

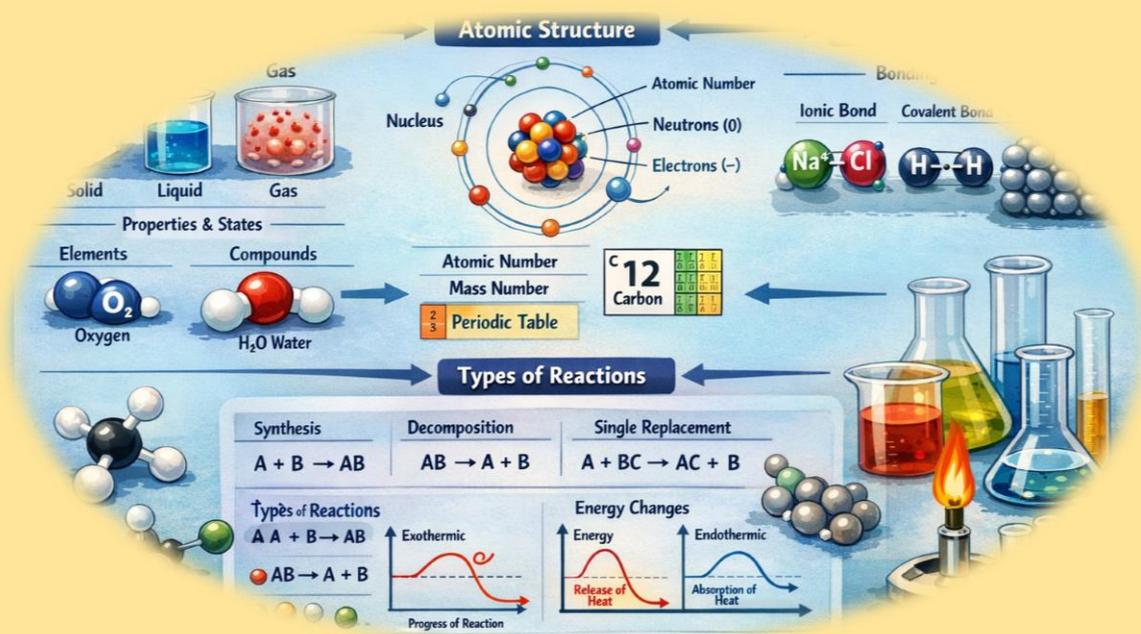
CHEMINEWS



Department of Chemistry ICFAI UNIVERSITY TRIPURA

Kamalghat, Mohanpur

West Tripura – 799210





MESSAGE

It gives me great pleasure to know that the Department of Chemistry (ISS, FST), ICFAI University Tripura is ready to publish the fifth volume of their newsletter, CHEMINEWS volume no. 5. Regular publication of this newsletter serves as the ground for appreciation of great achievements by the Department as well as ample encouragements for the students and faculties alike. Online seminars on various advanced topics are being regularly conducted by the Department of Chemistry and are highlighted in the events section of this newsletter. I am happy to note that the Department of Chemistry has successfully conducted international conference “FCSF 2025”. The faculties were able to publish quality works in international journals and were able to keep up the good research work even during the pandemic situation. The students were able to attain great height of achievements and all of these needed to be highlighted in this newsletter which I am sure the editorial members have taken good care at. I am delighted to note that the Department of Chemistry has achieved so much in such a small time since its establishment in 2018. I convey my heartiest greetings to every member of the Department of Chemistry for all these great achievements and wish them the best for their noble endeavour towards great achievements in future as a family of the ICFAI University Tripura.

Prof. (Dr.) Biplab Halder

Vice Chancellor

ICFAI University Tripura



MESSAGE

It is great to learn that the Department of Chemistry is bringing forward its fifth volume of CHEMINEWS. It covers the great feats achieved in the span of one year by the members of the family of the Department of Chemistry. The hard work and enthusiasm of each and every member of this department helped to achieve great accomplishment worth recognition. This newsletter reflects the collective effort put forth by every member of the Department to carry forward the academic excellence highlighted herein. I am sure that this newsletter will enlighten the students inspiring them to achieve even higher goals in all aspects of life. I convey my heartiest congratulations to all the members of the Department of Chemistry.

