

CURRICULUM VITAE

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INFORMATION REGARDING EMPLOYMENT

P.G. Teaching & Research Experience: Since 2003

Details of Employment

| | | |
|---------------------|---|---|
| Lecturer | Dept. of Chemistry, Nagaland University | 22 nd July 2003 – 21 st July 2007 |
| Senior Lecturer | Dept. of Chemistry, Nagaland University | 22 nd July 2007 – 7 th October 2012 |
| Associate Professor | Dept. of Chemistry, Nagaland University | 8 th October 2012 – 7 th October 2015 |
| Professor | Dept. of Chemistry, Nagaland University | 8 th October 2015 onwards |

Teaching Assignments

| Courses Taught/ Presently Teaching | | | | | |
|---|---|--|--|----------|---|
| CHEM-411 | Basic Concepts of Inorganic Chemistry | | | CHEM-412 | Structure, bonding reactive intermediates in org. molecules |
| CHEM-421 | Chemistry of Main Group, Transition and Inner Transition Elements | | | CHEM-422 | Oxidations, Reductions and Carbonyl reactions |
| CHEM-531 | Organometallic and Bioinorganic Chemistry | | | CHEM-532 | Heterocyclic, Bioorganic Chemistry |
| CHEM-544(A) | Green, Analytical and Sustainable Chemistry | | | CHEM-601 | Research methodology (Ph.D.) |
| CHEM-543(B) | Biological Chemistry | | | CHEM-602 | Advances in Chemistry (Ph.D.) |

Highlights of Research Activities

| Ph.D. Guidance | M.Sc. Projects Guided | Research Publications Total = 72 | | | Projects | | Conferences/ Seminars | | |
|----------------|-----------------------|-------------------------------------|--------|-------|---------------------|----------|-----------------------|-----------|---|
| | | Patents | Papers | Books | Completed | On-going | Participated | Organized | |
| 10 | 9 | 53 | 11 | 58 | 2 books + 1 chapter | 5 | 1 | 42 | 7 |

ADMINISTRATIVE EXPERIENCE

Responsibilities Assigned

1. Head, Department of Chemistry, Nagaland University, 22nd April 2022 to 21st April 2025.
2. Planning Officer, Nagaland University, 2016 – 2021.
3. MHRD NIRF Nodal Officer, 2017-2020.
4. DST-FIST coordinator, 2022 onwards.

Other University Assignments

- Coordinator, Committee for Indigenous Traditional Knowledge of Nagaland, 2025 ongoing.
- Cell in-charge, IPR Cell, Nagaland University, 28-10-23 to 06-11-2024.
- Founder and Convener, WTP-Incubation Hub, Nagaland University, Lumami
- Member, Committee to examine the UGC guidelines for establishment of Research and Development Cell (RDC) in Higher Education Institutions, 2022.
- University nominee to the governing body of People's College, Mokokchung, 2022-2024.
- University nominee to the Board of Studies, St. Joseph's College, Jakhama, 2021-24, 2024-25.
- University nominee to the Board of Studies, Kohima Science College, Jotsoma, 2020-22, 2024-26
- Member, Official Language (Hindi) Implementation Committee, from July, 2021.
- Member, Editorial Board for Annual Report, Nagaland University, 2020-2023.
- Member, Prospectus review and compilation committee for PG, Ph.D. programmes, 2019-2021.
- Member, Committee for MHRD's 17-by-17 Action Plan.
- Member, Digital Learning Monitoring Cell, Nagaland University.
- Member, Planning Committee for Silver Jubilee Celebrations, Nagaland University, 2019.
- Member, Executive Committee, Bioinformatics Infrastructure Facility Centre, 2017-2019.
- Member, Committee for framing syllabus for the written test for junior level posts.
- Member, Committee for framing policy on Open Educational Resources. 19th July 2017
- Programme Coordinator for Organizing 24th NU Foundation Day, 2017.
- Convener of Management Committee for opening of Nagaland University School, 2012.
- Member for finalizing Rules and Regulations for seeking admission into M.Phil. /Ph.D. programmes. Order dated: 20th September 2012
- Member, Nagaland University Innovation Cell, from 2012 onwards
- Warden of Iliki Women Research Scholars' Hostel, 2011 – 2014
- Warden of Aliper Women's Hostel, 2011 – 2014

Member of University Statutory Bodies

1. Chairperson (Former), BoS Chemistry, as Head, Department of Chemistry
2. Chairperson (Former), BPGS Chemistry, as Head, Department of Chemistry
3. Chairperson (Former), BUGS Chemistry, as Head, Department of Chemistry
4. Member of Academic Council, as Professor

5. Member of Board of Research Studies, 2023-2025.
6. Member of School Board of Sciences, 2005 to 2007, 2011 to 2013, 2016 onwards
7. Member of BoS in Mathematics, 2023-2026
8. Member of BoS in Forestry, 2023-2026
9. Member of BPGS in Chemistry, 2011 to 2014, 2014 to 2017, 2017 to 2020, 2020-2023
10. Member of BPGS in Environmental Sciences, 2022-2024.
11. Member of BUGS in Mathematics, 1-11-2018 to 31-10-2021
12. Member of BUGS in Chemistry, 2005 – 2008, 2018-2020, 2020-2023
13. Member of BPGS in Mathematics, 26-02-2013 to 25-02-2016
14. Member, Planning Board, From 11-02-2016-2021; from 2022 for three years as HoD.
15. Member, Building Construction Committee, From 11-02-2015

Other Assignments

- Member of Subject Expert Committee for ‘Environment, Climate and Sustainable Development (ECSD) under the GoI DST WISE (Women in Science and Engineering)-SCOPE Programme, from 2024 for three years

ACADEMIC INFORMATION

Educational Qualifications

| Exam. passed | Year of Passing | Division/ Class | Percentage of marks | Name of the Board/ University |
|---------------------------|-----------------|------------------------------|---------------------|--------------------------------------|
| Matriculation | 1989 | I | 70 % | MBOSE, Meghalaya |
| P.U. (Sc.) | 1991 | I | 75.8% | N.E.H.U., Shillong |
| B.Sc (Hons.) | 1994 | I (1 st position) | 74 % | NEHU, Shillong |
| M.Sc. (Chemistry) | 1996 | I (2 nd position) | 71% | NEHU, Shillong |
| Ph.D. (Chemistry) | 2002 | - | Awarded | IIT, Guwahati |
| M.Phil. (Women’s Studies) | 2010 | I | 70% | The Global Open University, Nagaland |
| D.Sc. (Chemistry) | | | On-going | Nagaland University |

| Title of the Ph.D. thesis | Ph.D. Thesis guide |
|---|---|
| Peroxovanadate(V) Mediated Synthesis of Quaternary Ammonium Tribromides and Oxidative Organic Brominations, Synthesis and Structural Assessment of Newer Heteroligand Diperoxo vanadates(V) And Efficacy of a New Chromium(VI) Reagents | Prof. Mihir K. Chaudhuri, F.A.Sc., F.N.A. Dept. of Chemistry IIT Guwahati |

| Title of the M.Phil. thesis | M.Phil. Thesis guide |
|---|---|
| Women In Scientific Research: Explaining Gender Inequalities In India | Prof. Sanjib Baruah , Professor of Political Studies, Bard College, Annandale-on-Hudson, New York, USA |

