Online Shoppers with Special Focus on Select High End Products**”.
7. **Gargi Sarma** working under the supervision of **Bipasha Chetiyā Barua** was awarded PhD on 01/02/2023 by Dibrugarh University for the thesis titled, “**Role of Family Dynamics in Determining the Level of Pester Power for Designing Advertisements in Select Districts of Assam**”.

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## Research Articles Published in Journals

1. Kayuki, F., & Talukdar., D.B. , *A review paper on representation of males and females in Academic Leadership in Universities*, **International Journal of Multidisciplinary Education Research**. 12 (3), 63-65.
2. Borkakoty, D., & Talukdar., D. B., *Innovative practices of Classroom curriculum transactions*, **Dogo Rangsang Research Journal**. 13(4).19-26.
3. Borkakoty, D., & Talukdar., D. B., *Quality of curriculum at the elementary teacher education programme (ETEP): its determinants & hindrance*, **Education and Society**. 47(2). 140-150.
4. Borkakoty, D., & Talukdar., D. B., *Evolving nature of curriculum transactions in the twenty-first century*, **Rabindra Bharati Journal of Philosophy**. 24(12). 102-111.
5. Talukdar., D.B., *National Education Policy 2020 through a Gender Lens. Souvenir of Seminar on National Education Policy 2020 , Issues and Challenges, All India Federation of Diploma Engineers*.
6. Niharika Borgohain, *A short review on practice of mindfulness as treatment in obsessive compulsive disorder*, **Journal of Applied Consciousness Studies**, Vol 12, Issue 1.

## Books/ Book Chapters

1. Shrutidhara Mahanta, *An Exploration of Female Academics' Resiliency during COVID-19 with Special Reference to North Eastern Part of India*, in **Female Academics' Resiliency during the COVID-19 Pandemic - Intercultural Perspectives**. Editors: Charmaine Bissessar, University of Guyana. Publisher: Springer Nature.

## Articles

1. Talukdar, D. B. (2023, March 27), *The National Education Policy 2020 and Higher Education*, **The Assam Tribune**.

## Recognitions and Awards

1. Prof. D.B.Talukdar presented the following papers :

“Paradigm shift in Educational Research”. 34th Lectures of the R.G. Kothari Lecture Series, organized by Council for Teacher Education Foundation. (CTEF, Gujrat Sector) on 28th March, 2023.

“National Level Seminar on Emerging Trends and Innovative Practices in Teacher Education, organized by Journal Education & Culture, Kalyani, Naida. On 06th October, 2023.

2. **Niharika Borgohain** was registered as a Clinical Psychologist under Rehabilitation Council of India with CRR NO. A95161.