



Techno College of Engineering Agartala

An Engineering College affiliated to Tripura University (A Central University),

Approved by AICTE, MHRD, Govt. of India

Website: www.tiaedu.org

Name of the faculty: Dr. MITU SAHA

Designation: Assistant Professor

Education: (UG,PG, PhD): PhD

Contact: 8787320481, 9774228501

Address: College Address: Techno College of Engineering Agartala,
Maheshkhola, Agartala, Tripura-799004

Mobile: 8787320481

Email: saha.mitu@tiaedu.org, mitusaha.tu@gmail.com

Research Interest:

Thin film and Nano Science Technology

Membership of professional bodies: Nil

Professional Experience:

Worked as Guest lecturer in MBB college – I yr

Worked as Guest lecturer in BBM college – I yr

Working as Assistant Professor in Rajarshi College of Education and Skill-

From October, 2022 to 31st July 2023

Now working at Techno College of Engineering Agartala from 1st August 2023

To till now.

Patents: Nil

Publications:

1. Biosynthesized Ag nanocrystals as efficient multiple recycled catalyst for effective removal of RB dye in water through assisted self-aggregation process

Babli Debnath , Suari Debbarma , **Mitu Saha** , Ratan Das

Journal of Molecular Liquids 446 (2026)

2. Micellar effect of CTAB on Phenol red sodium salt: A model system may be used for cell membrane study

Mitu Saha, Nilima Biswas, S. A. Hussain, D. Bhattacharjee

Materials Today: Proceedings DOI: 10.1016/j.matpr.2020.10.1008 (2021)

3. Study of aggregation behavior of water insoluble metalloporphyrin (Zn) in LB film

Mitu Saha, Soma Banik, S. A. Hussain, D. Bhattacharjee

Materials Today : Proceedings 5 (2018) 2246–2253





4. Clay induced changes in the aggregation pattern of Safranin-O in hybrid Langmuir-Blodgett (LB) films
Mitu Saha, Ashish Shil, S. A. Hussain, D. Bhattacharjee
Journal of Photochemistry and photobiology A: Chemistry 348 (2017) 199-208
5. Effect of denaturation of DNA on the molecular organization of a fluorescent dye in ultra thin films
Mitu Saha, J. Bhattacharjee, S. A. Hussain, and D. Bhattacharjee
Molecular Crystals and Liquid Crystals 633 (2016) 46-53.
6. Interaction of nano-clay platelets with a phospholipid in presence of a fluorescence probe
Mitu Saha, S. A. Hussain, D. Bhattacharjee
Molecular Crystals and Liquid Crystals 608 (2015) 198–210.
7. Interaction of a Laser Dye with a Floating Phospholipid Monolayer
Mitu Saha, Syed Arshad Hussain and D. Bhattacharjee
Journal of Macromolecular Science, Part A 50 (2013) 607–614.
8. Micellar effect of surfactant on the aggregation pattern of a fluorescent dye in ultra-thin film
Chandan Debnath, **Mitu Saha**, D. Bhattacharjee
Journal of Photochemistry & Photobiology A: Chemistry 364 (2018) 696–704
9. Effect of nano clay platelets on the hybrid monolayer of a cationic oxazine dye: In-situ Brewster Angle Microscopic (BAM) study
Soma Banik, **Mitu saha**, S.A. Hussain, D. Bhattacharjee
Materials Today : Proceedings 5 (2018) 2352–2358
10. pH induced interaction of DPPC with a fluorescent dye in Langmuir and Langmuir Blodgett (LB) films
Soma Banik, **Mitu Saha**, S. A. Hussain, and D. Bhattacharjee
Molecular Crystals and Liquid crystals 643 (2017) 255-265.
11. Matrix dependent changes in metachromasy of Crystal Violet in Langmuir-Blodgett Films
Ashis Shil, **Mitu Saha**, Chandan Debnath, S. A. Hussain, Debajyoti Bhattacharjee
Chemical Physics Letters 665 (2016) 76–84.
12. Two peak luminescence from linoleic acid protected gold nanoparticles
Ratan Das, Sumit Sarkar, **Mitu Saha**, Pijush Ch. Dey, Siddhartha S. Nath
Journal of Luminescence 168 (2015) 325-329.
13. Silver Nanoparticles and Their Antimicrobial Activity on a Few Bacteria
Ratan Das, **Mitu Saha**, Syed Arshad Hussain, Siddhartha S. Nath
BioNanoSci.(2013) 3, 67–72



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Achievements (if any):

S.No	Name of Award	Awarding Agency	Year
1.	Research Associate (RA)	CSIR, Govt. of India	2019-2021
2.	Women Scientist-A(WOS-A)	DST, Govt. of India	2015-2018
3.	1 st Prize in Poster presentation	UGC sponsored National Conference on “Chemistry today and tomorrow for better future” 5-6 August, 2016 , at Department of Chemistry, Dasaratha Deb memorial college khowai, Tripura.	2016
4.	1 st Prize in Poster presentation	Indo French Workshop on Water Treatment and Management at UPES Dehradun on 28-29 March, 2018	2018

Sl. No.	Project Name	Funding Agency	Project Title	Session
01	College Biotech Club-2024	Directorate of Biotechnology, Govt. of Tripura	Development of a fluorescence sensor to identify pollutants in Tripura's drinking water sources.	2024-26
02	AICTE-AURA	AICTE, Govt. of India	Fluorescence Sensors	2024-26

Hobbies: Story Reading and Cooking