Title of the D.Sc. thesis

A Chronological Study of Chemistry in India from 1500 BC to the 21st Century: Linking Ancient Chemistry Knowledge with Modern Day Research Through Computational Simulation

Awards

1. **North East's Woman Leader Award** by the World Women Leadership Congress Awards, **2023**.
2. National Environmental Science Academy **Women Excellence Award-2021**.
3. **STE Meritorious Award for Excellence in Academics and Research, 2021**.
4. Selected for Indian Academy of Sciences 'summer fellowship', **2005**
5. CSIR, Individual Senior Research Fellowship, **2000-2003**.
6. IIT Research Fellowship, **1998-2000**.
7. Qualified GATE examination, **1998**.
8. Selected for National Merit Scholarship in the year **1994**.
9. Rank certificate received in **1994** for securing first position in B.Sc. Hons. (Was awarded University Merit Scholarship.)
10. Selected for National Merit Scholarship in the year **1989**.

RESEARCH ACTIVITIES AND EXPERIENCE IN CHEMISTRY

Areas of Research

- Development of Green Reagents and Reaction Methodologies
- Pharmaceutical Assessment of Small Organic Molecules
- Development of Green Absorbents for Environmental Remediation

Ph.D. Guidance

| S. No. | Name of the Student | Title of the thesis | Status |
|--------|-----------------------|--|---|
| 1. | Dr. Latonglila Jamir | Synthesis of Newer Tribromides and Studies of Some Oxidative Organic Transformations | Completed, Ph.D., 2012 |
| 2. | Dr. Alimenla B. | Studies on Quaternary Ammonium Tribromides and Peroxovanadates Mediated Organic Halogenations | Completed, Ph.D., 2012 (as co-supervisor) |
| 3. | Dr. Anil Kumar | Studies on Organic Transformations Reactions Using Different Quaternary Ammonium Tribromides | Completed, Ph.D., 2012 |
| 4. | Dr. Manob Jyoti Borah | Synthesis and Characterization of some Oxygen and Nitrogen Donor Mixed Ligand Complexes of Transition Metal Ions | Completed, Ph.D., 2012 |
| 5. | Dr. Bernadette Kuotsu | Study of New Environmentally Benign Pathways for Certain Organic Transformations | Completed, Ph.D., 2018 (as co-supervisor) |
| 6. | Dr. Kikoleho Richa | Synthesis, <i>in Silico</i> and <i>in Vitro</i> Studies of | Completed, Ph.D., 2021 |

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|-----|-------------------------|--|---|
| | | isothiocyanates for Assessing their Anticancer, Antioxidant and Antimicrobial Activities | |
| 7. | Dr. Aola Supong | Studies on surface modifications of activated carbon for removal of organic and biological pollutants from water | Completed, Ph.D., 2021 (as co-supervisor) |
| 8. | Dr. Rituparna Karmaker | Computational and Mechanistic Investigations of Some Quaternary Ammonium and Polymeric Tribromides | Completed, Ph.D., 2023 |
| 9. | Dr. Apuchu R. Sangtam | Synthesis and Characterization of Mixed Metal Layered Hydroxides (MMLH) and Evaluation of their Adsorbent, Antimicrobial and Thermo-kinetic Properties | Completed, Ph.D., 2023 (co-supervisor Dr.R.L. Goswamee, CSIR-NEIST, Jorhat) |
| 10. | Dr. Naruti Longkumer | Green Synthesis of Halo-Organic Derivatives and Studies on their Biological Activities | Completed, Ph.D., 2023 |
| 11. | Ms. Angunuo Khieya | <i>In-Silico</i> Modeling of Natural Organohalogens to Assess their Biological Activity and the Role of Halogen Functionality on their Properties | Ongoing, registered, 2018 |
| 12. | Mr. Basanta Singha | <i>In-Silico</i> Design, Synthesis and Pharmaceutical Assessment of Novel Bromophenolic Compounds | Ongoing, registered, 2019 |
| 13. | Ms. Narola Imchen | Chemical Assessment of Axone (fermented soyabean), an indigenous food item of Nagaland | Ongoing, registered, 2021 |
| 14. | Mr. Partha Pratim Gogoi | Synthesis and Pharmaceutical Assessment of Chalcone Derivatives for Evaluating their Antimicrobial Properties | Ongoing, registered, 2022 |
| 15. | Ms. Penlisola Longkumer | Computational and Experimental Assessment of the Pharmaceutical Properties of Small Isothiocyanate Derivatives | Ongoing, registered, 2022 |
| 16. | Mr. Nichan Boruah | Studies on the Multifacted Applications of Selected Small Organic Molecules | Ongoing, registered, 2023 |
| 17. | Ms. Beware Dkhar | Assessment of the Pharmaceutical Potential of Isothiocyanate Derivatives Using a Combined Experimental and Computational Approach | Ongoing, registered, 2024 |
| 18. | Mr. Mhasilhoutuo Pucho | Synthesis and <i>in vitro</i> Pharmaceutical Evaluation of Chalcone Derivatives | Ongoing, registered, 2024 |
| 19. | Ms. Ilavanalangki Lytan | Experimental and Computational Assessment on the Pharmaceutical Potential of Selected Pyridocoumarin Derivatives | Ongoing, registered, 2024 |

M.Sc. Project Guidance

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R&D and Extension Projects

| S.No. | Title of Project | Funding Agency | Amount | Period |
|-------|--|----------------|-------------------|-------------|
| 1. | Studies on Selected Bromo-Organic Compounds to Assess their Antibacterial and Antioxidant Properties | DBT | Rs.46,75,336/- | 2021-2026 |
| 2. | The study of gamma, radon, thoron and their progeny level in Mokokchung and Zunheboto district of Nagaland (as Co-PI) | DAE-BRNS | Rs. 39,20,700/- | 2016-2019 |
| 3. | Greener Synthetic Protocols for Design And Development Of Quaternary Ammonium Tribromides And Reactivity Studies Thereof | UGC | Rs.14,46,100/- | 2015-2018 |
| 4. | Women Technology Park | DST – SEED | Rs. 51, 86, 337/- | 2012 - 2016 |

