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

Assistant Professor (Stage-III)

Department of Pharmacy

Tripura University (A Central University)

Suryamaninagar, West Tripura-799022

Mob: 9774598572 💿

Email: rajatghosh@tripurauniv.ac.in rajatnihalster@gmail.com



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

- 14 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 ¹H & ¹³C-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 tam*ala Leaves.
- 4. Phytochemical Screening and Biological Evaluation of Antibacterial Activities of *Piper mullesua* Fruits.
- 5. Synthesis, Characterization, Antibacterial & Antioxidant Studies of Some Substituted α,β 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

Research Projects

Year	Funding	Title of the project	Total Grant	Tenure
	Agency		(Rs. in	(In years
			Lakhs)	and
				months)
2019	AICTE,	Rational design and synthesis of	15.80	04 Yrs.
	New	isatin inspired spirooxindole		
	Delhi	derivatives as antineoplastic agents		
2018	DBT,	Phytochemical and pharmacological	73.91	03 Yrs.
	New	evaluations of bioactivity guided		
	Delhi	fractions of medicinal plants of		
		Tripura		
2017	DBT,	Integrated approach to understand	17.3	03 Yrs.
	New	agarwood formation and value		
	Delhi	addition of Agarwood (Aquilaria		
		malaccensis)		

Paper Publications

2024

- 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 in 2023)
- 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 7.1 in 2023)
- 3. 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 inhibitor. Aspects of Molecular Medicine. **2024**, 4, 100053. (*Elsevier*)
- 4. 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*)
- 5. 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 4.3 in 2023)
- S Bhaumik, A Sarkar, S Debnath, B Debnath, Rajat Ghosh, Magdi EA Zaki, Sami A Al-Hussain. α-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 3.0 in 2023)
- 7. 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

8. 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

- 9. 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.
- 10. 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

11. 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

12. **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 3.7 in 2023**)

2019

13. **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 0.975 in 2020**, **0.5 in 2023**)

2017

14. **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

- 15. **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.
- 16. K. Choudhury, R. Choudhury, **Rajat Ghosh**, S. Sen, R. Chakraborty, Z.C.Momin, B.B. Goswami, B.De.Antispermogenic activity of triterpenoids isolated from Dioscoreaglabra tuber. Der Pharma Chemica, **2016**, 8(11):76-82.

2014

- 17. **Rajat Ghosh***, K Darin, P Deb. Presence of Organic Impurities intoActive Pharmaceutical Ingredients: A Review. International Journal of PharmaceuticalSciences and Research. **2014**; 5(10):4066-4096.
- 18. **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.
- 19. **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.
- 20. **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**)

21. **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

- 22. **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.
- 23. **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.
- 24. **Rajat Ghosh*,** P Nath. Phytochemical and Medicinal Properties of *Cinnamomumtamala* a review. The Global Journal of Pharmaceutical Research. **2013**; 2(3):1786-1790.
- 25. P K Deb, S Das, KN Bhaumik, **Rajat Ghosh**, TK Ghosh, T Bhakta. Pharmacognostic& Preliminary Phytochemical Investigations of *NeptuniaProstrataL*. Journal of Pharmacognosy and Phytochemistry. **2013**; 2(3): 5-11.

2009

26. 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

27. 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. New Horizons in Higher Education and Research: Multidisciplinary Interfaces. Akansha Publishing House, New Delhi. **2024.** ISBN: 978-93-48001-65-8

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
XXXV th Annual	Department of Human	15 th -17 th	Emerging Health Issues
Conference of the	Physiology	November, 2024	and Challenges:
Physiological			Perspective from
Society of India	Tripura University (A Central University)		Northeast India
	Tripura		
27th Annual	Utkal University, Vani	27-28 September,	Beyond the counter :
National	Vihar, Bhubaneswar,	2024	Transforming Pharmacy
Convention of the	Odisha		Education for Industry
Association of			and Patient Impact
Pharmaceutical			
Teachers of India			
(APTICON'2024)			
Faculty	Tripura University,	11-22 March,	NEP 2020 Orientation &
Development	Tripura	2024	Sensitization
Program (FDP)			Programme
International	Dept. of Physics,	31 January-02	Fourth International
Conference	Tripura University	February, 2024	Conference on Material
			Science
National	Tripura University,	10-12 October,	Higher Education and
Conference	Tripura	2023	Research: Towards a
			Transformative and
			Sustainable Society
			(HERTSS)

