


## **Dr. Rajat Ghosh** M.Pharm, Ph.D.

Assistant Professor (Stage-III)  
Department of Pharmacy  
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### ***Topics Taught***

- ✓ Medicinal Chemistry & Drug Designing, Pharmaceutical Chemistry, Pharmaceutical Analysis and Phytochemistry.

### ***Research Interests***

1. In Silico Approach in Drug Design and Drug Discovery.
2. Synthesis of Active Pharmaceutical Ingredients (APIs).
3. Isolation & characterization of Bioactive Molecules from Medicinal Plants.
4. Instrumental Analysis of drug molecules.
5. Quantitative & qualitative estimation of drug molecules.

### ***Professional Work Experience***

1. 15 years Post Graduate (M.Pharm) teaching & research experience in Tripura University (A Central University), Suryamaninagar, West Tripura – 799022, Tripura (2011 onwards)
2. 03 years research experience as R&D Chemist in Synthetic R&D department of R L Fine Chem., Bangalore, Karnataka (2008 to 2011).

### ***Research Laboratory Experience***

1. Various types of organic reactions including Grignard, Friedel-Crafts Acylation.
2. Handling Moisture/Air sensitive molecules and carrying out reactions in complete inert atmosphere (Under Nitrogen) & phase transfer catalysis reaction.
3. Handling of Hazardous Chemicals.
4. Process optimization and Purification of synthesized compounds using crystallization and various chromatographic method (such as column & preparative chromatography) techniques.
5. Interpretation of Analytical Data using  $^1\text{H}$  &  $^{13}\text{C}$ -NMR, Mass spectra, FT- I.R., UV-Visible, X-ray crystallization, HPLC etc.

### ***Additional Experience***

- ✓ Experience on handling of **Drug Master Files, Impurity Profiling** during Pharmaceutical Industry tenure.
- ✓ One month Industrial Training at **Astra Zeneca India Ltd.**, Pharmaceutical company, Yelahanka, Bengaluru, Karnataka (2004-05).

## Education

| **Ph.D. in Pharmacy** | Tripura University, Department of Pharmacy, Suryamaninagar, Tripura | **Awarded in 2023** |

**Field of Research:** Synthesis and Pharmacological Evaluation of Spirooxindole Derivatives.

| **M. Pharm (Pharmaceutical Chemistry) | First Class (73.0%) | May 2006- July 2008**  
| Al-Ameen College of Pharmacy, Bangalore, Karnataka (Rajiv Gandhi University of Health Science) |

**Thesis Title:** Synthesis, Antibacterial, Analgesic & Anti-inflammatory Activities of Some Benzothiazole Derivatives.

| **B. Pharm | First Class (70.00%) | August 2001- December 2005** |

| Regional Institute of Pharmaceutical Science and Technology (RIPSAT, Tripura University), Abhoynagar, Agartala, Tripura, India. |

### **Project work:**

Physiochemical and Biological Studies of Some New Synthesized Amino-Pyrazolo-Carboxaldehydes.

## Achievements

B. Pharm admission was taken through Tripura Joint Entrance Exam. 2001; where PCB (Physics, Chemistry and Biology) rank was 54 & PCM (Physics, Chemistry and Math) rank was 103.

## Academic Master Research Supervision

### **2014**

1. Pharmacognostic, Phytochemical & Biological investigation of *Neptunia prostrata* L.
2. Phytochemical and Biological Evaluation of *Syndrella nodiflora* Leaves.
3. Extraction and Evaluation of Antimicrobial, Antioxidative potential of *Cinnamomum tamala* Leaves.
4. Phytochemical Screening and Biological Evaluation of Antibacterial Activities of *Piper mullesua* Fruits.
5. Synthesis, Characterization, Antibacterial & Antioxidant Studies of Some Substituted  $\alpha,\beta$ - Unsaturated Ketones and Their Heterocyclic Derivatives.

### **2015**

6. Extraction and Evaluation of Antimicrobial Activities of *Solanum Violaceum* Ortega leaves.
7. Phytochemical and Biological Evaluation of *Stephania Japonica* Miers leaves.
8. Synthesis, Characterization and Biological Evaluation of Newly Synthesized Heterocyclic Compounds.

