



INFORMATION BROCHURE FOR POSTGRADUATE PROGRAMME

CHEMISTRY DEPARTMENT



NATIONAL INSTITUTE OF TECHNOLOGY AGARTALA

TRIPURA, INDIA

Feb, 2023



Dr. Mitali Saha

Associate Professor and
HOD

HoD's Message

Chemistry Department, NIT Agartala established in the year 1965 with the focus on both teaching and high quality research in the frontier areas of Chemistry and its interface with allied disciplines. At present, the Chemistry Department is offering 2-year MSc and PhD programme in Chemistry. Besides, the Department also offers 5-year BS-MS dual degree course in Chemistry. Our PG program provides opportunities to students in a wide array of chemical disciplines including analytical, biological, environmental, inorganic, organic, materials, physical, and theoretical chemistry. I hope you will explore our website to get more information about our faculty profile and courses.

PG Coordinator's Message



Dr. Abhishek Koner

Assistant Professor

As a PG coordinator, I am happy to extend a warm welcome to the aspiring candidates interested in learning more about our PG course curriculum and syllabus. The PG programme is meant to help students not only acquire knowledge in science and chemistry, but also to apply that knowledge in industry and academia to tackle tomorrow's issues. I hope you will like our program and be motivated to join NIT Agartala.

About NIT Agartala

National Institute of Technology is a centrally funded institute declared as Institute of National Importance by Government of India. NIT Agartala offers B.Tech, BS-MS, BT-MT in 12 branches, M.Tech, MSc in 24 specializations, MBA, MCA, and Ph.D in all branches of engineering, science, humanities and management. Until now, 9350 undergraduate, 2420 post-graduate and 207 Ph.D. students have passed out from the institute. Presently, 3409 undergraduate students, 838 post graduate students and 275 Ph.D. scholars are pursuing their studies in the institute.

About Chemistry Department

The Department of Chemistry was started since the inception of the Institute. Over the years the department has developed sufficient infrastructure to run the under-graduate and post-graduate courses, viz., 5-year dual BS-MS, and 2-year MSc. The department has intake capacity of 13 students per session for MSc program and 20 students per session for dual BS-MS program. The department also offers Ph.D. program in Chemistry.

Chemistry Department has developed infrastructure for carrying out the research work in various fields such as organic and inorganic synthesis, organo-metallic chemistry, coordination chemistry, green chemistry, bioinorganic, theoretical and computational chemistry, nano-science and nanotechnology. The department has successfully completed/ongoing 10 major research projects sponsored by DST, DBT, DAE-BRNS, AICTE and CPRI.

Courses offered in the department

The Department of Chemistry offers courses in 5-year dual degree BSMS, 2- year MSc, and PhD programmes. In addition, the department offers 1-year Engineering Chemistry course in BTech.

Objectives to start the course

The MSc syllabus has been created with the syllabi of various competitive exams in mind, such as NET/GATE and others. Candidates enrolled in the MSc Chemistry programme at NIT Agartala will have the opportunity to acquire the fundamental concepts in Chemistry from a devoted group of faculty members with extensive experience in teaching and research. The students are being nurtured to become tomorrow's leaders in their chosen fields.

Student Intake

At present the student intake is 13 for 2-year PG program in Chemistry. Students are admitted through CCMN. If seats are lying vacant, students are admitted through institute advertisement.

Course Structure-Curriculum and Syllabus

The PG course has a total of 80 credits - 20 credits for each semester (1st to 4th). In the 1st, 2nd, and 3rd semesters, only theory and lab classes are conducted. Project and Dissertation is being carried out in the Industrial organization or in the institute on the proposed research topic so

that at least one journal paper may be published out of the research work.

The detailed syllabus is available on the departmental webpage.

<https://nita.ac.in/Department/Deptindex.aspx?page=a&ItemID=qa&nDeptID=caaso>

Credit evaluation system

Continuous evaluation system is followed. Credit based Cumulative Grade Point Average (CGPA) System alongwith SGPA (Semester Grade Point Average) system is adopted. Theory subjects are evaluated based on Internal Assessment (30 marks), Mid Term Examination (20 marks), and End Term Examination (50 marks). Questions are prepared following the Bloom's Taxonomy satisfying the NBA pattern.

Project evaluation committee

Project and Thesis are being evaluated by an Evaluation Committee where External Expert from reputed institutes like IISc, IITs, NITs are present to evaluate the works being carried out by the scholar under the supervision of a faculty member.

Evaluation of Project work

Beginning from the year 2022, the project evaluation would be carried out twice in a year: 3rd Semester (internally at the departmental level) and 4th Semester (in the presence of external examiner). Emphasis is generally given on publication of research in SCI/Scopus and UGC indexed journals, etc.