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|----|---|------------|---------------|------------|
| 5. | Women in Scientific Research – Examining the Challenges and Identifying Their Needs | DST-NCSTC | Rs.5,50,000/- | 2011 -2012 |
| 6. | Design and development of peroxy-metal mediated environmentally benign reagents and reactions thereof | DST – SERC | Rs.21,94,800- | 2004- 2008 |

Research Publications

Patents

1. A Process for Synthesizing 4-Bromo-2-Methylphenylisothiocyanate for Wound Healing, Nichan Boruah, Bendangtula Walling, Basanta Singha, Penlisola Longkumer, Partha Pratim Gogoi, Sudharsan Parthasarathy, Kikoleho Richa, Giridharan Bupesh, **Upasana Bora Sinha**, Indian Published Patent; Application No: 202431092998 dated 12-02-**2025**.
2. Aktivkohlebeimischtes Biofiltersystem zur nachhaltigen Entfernung von Bakterien aus Wasser (Biofilter System mixed with Activated Carbon for the Sustainable Removal of Bacteria from Water), Aola Supong, Dipak Sinha and **Upasana Bora Sinha**, German Utility Patent no:, Patent publication date 10.07.**2024**.
3. Ein Rechnergestutztes System zur Bwertung des Potenzias von halogenierten Gentisylakoholderivaten als pharmazeutishe Wirkstoffe (*Evaluation of Some Designed Halogenated Variants of Gentisyl Alcohol: Molecular Docking, DFT, Druglikeness, and ADMET Studies for Assessing Biological Properties*), Basanta Singha, Nichan Boruah, Partha Pratim Gogoi, Penlisola Longkumer, **Upasana Bora Sinha**, German Utility Patent no : 20 2024 103 106, Patent publication date 27.06.**2024**.
4. Ein System zur umweltfreundlichen und schnellen Synthese vonBromographen (BG) unter Verwendung eines umweltfreundlicheren Bromierreagenz, (*A System for the Environmentally Friendly and Rapid Synthesis of Bromographene (BG) using a more Environmentally Friendly Brominating Agent*), Kumar Suraj, Rangappa Dinesh, Singha Basanta, Sinha Dipak, **Sinha Upasana Bora** and Supong Aola, Registered German Utility Patent no : 20 2024 101 833, Patent publication date 22.04.**2024**.
5. Ein System zur umweltfreundlichen Synthese von Tetrabutylphosphoniumtribromid (TBPTB) and organischen Verbindungen durch das Reagenz (*A System for the Environmentally Friendly Synthesis of tetrabutylphosphonium tribromide (TBPTB) and Organic Compounds with the Reagent*), Imkongyanger Ao, Ketiyala Ao, Latonglila Jamir, Tsenbeni N. Lotha, Vevosa Nakro, Vimha Ritse, Lemzila Rundithongru, Upasana Bora Sinha, German Utility Model No. 20 2024 101 576 Publication Date: 08.05.**2024**
6. Activated Carbon-Amended Biofilters for Sustainable Removal of Total Heterotrophic, Coliform and Escherichia Coli Bacteria from Water, Application No.202331084823 A, Aola Supong, Temsurenla Jamir, T Ajungla, Pranjal Bharali, **Upasana Bora Sinha** and Dipak Sinha, Indian Published Patent, Publication date: 19.01.**2024**
7. A Process for the Synthesis of Antibacterial Activity Exhibiting Brominated Activated Carbon and Product Thereof, Application No.202331055555 A, Aola Supong, Parimal Chandra Bhomick, Suraj Kumar, Shisak Sharma,Dipak Sinha and **Upasana Bora Sinha**, Indian Published Patent, Publication date: 29.09.**2023**
8. Process for the Preparation of Metal Acetylacetones, B.M.Choudary, M.L.Kantam, M. K. Chaudhuri, S. K. Dehury, S. S. Dhar, **U. Bora**, WO 2004/056737 A1, Publication date: 08.07.**2004**
9. Process for Preparing Pyridinium Fluorochromate(VI), M. K. Chaudhuri, S. K. Dehury, **U. Bora**, J.Nath, B.M.Choudary, M.L.Kantam, WO 2004/054976 A1, 01.07.**2004**

10. Process for Preparing Quaternary Ammonium Tribromides, M. K. Chaudhuri, **U. Bora**, S. K. Dehury, D. Dey, S. S. Dhar, W. Kharmawphlang, B.M.Choudary, M.L.Kantam, WO 2004/054962 A1, 01.07.2004
11. A Process for the Preparation of the Isolable and Storage Stable Tetrabutyl ammonium Tribromide, **U. Bora**, M. K. Chaudhuri, A. T. Khan, B. K. Patel, 28/CAL/2000 of 19 January, 2000, 10.03. 2006.

Books Written

1. Quaternary Ammonium Tribromides (QATBs) - Green Reagents for Organic Brominations (ISBN No : 978-3-659-51351-0), **Upasana Bora Sinha**, Lambert Academic Publishing, Germany, 2014
2. Aspects of Green Chemistry (ISBN No: 978-93-83403-01-1), **Upasana Bora Sinha**, M.R. Publisher, Guwahati, 2014

Chapters in Books

1. **Name of Chapter:** Metal Acetylacetones: Newer Strategies for Direct Synthesis and Reactions, Evidence for Ion-Association/ Ion-Pair Formation in M(acac) and Mass Spectrometry (Chapter 4 of the book.); **Title of Book:** “Chemistry and Applications of Alkoxy, Aryloxy and Allied Derivatives of Elements” (ISBN 10:8176111716 , ISBN 13: 9788176111713), M. K. Chaudhuri, **U. Bora**, (Ed. R Bohra, A Singh and R C Mehrotra), RBSA Publisher, Rajasthan, 2003