9. Assessment of Drugs Prescribed by Physicians for Hypertension, Diabetes & Peptic Ulcer in Outpatient Department of General Medicine in Tripura Medical College & Bram Teaching Hospital of Tripura.
10. Isolation & Characterization of Chemical Constituents from the roots of *Boerhavia diffusa*.  
**2016**
11. Evaluation of Antimicrobial Activities of Newly Synthesized Pyrazoline and Pyrimidine Derivatives.
12. Extraction and Phytochemical Investigations for the Evaluation of Hepatoprotective and Anti-bacterial Activity of *Neptunia prostrata* L.
13. Evaluation of Antimicrobial Activity of Newly Synthesized Thiazine Derivatives.
14. Synthesis of some Flavonoid Derivatives for Anti-Microbial Screening.  
**2017**
15. Synthesis and Characterization of some Novel Heterocyclic Compounds.  
**2018**
16. Synthesis, Characterization and Evaluation of Pharmacological activities of newly synthesized five membered heterocyclic compounds.
17. Synthesis & Characterization of Pyrimidine Based Heterocyclic Compound.
18. Synthesis Characterization and Evaluation of Pharmacological activities of Benzopyrones.  
**2019**
19. Synthesis, Characterization and Evaluation of Antimicrobial & Antioxidant Activities of some Novel Spiro Heterocyclic Compounds.
20. Synthesis, Characterization and Evaluation of Pharmacological Activities of Newly Synthesized Pyrimidine Derivatives.  
**2020**
21. Synthesis, Characterization and Antimicrobial activity evaluation of Aurone derivatives against gram negative bacteria *Pseudomonas aeruginosa*.
22. Synthesis, Characterization and Antibacterial evaluation of Spiro Heterocyclic derivatives.  
**2021**
23. Extraction, fractionation and phytochemical investigation for the evaluation of pharmacological activity of *Neptunia prostrata* L.
24. Characterization and evaluation of pharmacological activity of newly synthesized isatin based spiro compound.
25. Synthesis and antimicrobial evaluation of fatty acids and its derivatives.  
**2022**
26. Synthesis, Characterization and anti-proliferative evaluation of indole derivatives.
27. Synthesis, Characterization and anti-bacterial activity evaluation of fatty acid derivatives
28. Extraction, Phytochemical investigation and biological evaluation of *Syndrella nodiflora*
29. Synthesis, Characterization and biological activity evaluation of ninhydrin based Spirocyclic compounds
30. Extraction, Phytochemical investigation and Antioxidant evaluation of *Moringa oleifera* leaves: An Asian miraculous tree  
**2023**
31. Synthesis and Characterization of Thiazine Derivatives

32. *In-silico* Drug design and Synthesis of Di-Spiro compounds

33. Design, Synthesis, Characterization and Antiproliferative evaluation of Indole-Pyrimidine Derivatives

## 2024

34. Phytochemical investigation and Biological evaluation of *Synedrella nodiflora* (L.) Gaertn.

35. Synthesis and antiproliferative activity evaluation of spiro heterocyclic derivatives

36. Synthesis, characterization and antiproliferative evaluation of Nitrogen Containing Heterocyclic Compounds

37. Synthesis and anti-bacterial activity evaluation of fatty acid derivatives

## 2025

38. Synthesis, Characterization and Anti-bacterial Evaluation of Butyrolactam Derivatives

39. Synthesis, Characterization and Pharmacological Evaluation of Spiro-indenoquinoline derivatives

40. Synthesis and Characterization of 1,3,4-Oxadiazole Derivatives

41. Bioactivity guided fractionation of *Synedrella nodiflora* to derive secondary metabolites of antidiabetic importance

## 2026

42. Synthesis, characterization, and anti-inflammatory activity evaluation of substituted chalcone derivatives

43. Design and synthesis of Indolyl-Pyrimidine derivatives as anti-proliferative agents

44. Synthesis, characterization and antimicrobial activity evaluation of lactam derivatives

### Research Projects Completed, On-going

Year	Funding Agency	Title of the project	Total Grant (Rs. in Lakhs)	Tenure (In years and months)
2026	DHR, New Delhi	Design and Development of Pharmacophore Targeting p53 for the Treatment of Triple Negative Breast Cancer (TNBC)	29.72	03 Yrs.
2026	ICMR RMRC	Identification of potential small molecules for epigenetic-based cervical cancer therapy from chemical database of edible wild fruits and vegetables of Tripura, North-east India	3.70	01 Yr.
2019	AICTE, New Delhi	Rational design and synthesis of isatin inspired	15.80	04 Yrs.

		spirooxindole derivatives as antineoplastic agents		
<b>2018</b>	DBT, New Delhi	Phytochemical and pharmacological evaluations of bioactivity guided fractions of medicinal plants of Tripura	73.91	03 Yrs.
<b>2017</b>	DBT, New Delhi	Integrated approach to understand agarwood formation and value addition of Agarwood ( <i>Aquilaria malaccensis</i> )	17.3	03 Yrs.