Prof. (Dr.) A. Ranganath

Registrar

ICFAI University Tripura



MESSAGE

I appreciate the efforts of the members of the Department of Chemistry to come up with the fifth volume of CHEMINEWS. The achievements of the students and the faculty members are put altogether in this newsletter which contains the year-around achievements worth mentioning in the department. Webinars, technical talks conducted on excellent advanced topics, extracurricular activities performed by the students, academic publications by the faculty members are all put together in this newsletter. The department leads innovative curriculum training the students to stand distinctly for their future careers. The department also successfully conducted campus-drive for the final year M.Sc. Chemistry Students setting an example in the science school. I believe that more industries and companies will be coming for recruitment in the next year. In this regard I am happy to note that the research facility for the Ph.D. students are also being upgraded in a constant effort as new scientific equipment are now being purchased by the ICFAI University for the Chemistry Department. The long list of scientific publications in international journals by the faculty members speaks for itself and I wish the Department of Chemistry to achieve great feats of accomplishment in coming years as an all-round performer in the ICFAI family.

Prof. (Dr.) Priyangshu Rana Barthakur

Dean, Faculty of Science and Technology

ICFAI University of Tripura



MESSAGE

It is a great pleasure to witness and be a part of the remarkable journey of the Department of Chemistry at ICFAI University, Tripura. With each passing year, the department continues to achieve new milestones in academic excellence, research, and student development. The publication of the latest volume of CHEMINEWS is yet another testament to the dedication and hard work of our faculty members and students.

The Department of Chemistry has always been committed to providing quality education, research opportunities, and industry exposure to its students. The faculty members work tirelessly to mentor and guide students, ensuring they are well-prepared for both higher studies and career opportunities. Through a well-structured curriculum, hands-on laboratory training, and interactive learning methodologies, the department fosters an environment that nurtures curiosity, innovation, and analytical thinking.

One of the key focus areas of the department has been enhancing research along with higher studies, employability and career readiness among students. We take pride in organizing campus recruitment drives, industry interactions, skill development sessions, and training programs to equip students for future challenges. It is indeed gratifying to see our students securing job offers in reputed organizations like Ediglobe, Academor, etc and making their mark in the professional world. The success of our students in placements, competitive exams, and research endeavors is a true reflection of the department's commitment to holistic development.

Beyond academics, the department actively encourages participation in seminars, conferences, workshops, and extracurricular activities, ensuring that students develop a well-rounded personality. The exposure to national and international platforms further enhances their learning experience and prepares them for global challenges.

I extend my heartfelt congratulations to the editorial team for their dedicated efforts in bringing out this latest edition of CHEMINEWS. This newsletter serves as a wonderful medium to showcase the department's achievements and the relentless spirit of our faculty and students.

Wishing everyone continued success and looking forward to many more accomplishments in the years ahead!

Prof. (Dr.) Swarnali Nath Choudhury

Professor & Dean of Placement

ICFAI University Tripura



MESSAGE

It is a matter of pride and pleasure to present “*Cheminews*”, the newsletter of the Department of Chemistry, ICFAI Science School, ICFAI University Tripura. Chemistry, as the central science, helps us understand the composition, structure, and transformation of matter, while cultivating analytical thinking, precision, and innovation. The department has consistently demonstrated excellence through its high-end research initiatives, contributing significantly to emerging areas of scientific advancement.

I am delighted to witness the department’s strong research culture, where faculty and students actively engage in cutting-edge projects, publish in reputed journals, and participate in collaborative ventures. Such scholarly pursuits not only enhance academic reputation but also address real-world challenges in areas like materials science, environmental sustainability, and chemical sciences.

Alongside its research achievements, the department continues to nurture young minds through quality teaching, laboratory training, seminars, and outreach activities that connect scientific knowledge with societal needs. These efforts truly reflect the spirit of higher education—innovation, dissemination of knowledge, and service to society.

I sincerely appreciate the dedication and hard work of the faculty members, researchers, staff, and students whose commitment sustains this culture of excellence. I congratulate the editorial team for bringing out “*Cheminews*” and extend my best wishes to the Department of Chemistry for continued growth, impactful research, and greater accomplishments in the years ahead.