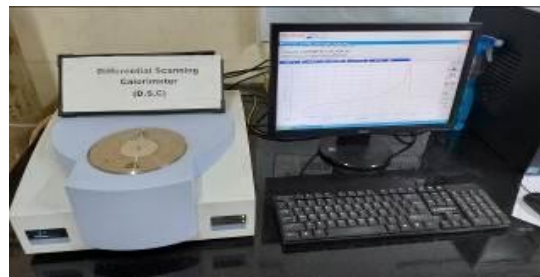
Facilities available in the department

- i) State-of-the-art UG, PG and PhD research laboratories

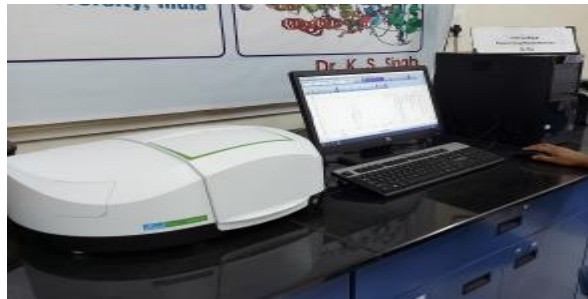


ii) Instruments laboratory with advanced facilities

➤ **Differential Scanning Calorimetry (DSC)**



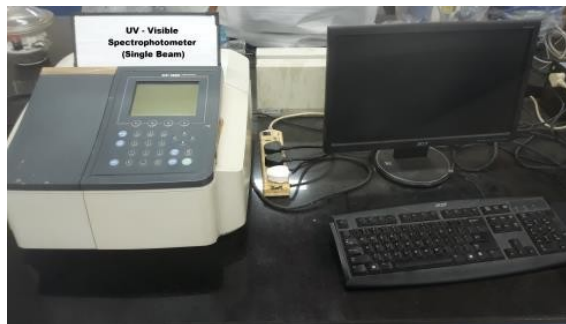
➤ **Infrared Spectrophotometer (FTIR)**



➤ **Partical size analyzer (DLS)**



➤ UV-Visible Spectrophotometer



iii) Departmental Library along with Central Library cater to the requirements of books for the various courses

iv) Smart Class rooms

v) Conference Room



More about our facilities can be found at the departmental website.

Departmental collaboration

The faculties in the Chemistry Department have established collaboration for their research projects with some of the premier institutes and universities in the country. Through their collaboration, the researchers have made significant contributions in their respective domains.

Departmental PG Course Committee

Courses	Faculty Name
Course-1 (Inorganic Chemistry)	Dr. Abhishek Koner, Coordinator Dr. Chanchal Bhaumik, Co-Coordinator
Course-II (Organic Chemistry)	Dr. Mitali Saha, Coordinator Dr. Venkata Bharat Nishtala, Co-Coordinator
Course-III (Physical Chemistry)	Dr. Jhinuk De, Coordinator Dr. Susanta Ghanta, Co-Coordinator
Course-IV (Special Paper)	Dr. Saroj Kumar Das, Coordinator Dr. Chitraniva Datta, Co-Coordinator

Departmental Alumni Committee

Dr. T. K. Misra (Associate Professor)

Coordinator

Placement and Higher Studies

The passed-out students of previous academic years that have qualified NET/GATE, pursuing higher education and currently employed are listed as under

S. N.	Name of Student	year	Higher studies Yes/no	Place of higher studies	Net /Gate/SLET qualified	Employed Yes/no	Employer name	Place of employer
1.	Abhay Shankar	2019	NO	NA	GATE	NO	NA	NA
2.	Snigdha Shil	2019	NO	NA	NA	YES	Brilliant Star School, Udaipur, Tripura	Tripura
3.	Dhilon Debnath	2020	NO	NA	NO	YES	TCG Life sciences, Chembiotek	Hyderabad
4.	Susmita Das	2020	NO	NA	GATE	YES	TCG Chembiotek	Hyderabad
5.	Arti Soni	2020	NO	NA	GATE	YES	Byju's	Bengaluru
6.	Shubhra Sharma	2020	NO	NA	NO	YES	Byju's	Bengaluru
7.	Nikita	2020	NO	NA	GATE	YES	Vedantu Group	Bengaluru
8.	Minakshi Gogoi	2020	YES	B.ed in NERIE shilling.	NO	NO	NA	NA
9.	Plabita Rajkhowa	2020	YES	RGU, Arunachal Pradesh	NO	NO	NA	NA
10.	Murshida Ezkhatun Achar Kandy	2020	YES	Jainee College of Education, Dindigul, TN	NO	NO	NA	NA
11.	Saikat Kumar Acharjee	2020	YES	B.Ed. College, IASE, Kunjaban, Agartala	NO	NO	NA	NA
12.	Akshay Kumar Ray	2021	YES	BHU, Banaras	NO	NO	NA	NA
13.	Sayari Saha	2021	NO	NA	NO	YES	Syngene International Limited	Hyderabad
14.	Subham Nath	2021	YES	MG Academic Institute, Murshidabad, W.B.	NO	NO	NA	NA

Core Faculty Members of the course

Sl. No.	Name of the Faculty Member	Designation	Research/Subjects taught
1	Dr. Saroj Kumar Das	Associate Professor	Organic Chemistry
2	Dr. Tarun Kumar Misra	Associate Professor	Inorganic Chemistry
3	Dr. Mitali Saha	Associate Professor	Organic Chemistry
4	Dr. Abhishek Koner	Assistant Professor	Inorganic Chemistry
5	Dr. Venkata Bharat Nishtala	Assistant Professor	Organic Chemistry
6	Dr. Subhojit Das	Assistant Professor	Physical Chemistry
7	Dr. Manojit Roy	Assistant Professor	Inorganic Chemistry
8	Dr. Jhinuk De	Assistant Professor	Physical Chemistry
9	Dr. Sajal Kundu	Assistant Professor	Inorganic Chemistry
10	Dr. Chitraniva Datta	Assistant Professor	Inorganic Chemistry
11	Dr. Susanta Ghanta	Assistant Professor	Physical Chemistry
12	Dr. Manas Roy	Assistant Professor	Inorganic Chemistry
13	Dr. Chanchal Bhaumik	Assistant Professor	Inorganic Chemistry

Detailed Faculty profile is available on the departmental page:

https://nita.ac.in/Department/Department_FacultyList.aspx?nDeptID=caaso

HoD, Department of Chemistry

Dr. Mitali Saha

Associate Professor and Head

Email: mitalisah@gmail.com, mitalisaha.chem@nita.ac.in

Mobile: 8974006400