### Paper Publications

#### 2026

1. **Rajat Ghosh**, AB Shaik, RR Bhandare, B Sridevi and PC Acharya. Stereoselective Synthesis, Anticolon Cancer Activity, Molecular Docking, and Dynamics Simulation Studies of Spirooxindole Derivatives. *Current Medicinal Chemistry*. (Bentham Science) (**Impact Factor/I.F.: 3.5**)
2. K Sarkar, S Debnath, **Rajat Ghosh**, D Choudhury, K Chakraborty, P Saha, A Singh, A Nandi, B Goswami, A Ghosh, SK Sil. Repurposing of DrugBank molecules as dual non-hydroxamate HDAC8 and HDAC2 inhibitors by pharmacophore modeling, molecular docking, and molecular dynamics studies. *Journal of Biomolecular Structure and Dynamics*. 2024, 1-23. (Taylor & Francis) (**Impact Factor 2.7**)

#### 2025

1. K Choudhury, **Rajat Ghosh**, S Sen, B De. In vitro Evaluation of Antidiabetic, Antioxidant, Cytotoxic Activities and Phytochemical Screening of Methanolic Extracts of Thevetia peruviana Bark and Solanum viarum fruit. *Research Journal Pharmacy and Technology*. 2025;18(11):5147-4. (**Scopus indexed**)
2. Sarkar, A., Debnath, S., Sen, D., Das Chowdhury, B., **Rajat Ghosh** & Debnath, B. Phytochemical Evaluation, In Silico Binding Affinity, and In Vitro Antibacterial Activity of Volatile Oil from Leaves of Bambusa polymorpha. *Chemistry of Natural Compounds*, 61(2), 243-250. (2025). (**Springer**) (**I.F.: 1.1**)

#### 2024

1. Rishav Mazumder, Ichudaule, A Ghosh, S Deb, **Rajat Ghosh\***. Significance of Chalcone Scaffolds in Medicinal Chemistry. *Topics in Current Chemistry*. **2024**, 382 (3), 22. (*Springer*) (**Impact Factor 10.9**)
2. Rishav Mazumder, D Choudhury, A Sarkar, A Ghosh, S Debnath, B Debnath, **Rajat Ghosh\***. In silico approach for identification of potential tetracyclic triterpenoids from mushroom as HMG-CoA reductase inh-ibitor. *Aspects of Molecular Medicine*. **2024**, 4, 100053. (*Elsevier*) (**Impact Factor 3.4**)
3. K Sarkar, M Debbarma, S Debnath, **Rajat Ghosh**, SK Sil. *In silico* identification of dual HDAC8 and MMP9 inhibitors by pharmacophore modeling, molecular docking, and molecular dynamics simulation studies for development of antitumour agent. *Interactions*. **2024**, 245 (1), 1-24. (*Springer*)(Conference Proceedings)
4. A Sarkar, A Chakrabarti, S Bhaumik, B Debnath, SS Singh, **Rajat Ghosh**, Magdi EA Zaki, Sami A Al-Hussain, S Debnath. *Parkia javanica* Edible Pods Reveal Potential as an Anti-Diabetic Agent: UHPLC-QTOF-MS/MS-Based Chemical Profiling, In Silico, In Vitro, In Vivo, and Oxidative Stress Studies. *Pharmaceuticals*. **2024**, 17 (7), 968. (*MDPI*) (**Impact factor 5.7**)
5. S Bhaumik, A Sarkar, S Debnath, B Debnath, **Rajat Ghosh**, Magdi EA Zaki, Sami A Al-Hussain.  $\alpha$ -Glucosidase inhibitory potential of *Oroxylum indicum* using molecular docking, molecular dynamics, and in vitro evaluation. *Saudi Pharmaceutical Journal*. **2024**, 32 (6), 102095. (*Elsevier*) (**Impact factor 4.3**)
6. A Sarkar, S Debnath, BD Chowdhury, **Rajat Ghosh**, B Debnath. Identification of phytoconstituents from *Dicliptera paniculata* and study of antibacterial activity guided by molecular docking. *In Silico Pharmacology*. **2024**, 12 (1), 18. (*Springer*)

## 2023

1. DR Choudhury, **Rajat Ghosh**, S Debnath, S Debnath. Potential peptidyl arginine deiminase type 4 inhibitors from *Morinda citrifolia*: a structure-based drug design approach. *In Silico Pharmacology*. **2023**, 11:13. (*Springer*)

## 2021

1. H Jajo, **Rajat Ghosh**. Hepatoprotective activity of the whole plant of *Neptunia prostrata* L. in carbon tetrachloride induced rats. *Int J Curr Pharm Res*. **2021**, 3,6, 56-59.
2. K Choudhury, B De, **Rajat Ghosh**. Review on few anti diabetic medicinal plants used by the indigenous tribal people of Tripura. *Int J Multidis Edu Res*. **2021**, 10, 6, 228-230. ISSN: 2277-7881. DOI: <http://ijmer.in.doi./2021/10.06.214>