Papers Published

1. A Holistic Computational Exploration of AZD7762 as a Potent Selective Modulator of LXRA, LXRB and FXR: An Underexplored Pathway in Cancer Therapeutics, Basanta Singha; Partha Pratim Gogoi; Penlisola Longkumer; Benzir Ahmed; Nichan Boruah; Bipul Bezbarua; Upasana Bora Sinha, *Computers in Biology and Medicine* (Elsevier), 194, 110433, 2025. [I.F.:7]
2. A Review on Varied Mechanistic Pathways of Four Major Isothiocyanates in Cancer Suppression and their Synergic action in Cancer Therapy, Beware Dkhar, Mhasilhoutuo Pucho, Ilavanalangki Lytan, Nichan Boruah, Penlisola Longkumer, Partha Pratim Gogoi, Basanta Singha and Upasana Bora Sinha, *Mini-Reviews in Medicinal Chemistry* (Bentham), Accepted for publication, 2025. [I.F.:2.9]
3. Photocatalytic Degradation of Chlorpyrifos using Fe-doped ZnO/ Activated Carbon Nanocomposite, Soremo L. Ezung, Mridushmita Baruah, Shisak Sharma, Raplang Steven Umdor, Imotila T. Longchar, Bupesh Gridharan, Upasana Bora Sinha, Dipak Sinha, *Journal of Molecular Structure* (Elsevier), 1319 (2), 139434, 2024 [I.F.:4]
4. Synthesis and Characterization of Brominated Activated Carbon Using a Green Strategy: Combined Experimental and Theoretical Study, Aola Supong, Parimal Chandra Bhomick, Rituparna Karmaker, Dipak Sinha and Upasana Bora Sinha, *Chemical Physics Lett.* (Elsevier), 850, 141477, 2024.[I.F.: 2.8]
5. Sustainable Synthesis of Guanidine Dervatives and Computational Assessment of their Antidiabetic Efficacy, Imkongyanger, Kikoleho Richa, Tsenbeni N. Lotha, Ketiyala Ao, Lemzila Rudthongru, Vevosa Nakro, Vimha Ritse, Nima D. Namsa, Pranay Punj Pankaj, Upasana Bora Sinha and Latonglila Jamir, *Endocrine, Metabolic and Immune Disorders-Drug Targets* (Bentham), July 2, 2024 [I.F.: 2.0]

6. Preparation of Co-doped TiO_2 activated carbon nanocomposite and its photocatalytic degradation of Soremo phenol wastewater, Mridushmita Baruah, Suraj Kumar, Soremo L Ezung, Latonglila Jamir, Upasana Bora Sinha, Dipak Sinha, *Inorganic Chemistry Communications* (Elsevier), 166, 112644, **2024**. [I.F.: 3.8]
7. Some Co(II)-Schiff Base Complexes as Promising Anticancer Agents: A DFT and Molecular Docking Study, Pratyashee Barukial, Benzir Ahmed, Basanta Singha, Pankaj Chetia, Nipu Kumar Das, Samir Thakur, Upasana Bora Sinha, Bipul Bezbaruah, *Indian Journal of Biochemistry and Biophysics*, 61, 6, **2024**. [I.F.: 1.4]
8. Evaluating Terrestrol A as an Inhibitor Against SARS-CoV-2 and Invasive Fungal Pathogens: A Comprehensive Computational Analysis, Basanta Singha, Bhoomika Arora, Rituparna Karmaker, Kikoleho Richa, Naruti Longkumer, Haider Thaer Abdulhameed, Mohammad Abid, and Upasana Bora Sinha, *ChemistrySelect* (Wiley-VCH), 12(9), **2024**. [I.F.: 2.3]
9. Evaluation of Some Designed Halogenated Variants of Gentsyl Alcohols: Molecular Docking, DFT, Druglikeness, and ADMET Studies for Assessing Biological Properties, Basanta Singha, Partha Pratim Gogoi, Penlisola Longkumer, Nichan Boruah and Upasana Bora Sinha, *Journal of Applicable Chemistry*, 13(2), **2024**. [Peer Reviewed]
10. Experimental and Theoretical Investigations on the Antibacterial Activity of some Bromoaniline Compounds, Naruti Longkumer, Kikoleho Richa, Rituparna Karmaker, Basanta Singha and Upasana Bora Sinha, *Anti Infective Agents* (Bentham), 21, 3, **2023**. [Scopus Cite Score: 1.2]
11. A non-isothermal thermokinetic degradation study of the mesoporous Ni-Co layered double hydroxide using isoconversional approaches, Apuchu R Sangtam, Pinky Saikia, Rajib L Goswamee, Upasana B Sinha, *Materials Today Chemistry* (Elsevier), 29, 101426, **2023**. [I.F.: 7.3]
12. Green Synthesis of mesoporous Ni-Co layered double hydroxide and its application for removal of 2,4-dinitrophenol from water: A theoretical study complemented by the first principle density functional theory-Monte Carlo approach, Apuchu R. Sangtam, Pinky Saikia, Rajib Lochan Goswamee, Dipak Sinha and Upasana Bora Sinha, *Journal of Environmental Chemical Engineering* (Elsevier), 10, 108378, **2022**. [I.F.: 7.7]
13. A Computational Approach to Understanding the Mechanism of Aromatic Bromination using Quaternary Ammonium Tribromides, Rituparna Karmaker, Naruti Longkumer, Kikoleho Richa, Dipak Sinha, Upasana Bora Sinha, *Journal of the Indian Chemical Society* (Elsevier), 99, 100574, **2022**. [I.F.: 1.3]
14. Mechanistic insight into the antibacterial activity of isothiocyanates via cell membrane permeability alteration, Kikoleho Richa, Temsurenla, Aola Supong, T Ajungla and Upasana Bora Sinha, *Pharmaceutical Chemistry Journal* (Springer), 56:3, **2022**. [I.F.: 0.9]
15. Synthesis and Characterization of Ni-doped TiO_2 activated carbon nanocomposite for the photocatalytic degradation of Anthracene, Mridushmita Baruah, Soremo L. Ezung, Shisak Sharma, Upasana Bora Sinha, Dipak Sinha, *Inorganic Chemistry Communications* (Elsevier), 144, 109905, **2022**. [I.F.: 3.8]
16. Synthesis and characterization of Co(II)-Co(III) LDH and $\text{Ac}@\text{Co(II)-Co(III)}$ LDH nanohybrid and study of its application as bactericidal agents, Apuchu R. Sangtam, Kikoleho Richa, Pinky Saikia, Naruti Longkumer, Upasana B. Sinha, Rajib L. Goswamee, *Results in Chemistry* (Elsevier), 4, 100671, **2022**. [I.F.: 2.3]