Dr. Prasenjit Bal

Assistant Professor & Principal

ICFAI Science School

ICFAI University Tripura



MESSAGE

It is with great pleasure to announce that the Department of Chemistry, ICFAI University Tripura has come up with its release of the volume 5 of our departmental newsletter, CHEMINEWS. Since our department's founding in 2018, we have made significant academic progress, and I am pleased to report that the Department of Chemistry has excelled in all areas since the start of its ambitious project. The ICFAI family responded very well to our first newsletter, which was a huge success and inspired the entire department to create the volume 5. Our yearly achievements report is contained in this newsletter, which compiles all of the academic and associated accomplishments. This publication is a testament to the hard work and dedication of our students, faculty, and staff.

The Department of Chemistry is proud to offer parallel B.Sc. (Hons), M.Sc., and PhD programs due to its excellent teacher-student ratio. The faculty members' close mentoring proven to be very beneficial in helping the students get through the challenges of the pandemic-era combined offline-online learning environment. I want to express my gratitude to the entire faculty, students, and parents for their unwavering support in helping the Department of Chemistry flourish and reach this remarkable milestone.

Since we place a high value on education, our faculty members work tirelessly throughout the academic year to adjust the curriculum as necessary. Both theoretical and practical experiments are presented and adjusted on a regular basis in response to recommendations. Students are continuously exposed to advanced research subjects through a variety of national and international webinars and seminars. We continuously push our students to pursue higher education, conduct research, and get ready for the workforce by scheduling extra classes for competitive exams like the NET, GATE, JAM, and others.

In addition to the standard curriculum, students learn teamwork, ethics, and soft skills. Innovative and creative thinking is constantly valued, which aids in a student's academic success. Students are always encouraged to participate in extracurricular activities, and many of them have accomplished amazing things. This newsletter attempts to provide a glimpse of the wide range of academic and academic-related activities that the Department of Chemistry at ICFAI University Tripura fosters.

I would like to extend my gratitude to the editorial team for their tireless efforts in bringing this newsletter to life. Your contributions are invaluable, and I appreciate your commitment to sharing the stories and successes of our department.

Dr. Ganesh Chandra Paul

Assistant Professor & Head

Department of Chemistry,

ICFAI University Tripura

Issue Editors:

Dr. Ganesh Chandra Paul

Assistant Professor & HOD Chemistry

Dr. Prasanta Sutradhar

Assistant Professor, Chemistry

Editorial Board:

Dr. Swarnali Nath Choudhury

Professor & Dean Placement Cell

Dr. Amitava Sharma

Assistant Professor, Chemistry

Dr. Tufan Singha Mahapatra

Assistant Professor, Chemistry

Dr. Subhadip Roy

Assistant Professor, Chemistry

Dr. Ankita Chakraborty

Assistant Professor, Chemistry

Dr. Saheli Roy

Assistant Professor, Chemistry

Dr. Dilip Nath

Associate Professor, Chemistry

Courses Offered:

- B. Sc. (Hons.) Chemistry
- M. Sc. Chemistry
- Ph. D. Chemistry (Full time)

Area of Research:

- Bio-inorganic Chemistry and Catalysis
- Coordination Chemistry
- Supramolecular Chemistry
- Surfactant and Surface Activity
- Theoretical Spectroscopy
- Natural Products
- Nano-chemistry and Nanotechnology

- Computational Chemistry
- Biophysical & Colloid Chemistry
- Polymer Nanocomposites

About the Department of Chemistry:

The Department of Chemistry started its journey in 2018 and dedicated itself towards the benefit of the society to promote science and nurture the young students. B.Sc. (Hons.), M. Sc. And Ph. D. programs are being offered and the advanced education is carried out by highly qualified faculty members actively engaged in research. Students are exposed to the cutting edge research and technologies and are trained in theory as well as practical classes accordingly. Regular seminars, workshops and webinars are arranged to expose the students to the current advancements in science and related fields. Students take part in summer internship programs in prestigious academic institutions. The M.Sc. students experience advanced research in their M. Sc. Project tenure under the guidance of Departmental faculty members. We also organize campus drive for the recruitment of interested students.