## 2020

1. B Debnath, P Debnath, **Rajat Ghosh**, S Debnath. In silico identification of potential inhibitors of SARS-CoV-2 papain-like protease from natural sources: A natural weapon to fight COVID-19. *Coronaviruses*, **2020**, 1, 1, 1-12. (**Bentham Science**) DOI: 10.2174/2666796701999201203211330
2. **Rajat Ghosh**, JB Vitor, E Mendes, A Paulo, PC Acharya. Stereoselective Synthesis of Spirooxindole Derivatives Using One-Pot Multicomponent Cycloaddition Reaction and Evaluation of Their Antiproliferative Efficacy. *ACS Omega*. **2020**, 5, 42, 27332–27343. (**Impact factor 5.2**)

## 2019

1. **Rajat Ghosh\***, A Das, S Mallik. Inhibition of Quorum Sensing in *Pseudomonas aeruginosa*: A Review. *Indian J Pharm Sci*, **2019**; 81(5):797-806. (**Impact Factor 0.9**)

## 2017

1. **Rajat Ghosh**, Jajo H and Acharya PC. An Overview of *Neptunia prostrata*: A Source of Herbal Medicine of Ethnopharmacological Importance. *Glob J Pharmaceu Sci*, **2017**, 2(1):1-3.

## 2016

1. **Rajat Ghosh\***, R Nandi. Phytochemical And Biological Importance of *Boerhavia diffusa*: A Plant of Ethnopharmacological knowledge. *International Journal of Pharma Sciences and Research*. **2016**,7(3):134-143.
2. K. Choudhury, R. Choudhury, **Rajat Ghosh**, S. Sen, R. Chakraborty, Z.C.Momin, B.B. Goswami, B.De. Antispermogenic activity of triterpenoids isolated from *Dioscorea glabra* tuber. *Der Pharma Chemica*, **2016**, 8(11):76-82.

## 2014

1. **Rajat Ghosh\***, K Darin, P Deb. Presence of Organic Impurities into Active Pharmaceutical Ingredients: A Review. *International Journal of Pharmaceutical Sciences and Research*. **2014**; 5(10):4066-4096.
2. **Rajat Ghosh\***, A Das. Synthesis and biological activities of chalcones and their heterocyclic derivatives: A Review. *World Journal of Pharmacy and Pharmaceutical Sciences*. **2014**.3(3):578-595.
3. **Rajat Ghosh\***, PK Deb, T Bhakta, TK Ghosh. Traditional Phyto-therapy With Herbal Compositions Used By Folk-Practitioners of Tripura (North-East) For Treatment of

Various Diseases. Indo American Journal of Pharmaceutical Research. **2014**.4(02):1221-1233.

4. **Rajat Ghosh\***, P. Deb. A Study on Antioxidant Properties of Different Bioactive Compounds. Journal of Drug Delivery and Therapeutics. **2014**.4(2), 105-115. (Impact factor: 0.402)
5. **Rajat Ghosh\***, K Darin, P Nath, P Deb. An Overview of Various Piper Species for Their Biological Activities. International Journal of Pharma Research & Review. **2014**; 3(1):67-75.

## 2013

1. **Rajat Ghosh\***, B. De. Review on: Synthesis, Chemistry and Therapeutic Approaches of Imidazole Derivatives. International Journal of Pharmaceutical Sciences Review and Research. **2013**; 23(2): 237-246.
2. **Rajat Ghosh**, B Debnath, P Deb. Pharmacognostic, phytochemical and biological studies of *Synedrellanodiflora*- a review. International Research Journal for Inventions in Pharmaceutical Sciences.**2013**; 1(3):01-04.
3. **Rajat Ghosh\***, P Nath. Phytochemical and Medicinal Properties of *Cinnamomumtamala*- a review. The Global Journal of Pharmaceutical Research. **2013**; 2(3):1786-1790.
4. P K Deb, S Das, KN Bhaumik, **Rajat Ghosh**, TK Ghosh, T Bhakta. Pharmacognostic& Preliminary Phytochemical Investigations of *NeptuniaProstrata*L. Journal of Pharmacognosy and Phytochemistry. **2013**; 2(3): 5-11.

## 2009

1. B. De, M.Chakraborty, K Dutta, P. R. Bhattacharjee, S.Paul(Datta), S Sen, **Rajat Ghosh**, K. Bhattacharjee*et.al.*, In vitro study of effect of normal saline, aspirin, atenolol & doxycycline on Insulin. J. Inst. Chemists. **2009**; 81(5):141-149.