17. Density Functional Theory Calculations of the Effect of Oxygenated Functionals on Activated Carbon towards Cresol Adsorption, Aola Supong, Upasana Bora Sinha and Dipak Sinha, *Surfaces* (MDPI), 5, 280-289, **2022**. [I.F.: 2.0]
18. Facile Green Synthesis of Bromoaniline Molecules: An Experimental and Computational Insight into their Antifungal Behaviour, Naruti Longkumer, Kikoleho Richa, Rituparna Karmaker, Basanta Sinha, and Upasana Bora Sinha, *Asian Journal of Chemistry*; 34, 12, **2022**. (Scopus Indexed)
19. An environmentally benign synthesis of Tetrabutylphosphonium tribromide (TBPTB)– a versatile and efficient phase transfer reagent for organic transformations, Visekhonuo Kuotsu, Vevosa Nakro, Imkong Yanger, Tsenbeni N. Lotha, Ketiyala Tzudir, Upasana Bora Sinha & Latonglila Jamir, *Green Chemistry Letters and Reviews* (Taylor&Francis), 14:2, 424-433, **2021**. [I.F.: 6.0]
20. Rationalizing between the efficiency and greenness of solvents – a computational study of their influence on TBATB, Rituparna Karmaker, Dipak Sinha and Upasana Bora Sinha, *Sustainable Chemistry and Pharmacy* (Elsevier), 100387, 20, **2021** [I.F.: 6.0]
21. Experimental and theoretical insight into the adsorption of phenol and 2,4-dinitrophenol onto *Tithonia diversifolia* activated carbon, Aola Supong, Parimal Chandra Bhomick, Rituparna Karmaker, Soremo L Ezung, Latonglila Jamir, Upasana Bora Sinha, Dipak Sinha, *Applied Surface Science* (Elsevier), 529, 147046, **2020**. [I.F.: 6.7]
22. Rationale for antioxidant interaction studies of 4-Bromo-1-isothiocyanato-2-methylbenzene – An experimental and computational investigation, Kikoleho Richa, Rituparna Karmaker, Toshinungla Ao, Naruti Longkumer, Basanta Sinha and Upasana Bora Sinha, *Chemical Physics Letters* (Elsevier), 753, 137611, **2020**. [I.F.: 2.8]
23. Synthesis, *in-vitro* evaluation, molecular docking and DFT studies of some phenyl isothiocyanates as anticancer agents, Kikoleho Richa, Rituparna Karmaker, Naruti Longkumer, Vishal Das, Pulak Jyoti Bhuyan, Mintu Pal and Upasana Bora Sinha, *Anti-Cancer Agents in Medicinal Chemistry* (Bentham) 19, 18, 2211-2222, **2019**. [I.F.: 2.5]
24. Biomass-derived activated carbon for removal of ^{222}Rn from air, P. C. Bhomick, S. Jamir, U.B. Sinha, B.K. Sahoo, D. Sinha, *Sustainable Chemistry and Pharmacy* (Elsevier), 14, 100193, **2019**. [I.F.: 6.0]
25. Green Synthesis of Bromo-organic Compounds and Investigations on their Antibacterial Properties: an Experimental and Computational Approach, Naruti Longkumer, Kikoleho Richa, Rituparna Karmaker, Visekhonuo Kuotsu, Latonglila Jamir, Pranjal Bharali and Upasana Bora Sinha, *Acta Chemica Slovenica* (Slovenian Chemical Society), 66, 276-28, **2019**. [I.F.: 1.2]
26. A combined experimental and theoretical investigation of the adsorption of 4-Nitrophenol towards activated biocarbon, A. Supong, P.C. Bhomick, M. Baruah, C. Pongener, U.B. Sinha, D. Sinha, *Korean Journal Of Chemical Engineering* (Springer), 36, 2023-2034, **2019**. [I.F.: 2.7]
27. Adsorptive removal of Bisphenol A by biomass activated carbon and insights into the adsorption mechanism through density functional theory calculations, A. Supong, P.C. Bhomick, M. Baruah, C. Pongener, U.B. Sinha, D. Sinha, *Sustainable Chemistry and Pharmacy* (Elsevier), 13, 110159, **2019**. [I.F.: 6.0]
28. A theoretical and Experimental Study on the Effect of Cationic Moiety of Quaternary Ammonium Tribromides in Bromination Reactions, Rituparna Karmaker, Neivotsonuo B. Kuotsu, Aniruddha Ganguly, Nikhil Guchhait and Upasana Bora Sinha, *Chemical Physics Letters* (Elsevier), 711, 118-126, **2018**. [I.F.: 2.8]

29. Adsorption of fluoride onto activated carbon synthesized from *Manihot esculenta* biomass—Equilibrium, kinetic and thermodynamic studies, Chubaakum Pongener, Parimal Chandra Bhomick, Aola Supong, Mridushmita Baruah, Upasana Bora Sinha and Dipak Sinha, *Journal of Environmental Chemical Engineering* (Elsevier), 6, 2382–2389, **2018**. [I.F.: 7.7]
30. A novel one-pot synthesis of isothiocyanates and cyanamides from dithiocarbamate salts using environmentally benign reagent tetrapropyl ammonium tribromide, Neivotsonuo Bernadette Kuotsu, Latonglila Jamir, Tovishe Phucho and Upasana Bora Sinha, *Acta Chimica Slovenica* (Slovenian Chemical Society), 64, 832–841, **2017**. [I.F.: 1.2]
31. Sand-supported bio-adsorbent column of activated carbon for removal of coliform bacteria and *Escherichia coli* from water, C. Pongener, P. Bhomick, S. Upasana Bora, R. L. Goswamee, A. Supong, D. Sinha, *International Journal of Environmental Science and Technology* (Springer), 1897-1904, **2017**. [I.F.: 3.1]
32. Comparative Degradation Kinetic Studies of Tetrabutylammonium Tribromide (TBATB) and Cetyltrimethylammonium Tribromide (CTMATB) – A Route to Reactivity Assessment for Solvent-Free Reaction, Neivotsonuo B. Kuotsu, Chubaakum Pongen, Tovishe Phucho And Upasana B. Sinha, *Chemical Science Transactions*, 4(1), 289-295, **2015**. [Peer Reviewed]
33. Tetrapropylammonium Tribromide – an Efficient Reagent for Solvent-free Brominations, Alimenla B, Bernadette Kuotsu and Upasana B. Sinha, *Chemical Science Transactions*, 3(2), 826-832, **2014**. [Peer Reviewed]
34. Solvent-Free Dibrominations of Alkenes and α,β -Unsaturated Carbonyl Compounds using Cetyltrimethyl Ammonium Tribromide, Anil Kumar, Latonglila Jamir and Upasana B. Sinha, *Chemical Science Transactions*, 3(1), 480-485, **2014**. [Peer Reviewed]
35. Measurement of Radon and Thoron progeny concentration in some dwellings of Nagaland state – an initial report, D. Sinha, U.B. Sinha, D. Kibami, C. Pongener, R. Mishra, R. Prajith and Y. S. Mayya, *Journal of Applicable Chemistry*, 2(4), 825-831, **2013**. [Peer Reviewed]
36. Basic Concepts of Chemical Toxicity for School Children, Upasana B. Sinha and Kaza Somasekhara Rao, *Journal of Applicable Chemistry*, 2(6), 1409-1412, **2013**. [Peer Reviewed]
37. Toxicity Of Chemicals Used In Everyday Life – An Understanding, Upasana B. Sinha and Kaza Somasekhara Rao, *Journal of Applicable Chemistry*, 2(5), 1382-1384, **2013**. [Peer Reviewed]
38. Environmentally benign and facile one-pot synthesis of Cyanamides mediated by phase transfer reagent Ethyltriphenyl phosphonium tribromide, Upasana Bora Sinha, Dipak Sinha and Latonglila Jamir, *International Journal of Current Research*, 5(12), 4205-4207, **2013**. [Peer Reviewed]
39. Development of synthetic protocols for Quarternary Ammonium Tribromides – A Brief Account, Upasana Bora Sinha and Latonglila Jamir, *Journal of Applicable Chemistry*, 2(5), 1073-1079, **2013**. [Peer Reviewed]
40. Solvent-free methodologies for organic brominations using quaternary ammonium tribromides, Anil Kumar, Alimenla B., Latonglila Jamir, Dipak Sinha and Upasana Bora Sinha, *Organic Communications*, 5(2), 64-69, **2012**. [I.F.: 0.56]
41. Thermal Studies of Cetyltrimethyl Ammonium Tribromide for Application to Solvent-Free Brominations, Upasana Bora Sinha, *Journal of Applicable Chemistry*, 1(1), 137-142, **2012**.
42. A Comparative Study of Synthesis and Reactivity of Nitrogen and Phosphorus based Tribromide Reagents, Upasana Bora Sinha, *Der Chemica Sinica*, 3(3), 569-575, **2012**. [Peer Reviewed]