NPTEL Workshop	Prof. N Suryaprakash, IISc, Bangalore	4-10 July, 2022	High Resolution NMR Spectroscopy in Liquids and Solids: Principles and Analysis of Spectra
1 st Paramedicon: An International Conference	Institute of Medical Sciences & Banaras Hindu University	07-08 April, 2022	Innovations in Modern/Traditional Health Sciences and Medical Technology
2 nd World Congress on Pharmacology	BioGenesis Health Cluster, Bengaluru, India.	30-31 January, 2022	Drug Discovery, Design & Development.
05-Day International Workshop	Central Library & Dept. of Library and Information Science, Tripura University	17-21 January, 2022	Academic Writing and Publishing
International Conference	Pharma Medical Sciences Development Society, Rampur, U.P., India.	28-29 January, 2021	Recent Trends in Pharmaceutical, Medical and Applied Sciences for Global Development (RTPMASGD-2021)
National Webinar	Ramthakur College, Agartala,Tripura	27-28,June, 2020	Impact of COVID-19 on Indian Economy: Issues and Challenges
National Webinar	SRM University, Andhra Pradesh	29-May- 2020	"Post COVID-19: Science and Technology"
National Webinar	Swamy Vivekanandha College of Pharmacy, Affiliated to Dr.M.G.R. University,Chennai	25-May- 2020	"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	AICTE Training and Learning (ATAL), at Dept. of IT, Tripura	13-01- 2020 to 17-01- 2020	Artificial Intelligence

Program (FDP)	University.		
QIP STC	Department of Pharmaceutical Engineering and Technology, IIT-BHU	01 Week (03-09 October 2019)	Emerging Computational Tools in Drug Design & Discovery
	Varanasi		
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, IIT -Madras	08 Week (06 August to 28 September 2018)	Computer Aided Drug Design (CADD)
Workshop	E & ICT Academy. IIT Guwahati association with Tripura University	05 days (31 ST July to 04 TH August, 2018)	Data Analytics Using R Programming
Refresher Course	UGC-HRDC, Manipur Central University, Imphal-795003.	11 June to 2 July, 2015	Advances in Chemistry, Biotechnology & allied disciplines
Orientation Programme	North East Hill University (NEHU),	June 23, 2014 – July 20, 2014 .	29 TH OP under UGC Academic Staff College
. 108141111110	chirelity (Hillo),	Jary 20, 2011.	Tradelline Duni Gonege

	Shillong-793022,		(ASC)
	Meghalaya, India		
Conference	Delhi.	20th-22nd	65th Indian
		December, 2013	Pharmaceutical
			Congress (IPC)
Workshop	Tezpur University	21st March 2013	Enhancing Institutional
	Intellectual Property		Innovation With
	Right Cell in		Intellectual Property
	collaboration with		Rights
	equal opportunity cell		
	Tripura University		
Workshop	DST,Government of	October 18-19,	Developing R&D
	India, held at	2012.	proposals for states of
	PragnaBhawan,		North Eastern Region,
	Agartala, Tripura		INDIA
Symposium	TRIPURA	September 28 &	Integrated Approach
	UNIVERSITY & DBT,	29, 2012	For Teaching &
	GOVT. OF INDIA.		Research In Life
			Sciences
Workshop	Microsoft & MHRD,	21st November to	NME-ICT: SAKSHAM-IT
	New Delhi, Venue:	1st December	Champion Training
	Tripura University	2011.	program
Conference	BHU, Varanasi	20 th -23 rd	59 th Indian
		December, 2007.	Pharmaceutical
			Congress (IPC)

Poster /Oral Presentation

- 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.
- 2. 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.
- 3. 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.

- 4. 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 31st January-2nd February, **2024** organized by Department of Physics, Tripura University, Tripura.
- 5. 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 10th-12th October, **2023** organized by Tripura University, Tripura.
- 6. Poster presentation on "Synthesis and Biological Evaluation of Ninhydrin based Spiro-Indenoquinoxaline Derivatives" in national conference on HERTSS held on 10th-12th October, **2023** organized by Tripura University, Tripura.
- 7. Poster presentation on "Phytochemical Screening and Biological Study of Synedrella nodiflora (L.) Gaertn" in national conference on HERTSS held on 10th-12th October, **2023** organized by Tripura University, Tripura.
- 8. 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 06th May, **2023** organized by Bharat Pharmaceutical Technology, Tripura.
- 9. Poster presentation in international conference on "Inovation in Modern/Traditional Health Sciences and Medical Technology (1st Paramedicon)" held in Banaras Hindu University, Varanasi, U.P., India on 7-8 April, **2022**.
- 10. 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.
- 11. 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**.
- 12. 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.
- 13. 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.
- 14. 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*).
- 15. In 65th 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".
- 16. In 54th 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.
- 17. 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".
- 18. In 59th 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.
- Received award (Third Prize) for the Oral presentation on "Synthesis of Spirooxindole Derivatives Using a Facile Onepot 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

<u>2020</u>

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

Talk Delivered in Seminar/Symposium/as Visiting Faculty

- 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.
- 2. 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**.
- 3. 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**st **March**, **2024**.
- 4. 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"
- 5. 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"
- 6. 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.
- 7. Delivered a lecture on "Pharmaceutical Organic Chemistry" for students 2nd year B. Pharm & D. Pharm students of Bharat Pharmaceutical Technology, Amtali, Agartala, Tripura on 26th-28th September 2020.

Other Information

- 1. Elected **President** of Association of Pharmaceutical Teachers of India (**APTI**), Tripura State Brach, **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 1st 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.

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.