## 2007

1. B. De, S.Sen, **Rajat Ghosh**, M.Das, M.Debnath *et.al.* Physicochemical & biological studies of some new synthesized amino-pyrazole-carboxaldehydes.J. Inst. Chemists. **2007**; 79(2):54-57.

## Books/ Book Chapters Published

### 2024

Book Chapter Title: Ichudaule, R Mazumder, **R Ghosh**, K Manna. In Silico Studies of Phytoconstituents from Rhus Chinensis for Identification of Potential Anti-Cancer Agents.

## 2020

Book Chapter Title: Biswal S., **Rajat Ghosh**, Acharya P.C. Pharmacology of Angiotensin and Its Receptors. *Frontiers in Pharmacology of Neurotransmitters*. Springer, Singapore, **2020**. **Pages 361- 380**. **ISBN 978-981-15-3555-0, ISBN 978-981-15-3556-7 (eBook)**, <https://doi.org/10.1007/978-981-15-3556-7>

## 2019

Book Chapter Title: Impact of Indian Food Dishes in Diabetes. Book Title: *Diabetes Mellitus (analysis and advancement)*. **CBS Publishers and distributors Pvt. Ltd. ISBN: 978-93-88108-48-5, Pages 70-124.**

## 2018

Book Chapter Title: *Role of Salt Selection in Drug Discovery and Development*. Book Title: *Advances in Pharmaceutical Product Development and Research series: Dosage form design considerations. Volume-I. Published in Academic Press, Elsevier. ISBN 9780128144237. 2018, Pages 435-472.* <https://doi.org/10.1016/B978-0-12-814423-7.00013-7>

### Seminar/ Conference/ Workshop/ Refresher/ Orientations/MOOC Participated

Name of Training	Institution	Duration	Subject
74 <sup>th</sup> Indian Pharmaceutical Congress	Bangalore International Exhibition Centre (BIEC), Bangalore	19 <sup>th</sup> -21 <sup>st</sup> December, <b>2025</b>	AI & TECHNOLOGY IN PHARMA: EDUCATE, INNOVATE, EMPOWER
XXXV <sup>th</sup> Annual Conference of the Physiological Society of India	Department of Human Physiology Tripura University (A Central University) Tripura	15 <sup>th</sup> -17 <sup>th</sup> November, <b>2024</b>	Emerging Health Issues and Challenges: Perspective from Northeast India
27 <sup>th</sup> Annual National Convention of the Association of Pharmaceutical Teachers of India (APTICON'2024)	Utkal University, Vani Vihar, Bhubaneswar, Odisha	27-28 September, <b>2024</b>	Beyond the counter : Transforming Pharmacy Education for Industry and Patient Impact
Faculty Development	Tripura University,	11-22 March,	NEP 2020 Orientation & Sensitization

Program (FDP)	Tripura	2024	Programme
International Conference	Dept. of Physics, Tripura University	31 January-02 February, <b>2024</b>	Fourth International Conference on Material Science
National Conference	Tripura University, Tripura	10-12 October, <b>2023</b>	Higher Education and Research: Towards a Transformative and Sustainable Society (HERTSS)
NPTEL Workshop	Prof. N Suryaprakash, IISc, Bangalore	4-10 July, <b>2022</b>	High Resolution NMR Spectroscopy in Liquids and Solids: Principles and Analysis of Spectra
1 <sup>st</sup> Paramedicon: An International Conference	Institute of Medical Sciences & Banaras Hindu University	07-08 April, <b>2022</b>	Innovations in Modern/Traditional Health Sciences and Medical Technology
2 <sup>nd</sup> World Congress on Pharmacology	BioGenesis Health Cluster, Bengaluru, India.	30-31 January, <b>2022</b>	Drug Discovery, Design & Development.
05-Day International Workshop	Central Library & Dept. of Library and Information Science, Tripura University	17-21 January, <b>2022</b>	Academic Writing and Publishing
International Conference	Pharma Medical Sciences Development Society, Rampur, U.P., India.	28-29 January, <b>2021</b>	Recent Trends in Pharmaceutical, Medical and Applied Sciences for Global Development (RTPMASGD-2021)
National Webinar	Ramthakur College, Agartala, Tripura	27-28, June, <b>2020</b>	Impact of COVID-19 on Indian Economy: Issues and Challenges
National Webinar	SRM University, Andhra Pradesh	29-May- <b>2020</b>	“Post COVID-19: Science and Technology”
National Webinar	Swamy Vivekanandha College of Pharmacy, Affiliated to Dr.M.G.R. University, Chennai	25-May- <b>2020</b>	“Lipid Based Nano Drug Delivery System: A Novel Targeting Approach”