43. Synthesis and Crystal Structure Determination of Dimeric Co(II) and Ni(II) with pyridine2,6-dicarboxylic acid, Manob Jyoti Borah, R. K. Bhubon Singh, Upasana Bora Sinha, Toka Swu and Pronob Jyoti Borah, *J. of Chemical Crystallography* (Springer), 39, 67 – 75, **2012**. [I.F.: 0.8]
44. Environmentally Benign One-pot Synthesis of Cyanamides from Dithiocarbamates Using I_2 and H_2O_2 , Latonglila Jamir, Upasana Bora Sinha, Jayashree Nath and Bhisma K. Patel, *Synth. Communications* (Taylor & Francis), 42, 951-958, **2012**. [I.F.: 2.1]
45. Cetylpyridinium tribromide-An environmentally benign reagent for organic brominations and acetylations, Anil Kumar, Alimenla Jamir, Latonglila Jamir, Dipak Sinha and Upasana Bora Sinha, *Organic Communications*, 4(1), 1-8, **2011**. [I.F.: 0.56]
46. Synthesis and Reactivity Studies of a New Reagent – Ethyltriphenylphosphonium Tribromide, Latonglila Jamir; B. Alimenla; Anil Kumar; Dipak Sinha and Upasana B. Sinha, *Synth. Communications* (Taylor & Francis), 41, 147-155, **2011**. [I.F.: 2.00]
47. Studies On the Surface Characterization of Newly Prepared Activated Kaza's Carbons, V.Sreenivasa Rao, Kaza Somasekhara Rao, M. Nageswara Rao and Upasana Bora Sinha, *Asian Journal of Biochemical And Pharmaceutical Research*, 1(2), 567-584, **2011**. [Peer Reviewed]
48. A one-pot preparation of cyanamide from dithiocarbamate using molecular iodine, Jayashree Nath, Bhisma K. Patel, Latonglila Jamir, Upasana Bora Sinha and K. V. V. V. Satyanarayana, *Green Chemistry* (Royal Society of Chemistry), 11, 1503-1506, **2009**. [I.F.: 11.03]
49. An Efficient Microwave-Induced Solvent-Free Organic Bromination Using Tetrabutyl ammonium Tribromide, Alimenla Bernard, Anil Kumar, Latonglila Jamir, Dipak Sinha and Upasana Bora Sinha, *Acta Chimica Slovenica* (Slovenian Chemical Society), 56, 457-461, **2009**. [I.F.: 1.2]
50. Organic Brominations under Microwave Conditions, Anil Kumar, Alimenla B., Latonglila Jamir and Upasana B. Sinha, *Nagaland University Research Journal*, 177-184, **2008**.
51. Microwave Induced Reactions – an Alternative Route for Chemical Synthesis, B. Alimenla, A. Kumar, L. Jamir, D. Sinha and U. B. Sinha, *Radiation Effects and Defects in Solids* (Taylor & Francis), 161(12), 687 -693, **2006**. [I.F.: 1.14]
52. Gamma induced modifications of Polycarbonate polymer, D. Sinha, K. L. Sahoo, U. B. Sinha, T. Swu, A. Chemsedd and D. Fink, *Radiation Effects and Defects in Solids* (Taylor & Francis), 159, 587 –595, **2004**. [I.F.: 1.14]
53. The Economic Synthesis of Pyridinium Fluorochromate(VI), $C_5H_5NH[CrO_3F]$ (PFC), and Solvent-Free Oxidation of Organic Substrates with PFC, Mihir K. Chaudhuri, Sanjay K. Dehury, Siddhartha S. Dhar and Upasana B. Sinha, *Synthetic Communications* (Taylor & Francis), 34(22), 2077-2088, **2004**. [I.F.: 2.00]
54. Synthesis of Cetyltrimethylammonium tribromide (CTMATE) and its Applications in Selective Oxidation of Sulfides to Sulfoxides, Gopa Kar, Anil K. Saikia, Upasana Bora, Sanjoy K. Dehury and Mihir K. Chaudhuri, *Tetrahedron Letters* (Elsevier), 44, 4503-4505, **2003**. [I.F.: 1.8]
55. Green Chemistry in Indian Context-Challenges, Mandates and Chances of Success, Upasana Bora, Mihir K. Chaudhuri and Sanjay K. Dehury, *Current Science* (Indian Academy of Sciences), 82(12), 1427-1435, **2002**. [I.F.: 1.00]

56. Peroxometal-mediated environmentally favourable route to brominating agents and protocols for bromination of organics, Upasana Bora, Mihir K. Chaudhuri, Deepa Dey and Siddhartha S. Dhar, *Pure & Applied Chemistry* (IUPAC), 73(1), 93-102, **2001**. [I.F.: 1.8]
57. 3,5-Dimethylpyrazolium fluorochromate(VI), $C_5H_8N_2H[CrO_3F]$, (DmpzHFC) : a convenient new reagent for oxidation of organic substrates, Upasana Bora, Mihir K. Chaudhuri, Deepa Dey, Dipak Kalita, Wancydora Kharmawphlang and Gagan C. Mandal, *Tetrahedron* (Elsevier), 57, 2445-2449, **2001**. [I.F.: 2.1]
58. Regioselective Bromination of Organic Substrates by Tetrabutyl ammonium Bromide Promoted by $V_2O_5-H_2O_2$: An Environmentally Favourable Synthetic Protocol, Upasana Bora, Gopal Bose, Mihir K. Chaudhuri, Siddhartha S. Dhar, Rangam Gopinath, Abu T. Khan and Bhisma K. Patel, *Organic Letters* (ACS), 2(3), 247-249, **2000**. [I.F.: 5.2]