National Webinar	Swamy Vivekanandha College of Pharmacy, Affiliated to Dr.M.G.R. University, Chennai	23-May-2020	“Molecular Docking as popular Tool in Drug Design”
National Webinar	Swamy Vivekanandha College of Pharmacy, Affiliated to Dr.M.G.R. University, Chennai	21-May-2020	“Role of Bioequivalence Studies in Generic Drug Product” Development
Faculty Development Program (FDP)	AICTE Training and Learning (ATAL), at Dept. of IT, Tripura University.	13-01-2020 to 17-01-2020	Artificial Intelligence
QIP STC	Department of Pharmaceutical Engineering and Technology,  IIT-BHU Varanasi	01 Week (03-09 October 2019)	Emerging Computational Tools in Drug Design & Discovery
NPTEL	MOOC by Prof. Harinath Chakrapani Department of Chemistry IISER Pune	12 Week (28 Jan'19 - 19 Apr'19)	Medicinal Chemistry
NPTEL	MOOC by Prof. Swagata Dasgupta Department of Chemistry IIT Kharagpur	12 Week (28 Jan'19 - 19 Apr'19)	Biochemistry
NPTEL	MOOC by Prof. Hanudatta S. Atreya NMR Research Centre IISc Bangalore	08 Week (28 Jan'19 - 22 Mar'19)	Multidimensional NMR Spectroscopy for Structural Studies of Biomolecules
Refresher Course	Tripura University, Faculty Development Centre	08 January to 28 January, 2019	Naitalim: Gandhi's Vision of Education and Present Scenario – Advanced Teaching and Research Methods
NPTEL	MOOC by Prof. Mukesh Doble Biotechnology,	08 Week (06 August to 28 September	Computer Aided Drug Design (CADD)

	IIT -Madras	<b>2018)</b>	
Workshop	E & ICT Academy. IIT Guwahati association with Tripura University	05 days (31 <sup>ST</sup> July to 04 <sup>TH</sup> August, <b>2018</b> )	Data Analytics Using R Programming
Refresher Course	UGC-HRDC, Manipur Central University, Imphal-795003.	11 June to 2 July, <b>2015</b>	Advances in Chemistry, Biotechnology & allied disciplines
Orientation Programme	North East Hill University (NEHU), Shillong-793022, Meghalaya, India	June 23, 2014 – July 20, <b>2014</b> .	29 <sup>TH</sup> OP under UGC Academic Staff College (ASC)
Conference	Delhi.	20th-22nd December, <b>2013</b>	65th Indian Pharmaceutical Congress (IPC)
Workshop	Tezpur University Intellectual Property Right Cell in collaboration with equal opportunity cell Tripura University	21st March <b>2013</b>	Enhancing Institutional Innovation With Intellectual Property Rights
Workshop	DST, Government of India, held at PragnaBhawan, Agartala, Tripura	October 18-19, <b>2012</b> .	Developing R&D proposals for states of North Eastern Region, INDIA
Symposium	TRIPURA UNIVERSITY & DBT, GOVT. OF INDIA.	September 28 & 29, <b>2012</b>	Integrated Approach For Teaching & Research In Life Sciences
Workshop	Microsoft & MHRD, New Delhi, Venue: Tripura University	21st November to 1st December <b>2011</b> .	NME-ICT: SAKSHAM-IT Champion Training program
Conference	BHU, Varanasi	20 <sup>th</sup> -23 <sup>rd</sup> December, <b>2007</b> .	59 <sup>th</sup> Indian Pharmaceutical Congress (IPC)

### ***Poster /Oral Presentation***

1. Poster presentation on “PHYTOPHARMACOLOGICAL SCREENING OF SYNEDRELLA NODIFLORA FOR BIOLOGICAL POTENTIAL” in 74th Indian Pharmaceutical Congress during 19th to 21st December **2025** in “AI & TECHNOLOGY IN PHARMA: EDUCATE, INNOVATE, EMPOWER” held at Bangalore International Exhibition Centre (BIEC), Bangalore.

2. Oral presentation on “Drug Repurposing: Emerging Approach to Therapeutic Switching” in National Seminar on “Emerging Health Issues and Challenges: Perspective from Northeast India” of PHYSICON **2024**, the 35th Annual Conference of the Physiological Society of India during November 15-17, **2024** at Tripura University, Tripura.
3. Poster presentation on “In vitro Antidiabetic and Antioxidant Activity Evaluation of *Synedrella nodiflora* (L.) Gaertn. Leaves to Identify Bioactive Molecules” in National Seminar on “Emerging Health Issues and Challenges: Perspective from Northeast India” of PHYSICON 2024, the 35th Annual Conference of the Physiological Society of India during November 15-17, **2024** at Tripura University, Tripura.
4. Poster presentation on “Antidiabetic Activity Evaluation of *Neptunia Prostrata* In Search of Bioactive Molecules Guided by In Silico and In Vitro Studies” held on 27-28 September, **2024** in APTICON’24, Bhubaneswar, Odisha.
5. Poster presentation on “Computer Aided Systematic Screening to identify bioactive molecules of *Neptunia prostrata* as Antidiabetic agents” in International conference on “Fourth International Conference on Material Science [ICMS-2024]” held on 31<sup>st</sup> January-2<sup>nd</sup> February, **2024** organized by Department of Physics, Tripura University, Tripura.
6. Oral presentation on “Multi-Target Based Approach to Identify Anti-Dengue Potential Bioactive Molecules from *Neptunia prostrata*” in national conference on “Higher Education and Research: Towards a Transformative and Sustainable Society (HERTSS)” held on 10<sup>th</sup>-12<sup>th</sup> October, **2023** organized by Tripura University, Tripura.
7. Poster presentation on “Synthesis and Biological Evaluation of Ninhydrin based Spiro-Indenoquinoxaline Derivatives” in national conference on HERTSS held on 10<sup>th</sup>-12<sup>th</sup> October, **2023** organized by Tripura University, Tripura.
8. Poster presentation on “Phytochemical Screening and Biological Study of *Synedrella nodiflora* (L.) Gaertn” in national conference on HERTSS held on 10<sup>th</sup>-12<sup>th</sup> October, **2023** organized by Tripura University, Tripura.
9. Poster presentation on “In silico study of phytoconstituents obtained from *Balanophora* species to evaluate anticancer potential targeting EGFR tyrosine kinase” in national conference on recent trends and innovations in pharmaceutical sciences held on 06<sup>th</sup> May, **2023** organized by Bharat Pharmaceutical Technology, Tripura.

10. Poster presentation in international conference on “Inovation in Modern/Traditional Health Sciences and Medical Technology (1<sup>st</sup> Paramedicon)” held in Banaras Hindu University, Varanasi, U.P., India on 7-8 April, **2022**.
11. Oral presentation in international conference on “Recent Trends in Pharmaceutical, Medical and Applied Sciences for Global Development (RTPMASGD-2021)” held in Pharma Medical Sciences Development Society, Rampur, U.P., India on 28-29 January, **2021**.
12. Oral presentation in national webinar on “Impact of Covid-19 on Pharmaceutical industry of India: Challenges and Prospects Ahead” held in Ramthakur College, Tripura, June 27-28, **2020**.
13. In ICUCPR-2017 (International Conference on Updates in Cancer Prevention and Research). 14-16 February, **2017**. Venue: Babasaheb Bhimrao Ambedkar University (A Central University) Vidya Vihar, Rae Bareli Road, Lucknow-226025 (U.P.) INDIA. Presentation on: Spirocyclic Oxindole Scaffold As an Emerging Pharmacophore in the Anticancer Drug Discovery under the Theme: Therapeutics and Survivorship.
14. In One Day National Seminar On Emerging Trends in Pharmaceutical Education & Research, 07TH May **2016**, Venue: GIPS Guwahati in association with Assam Science & Technology University, Guwahati. Poster Presentation: Abstract No: ETPER-60, Evaluation of Antimicrobial and Antioxidant Activities of Newly Synthesized Pyrazoline and Pyrimidine Derivatives.
15. In 67th Indian Pharmaceutical Congress (IPC) **2015**, Mysore; poster presentation on Medicinal Chemistry & Phytochemistry. B-100:- “*In Vitro* Anthelmintic Activity of *Neptunia prostrata* Linn. on Indian earthworm (*Pheretima posthuma*).
16. In 65<sup>th</sup> Indian Pharmaceutical Congress (IPC) **2013**, Delhi; poster presentation on Medicinal Chemistry & Phytochemistry. B-3:- “Anti-proliferative & Cytotoxic activity of *Neptunia prostrata* Linn. on Human Myeloid Cell line”.
17. In 54<sup>th</sup> Annual Conference of Indian Society of Hematology & Blood Transfusion. Poster Presentation. Abstract No. 347: Apoptotic Activity of BNW-8 isolated from *Neanotis Wightiana* on Human Leukemic Cell lines. Indian J Hematol Blood Transfus (Oct-Dec **2013**) 29(4):396.
18. Symposium on “Integrated Approach for teaching & research in life sciences”. September 28 & 29, **2012**. Sponsored by: Tripura University & DBT, Govt. of India. Poster Presentation: “Mustard oil is best for our heart”.
19. In 59<sup>th</sup> Indian Pharmaceutical Congress (IPC), **2007**, Varanasi, abstract no. B-36: synthesis & antibacterial evaluation of some benzothiazole derivatives.