Conferences/ Workshops/ Symposia Attended

| Sl. No. | Title of Lecture/ Academic Session | Title of Conference/ Seminar etc. | Organized by |
|---------|---|--|--|
| 1. | Planning for a Career in Research: Strategies for Securing Research Fellowships and Grants (Plenary Speaker) | One day National Level Workshop on Emerging Areas of Research in Biological and Cultural Anthropology: An Interdisciplinary Approach, 21st March, 2025 | Dept. of Anthropology, Nagaland University |
| 2. | A Mix of Growth, Challenges and Innovation – My Journey after IIT Guwahati (Invited Speaker) | Celebrating 30 Years of Chemistry at IIT Guwahati, 8th March, 2025 | Dept. of Chemistry, IIT Guwahati |
| 3. | Empowering Women in Science: Challenges and Prospects (Keynote Address) | IUPAC, Global Women's Breakfast, 11-02-2025 | Kohima Science College in collaboration with ACT |
| 4. | Empowering Women in Research & Guidelines for Writing a Successful Grant Proposal (Resource Person) | Webinar organized by the Department of Pharmaceutical Chemistry & Women Empowerment Cell, 9th January, 2025 | Vignan Pharmacy College, Vadlamudi, AP |
| 5. | Current Trends and Challenges of Girls in Society and Career (Resource Person) | Webinar organized by the Women Empowerment Cell, 19th August, 2024 | PB Siddhartha College of Arts and Sciences, Vijayawada, AP |
| 6. | Strategies for Identifying Small Molecules with Pharmaceutical Properties (Invited Speaker) | International Seminar on “Need and Role of Next Generation Therapeutics”, 3rd July, 2024 | Sri Siddhartha Pharmacy College, Nuzvid |
| 7. | Strategies for Enhancing Women Participation in STEM Research (Invited Lecture) | Invited talk, 1st July, 2024 | KBN College, Vijayawada, AP |
| 8. | Exploring the Pharmaceutical Potential of Small Bromo-Organic Compounds (Invited Lecture) | 2-Day International Conference on “New Age Technologies in Therapeutics-2024 (NTT-2024)” 1st-2nd July, 2024 | Department of Chemistry, PBSCAS, Vijayawada |
| 9. | Essential Soft Skills for a Career in Scientific Research (Invited Speaker) | Orientation Programme for UG and PG students, 12th September, 2023 | Assam down town University, Guwahati |
| 10. | Breaking Barriers in Science (Resource Person) | IUPAC Global Women's Breakfast (GWB) program, 14th Feb 2023 | IIT Guwahati |
| 11. | From Waste to Wealth – Relooking at Some Commonly Synthesized Bromoorganic Compounds for their | 41 st Annual Conference of the Indian Council of Chemists, 27th – 29th December, 2022 | Indian Council of Chemists, Agra University |

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| | Pharmaceutical Properties (Invited) | | |
| 12. | Towards greater participation of women in STEM research – Setting the agenda (Invited Speaker) | IUPAC Global Women's Breakfast (GWB) program, 16th Feb 2022 | NSC Science College, Nashik in collaboration with ACT |
| 13. | Soft Skills, communication skills and role of personality in organizational behaviour (Invited Speaker) | Invited talk, 8th January, 2022 | University of Science and Technology, Meghalaya (USTM) |
| 14. | Resource person and Judge | ACT Research Convention 2021 “Appreciation of Research Papers AORP-21”, 7th January, 2022 | Association of Chemistry Teachers |
| 15. | Session Chair | International Conference on Progress and Challenges in Modern Day Science (PCMDS-2021), 17th & 18th June, 2021 | Department of Chemistry, B. Borooh College, Guwahati-7 |
| 16. | Strategies for Scientific Research (Resource Person) | STTP on ‘Recent Trends in Teaching and Research’ 20th March, 2021 (15.3.2020-20.3.2020) | GIMT, Guwahati |
| 17. | Examining the Challenges of Women Scientists (Invited Speaker) | National Seminar on Women in Science: the Northeast Chapter, 7th November, 2020 | Tripura University |
| 18. | Soft Skills (Resource Person) | Training cum Workshop on Academic Administration, 14th October 2020 (24.9.2020-22.10.2020) | IQAC, Nagaland University |
| 19. | Introduction to the realms of research (Speaker) | Webinar, 7th August, 2020 | Immanuel College, Dimapur |
| 20. | Indian Science Congress (under Chemical Sciences) (Session Chair) | Indian Science Congress, 3-7 Jan, 2020 | Indian Science Congress Association |
| 21. | Project Proposal Preparation for Competitive Research Grant (Invited Lecture) | Workshop on Research Ethics, Paper Writing & IPR, 14-15 November, 2019 | Biotech Hub, Nagaland University |
| 22. | Sustainable Development – Challenges and Strategies (Invited Lecture) | Regional Seminar on Science for Sustainable Development (SSD-2019), 9th January 2019 | Department of Chemistry, B. Borooh College, Guwahati |
| 23. | Funding Agencies and Project Funding (Invited Lecture) | DBT Sponsored National Workshop on Newer Frontiers in Bioinformatics and Research Methodology, 13-19th November, 2018 | Bioinformatics Infrastructure Facility (BIF) Centre, NU, Lumami |
| 24. | QATBs – Smart Reagents having Interesting Chemical and Biological Applications, (Invited Lecture) | National Conference on Emerging Materials (NCEM-2018), 20-22 March, 2018 | Department of Chemistry, Assam University, Silchar |
| 25. | Green Chemistry Strategies for Sustainable Development (Paper presentation) | National Seminar on Climate Change and Sustainable Development with Special Focus on North East India 17-18 May, 2017 | NUTA, Nagaland University |
| 26. | Tribromides As Versatile Reagents For Organic Synthesis (Invited Lecture) | National Seminar on Interdisciplinary Research in Chemical Sciences, NSIRCS-2016, 28-29 September, 2016 | Kohima Science College, Jotsoma |
| 27. | Quaternary Ammonium Tribromides – Smart Reagents through a Bio Inspired Pathway (Paper presentation) | International Conference on Emerging Trends in Science and Engineering Research, 2-4 December, 2015 | Dept. of Basic Sciences and Humanities, NIT Manipur |
| 28. | Understanding the Nature of Quaternary Ammonium Tribromides Through Spectroscopic Analysis (Paper presentation) | UGC-SAP National Seminar on Emerging Trends in Chemical Sciences 2015, 5-6 November, 2015 | Department of Chemistry, Gauhati University |
| 29. | Women and Environment-A look into | National Seminar on Women and | D.K. College, Mirza, |