## Scholarship/Award/Recognitions

1. Best poster presentation award (**Winner**) was received by M.Pharm student for “In silico study of phytoconstituents obtained from *Balanophora* species to evaluate anticancer potential targeting EGFR tyrosine kinase” in national conference on recent trends and innovations in pharmaceutical sciences held on 06th May, **2023** organized by Bharat Pharmaceutical Technology, Tripura.
2. Received award (**Third Prize**) for the Oral presentation on “Synthesis of Spirooxindole Derivatives Using a Facile One-pot Dipolar Cycloaddition Reaction and Evaluation of Their Antiproliferative Efficacy in International Conference On Recent Trends in Pharmaceutical, Medical and Applied Sciences for Global Development (RTPMASGD-2021) on 28-29 January, **2021** by Pharma Medical Sciences Development Society, Rampur, U.P., India.
3. NEC (North East Council) Scholarship obtained during M.Pharm (Post-graduation) pursuing in **2006-2008**.

## Seminar/Symposium organized

### 2020

1. “Two Day International Webinar on Drug Discovery and Drug Development” From 27th-28th August 2020.

## Talk Delivered in Seminar/Symposium/as Visiting Faculty

1. Talk delivered as **Invited Speaker**- “Exploring the synergy of AI and immersive technologies to revolutionize pharmacy pedagogy” in 5-day e-Faculty Development Programme on “Immersive Technologies and Artificial Intelligence in Pharmacy Education: Building the Future of Learning”, organized by Bharat Pharmaceutical Technology, Amtali, Agartala, Tripura on **15-19 September, 2025**
2. Talk delivered as **Invited Speaker** in National Seminar on “Emerging Health Issues and Challenges: Perspective from Northeast India” of PHYSICON 2024, the 35th Annual Conference of the Physiological Society of India during **November 15-17, 2024** at Tripura University, Tripura.
3. Talk delivered as a special guest during valedictory session of **Faculty Development Programme** on “Exploring Technological Advances in Pharmaceutical Education and Research”, organized by Bharat Pharmaceutical Technology, Amtali, Agartala, Tripura on **21-25 October, 2024**.
4. Participated as a Panelist in the workshop on PMBJP (**Pradhan Mantri Bhartiya Janaushadhi Pariyojana**), organized by the Department of Geography and Disaster Management, Tripura University on **1<sup>st</sup> March, 2024**.

5. National Level Online Webinar on 'COVID 19: Drug Discovery & Role of Modern Pharmacist' by Bharat Pharmaceutical Technology, Amtali, Agartala, Tripura on **22-24 August, 2020**. Topic: - "COVID-19: Drug Targets & Drug Discovery"
6. National Level Online Webinar on 'National Education Policy' by Bharat Pharmaceutical Technology, Amtali, Agartala, Tripura on **18-19 September, 2020**. Topic: - "Evolution of Education Policy"
7. Delivered a lecture on "Pharmaceutical Organic Chemistry" for 2nd year B. Pharm & D. Pharm Students of Bharat Pharmaceutical Technology, Amtali, Agartala, Tripura on **17-18 August, 2020**.
8. Delivered a lecture on "Pharmaceutical Organic Chemistry" for students 2nd year B. Pharm & D. Pharm students of Bharat Pharmaceutical Technology, Amtali, Agartala, Tripura on **26<sup>th</sup>-28<sup>th</sup> September 2020**.

### **Other Information**

1. Elected **President** of Association of Pharmaceutical Teachers of India (**APTI**), Tripura State Branch, **since 2023**.
2. Worked as departmental Head & Co-ordinator for the period **August 2015 to January 2019**.
3. Worked as **Co-ordinator of AICTE** in the Year **2015** for Department of Pharmacy, when department got AICTE affiliation for the 1<sup>st</sup> time in Tripura University.
4. Act as **member of BPGS** under Pharmacy department and **BFS** under Faculty of Science, Tripura University.
5. Act as **External Examiner** in the department of Pharmaceutical Sciences & Pharmacy Institutes.

### **Memberships**

1. Life Member of Association of Pharmaceutical Teachers of India (**APTI**), Bangalore.
  2. Life Member of Indian Pharmaceutical Association (**IPA**), Mumbai.
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Welcome to my laboratory's section. Here, you'll find a glimpse into the research environment where cutting-edge studies are conducted. I am always open to collaboration with like-minded researchers, institutions, and students who share an interest in advancing knowledge in *Medicinal Chemistry* and *Chemistry of Natural Product* incorporating both *in vitro* and *in silico* methodologies. Whether you're looking for collaboration in research, innovation, or mentorship, please feel free to reach out. Let's explore the potential for meaningful academic and scientific exchange.



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