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| | the issues, problems and opportunities (Keynote Speaker) | Environment-A look into the issues, problems and opportunities, 31 March – 1 April, 2013 | Guwahati |
| 30. | Peroxometal-Mediated Bromide Oxidation And Reactions Thereof (Invited Speaker) | National Seminar on Emerging Trends in Chemical Sciences-2012, 30-31 March, 2012 | Department of Chemistry, Gauhati University |
| 31. | Green Chemistry and its Relevance (Invited Speaker) | National Seminar on Material Science 17-18 February, 2012 | Dept. of Chemistry, Patkai Christian College, Dimapur |
| 32. | Ethyltriphenylphosphonium Tribromide – A versatile New Reagent (Paper presentation) | 18 th International Conference on Perspective and Challenges in Chemical and Biological Sciences Innovation Cross Roads, 28-30 January, 2012 | IASST, Guwahati & ISCB, Lucknow |
| 33. | Microwave-Induced Solvent Free Organic Brominations Using Organic Ammonium Tribromide (Paper presentation) | 18 th International Conference on Perspective and Challenges in Chemical and Biological Sciences Innovation Cross Roads, 28-30 January, 2012 | IASST, Guwahati & ISCB, Lucknow |
| 34. | The Changing Challenges of Indian Women Scientists – an Analysis (Presented a paper) | A Two-Day National Seminar on “Women in Science and Social Science in North East India”, 11th-12th April 2011 | Imphal College, Imphal |
| 35. | Presided as Co-Chairperson. | A Two-Day National Seminar on “Women in Science and Social Science in North East India”, 11th-12th April 2011. | Imphal College, Imphal |
| 36. | Women in Scientific Research- A Study of North East in India (Presented a paper) | XXXIV Indian Social Science Congress. Indian Academy of Social Sciences, 27th - 31st December 2010. | Indian Academy of Social Sciences |
| 37. | Capacity Building of Rural Women Through Scientific Intervention (Presented a paper) | 12 th Annual Conference. North Eastern Economic Association. 10-11 November 2010. | North Eastern Economic Association |
| 38. | Tetrabutyl Ammonium Tribromide – A Green Reagent (Paper presentation) | National Symposium on Advances in Chemistry and Environmental Impact 2-3 November, 2006 | NEHU Shillong |
| 39. | Indo-US Workshop on Green Chemistry (Participated in the workshop) | Indo-US Workshop on Green Chemistry, 7-9 January, 2006 | Green Chemistry Institute, American Chemical Society & University of Delhi |
| 40. | Indo-US Workshop on Green Chemistry (Participated in the workshop) | Indo-US S&T Forum Workshop on Green Chemistry, 17-20 November, 2003 | Indo-US Science and Technology Forum |
| 41. | Cetyltrimethyl Ammonium Tribromide, $C_{19}H_{42}NBr_3$ (CTATB): A New Efficient and Environmentally Favourable Brominating Agent (Paper presentation) | Second National Symposium in Chemistry, 27-29 January, 2000 | IICT, Hyderabad |
| 42. | Bio-resource Exploration and Utilization: Applications in Modern Biology (Participated) | DBT Sponsored National Seminar 9-10 October, 2018 | BIF Centre, Nagaland University |

Member of Professional Bodies

1. Life member of the Association of Chemistry Teachers (LM No. 2623)
2. Life member of Chemical Research Society of India (LM 857)
3. Life member of Indian Science Congress Association (L11775)

4. Life member of Indian Council of Chemists (LF 1547)
5. Life member of National Environmental Science Academy (L/M No. 2277)
6. Life member of Save The Environment (L/M No. 59)
7. Fellow member of Scholars Academic and Scientific Society (SAS/ FSASS/254)

Seminars/ Workshops/ Events Organized

- In **2025**, Convenor for the International Conference on Chemistry in Multidisciplinary Research (ICCMR-2025), organized by the Department of Chemistry on 25-27th March, 2025.
- In **2019**, Coordinator for DST-Sponsored Sensitization Workshop on DST Women Scientist Scheme, held at SASRD, Medziphema on 4-5th March, 2019
- In **2018**, Convener for National Seminar on Chemistry in Interdisciplinary Research, NSCIR-2018, held on 9-10th November, 2018.
- In **2013**, was Organizing Secretary of the 3rd Convocation of Nagaland University for which the President of India had been invited as Chief Guest.
- In **2011-2012**, a series of national level workshops were organized through a DST sponsored project. The roving seminars were organized under the theme “Women in Scientific Research – Examining the challenges and identifying their needs”.
 - On *23-24 August, 2011* --- Nagaland University; Lumami
 - On *21-22 October, 2011* --- North Eastern Hill University, Shillong
 - On *2-3 March, 2012* --- Gauhati University, Guwahati

New Course(s) Developed

Value Added Course - Essential Soft Skills for a Research Career (Approved by the 36th Academic Council, 2023)

EXTENSION ACTIVITIES

Areas of Interest

- Women Participation in Scientific Research
- Personality Development in Youth
- Women Entrepreneurship and Empowerment
- Indian Knowledge Systems – Ancient Scientific Knowledge

Activity worth mentioning

- **Setting up of Women Technology Park – Incubation Hub** – which is a Capacity Building Centre for Grassroot Women Entrepreneurs. As part of the ongoing activities, a café ‘Toti-La Café as well as a market for local produce, ‘Toti-La Local Market’ have been set up in Lumami Campus.

Papers published

1. Are Indian women scientists victims of the ‘glass ceiling’? Upasana Bora Sinha and Dipak Sinha, Curr. Sc., Vol. 100, No. 6, 25th March, 2011. This article has been translated to Hindi: Srote, Vol.5, No.7. July, 2011
2. The Changing Challenges of Indian Women Scientists – An Analysis, Upasana Bora Sinha,

Women's Writ, (Souvenir of the UGC-Sponsored National Seminar on Women in Science and Social Science in North East India), 14-23, 2011

3. Women Participation In Scientific Research –A Study Of North East India, Upasana Bora Sinha, Proceedings of the XXXIV Indian Social Science Congress, 2011

Books Written

1. **From Bilbari To Paris, Professional Biography Of An IITian**, Upasana Bora Sinha, Longpok Press, Nagaland, 2004.
2. **Ways to a healthy pregnancy – what every woman should know**, Upasana Bora Sinha, Bani Prokash Pvt. Ltd., Guwahati, 2009.

Chapters in Books on Invitation

3. **Lower Women Participation in Scientific Research – *Strategies for Change***, in “*Changing World : Challenges and Issues*” being brought out by D.C.B. Girls’ College, Jorhat, Assam, 2012.
4. **Status of Education in Nagaland-Examining the Past to Assess the Present**, in “*Education in North East India: Issues and Challenges*”, DVS publishers Guwahati, 2013.

Articles on Indian Traditional Knowledge

1. Role of NEP in reclaiming our educational heritage, *Nagaland Post*, 23rd Nov. 2023.
2. Linking Traditional Indian Knowledge System with the Modern – the Role of NEP-2020, university newsletter.

Newspaper Articles