Highlights of the Department:

- UG, PG and Ph.D. programs
- Highly qualified faculty members
- Well-equipped laboratory facility
- Active research and publications in high impact international journals
- International and national seminars and webinars by renowned experts
- Preparatory special classes for NET, GATE, JAM etc.
- Campus drive for students
- 4 students from B. Sc. Chemistry (Hons.) qualified JAM 2024 and 2 students qualified CUET 2025.

EVENTS

“Birthday Celebration of Acharya Prafulla Chandra Ray-2024”



Figure 1: Flyer of the 163rd Birthday Celebration of Acharya Prafulla Chandra Ray program.



Figure 2: Prof. (Dr.) Swarnali Nath Choudhury delivering welcome address marking the beginning of the program.



Figure 3: Dr. Ganesh Chandra Paul delivering his talk on the occasion of 163rd Birthday Celebration of Acharya Prafulla Chandra Ray at Department of Chemistry.



Figure 4: Dr. Tufan Singha Mahapatra during his presentation on the occasion of 163rd Birthday Celebration of Acharya Prafulla Chandra Ray at Department of Chemistry.



Figure 5: Dr. Ankita Chakraborty during his presentation on the occasion of 163rd Birthday Celebration of Acharya Prafulla Chandra Ray at Department of Chemistry.



Figure 6: Dr. Amitava Sharma delivering the vote of thanks on the occasion of 163rd Birthday Celebration of Acharya Prafulla Chandra Ray at Department of Chemistry.

Acharya Prafulla Chandra Ray, born on August 2, 1861, was a renowned chemist, historian, educator, industrialist, and philanthropist. Often regarded as the father of chemical science in India, Ray established the first modern Indian research school in chemistry. To honour his immense contributions, the Department of Chemistry at The ICFAI University Tripura celebrated his birthday on 2nd August 2024.

Indian Knowledge System (IKS) talk/presentation "Case Studies in Indian Metallurgy: Insights into Historical Techniques and Applications"

The Department of Chemistry organizes a talk on Indian Knowledge System (IKS) on 23rd September 2024. Dr. Subhadip Roy, Assistant Professor and Associate Dean R & D, The ICFAI University Tripura delivered an insightful talk titled "Case Studies in Indian Metallurgy: Insights into Historical Techniques and Applications." His presentation explored the rich history of metallurgical practices in India, focusing on the technological advancements and

methods that have contributed to global metallurgy. By examining ancient techniques of copper extraction, zinc production, and wootz steel manufacturing, Dr. Roy highlighted the lasting influence of Indian metallurgical innovations on modern science and industry.

The key highlights from the presentation:

- Copper Ores and Extraction
- Zinc Metal Production and Technological Transfer
- Wootz Steel: Indian Primacy in Steel Making

Dr. Subhadip Roy's presentation offered valuable insights into the rich heritage of Indian metallurgy. His detailed exploration of copper extraction, zinc production, and steel manufacturing techniques demonstrated how ancient practices laid the foundation for modern metallurgical science. The event provided a platform to reflect on the importance of preserving and studying these historical techniques to inspire future innovations in science and technology

The session was highly beneficial for students, equipping them with essential insights to navigate their knowledge in industrial chemistry.



Figure 7: Welcome address by Dr. Ganesh Chandra Paul, Assistant Professor & HOD, Department of Chemistry, ICFAI University Tripura.



Figure 8: Dr. Subhadip Roy commencing his presentation.



Figure 9: Dr. Roy explaining the discoveries at Ingaldhal, Karnataka, where evidence of early copper smelting was uncovered.



Figure 10: Exhibition of steel blades from Dr. Roy's personal collection.

Teacher's Day Celebration-2024

Teacher's Day, observed on the 5th of September, is a day dedicated to celebrating the immense contribution of teachers in shaping the lives of students and, by extension, society at large. This date marks the birthday of Dr. Sarvepalli Radhakrishnan, India's former President, who was a renowned scholar and a devoted teacher. The day serves as a reminder of the pivotal role that teachers play in nurturing and guiding young minds towards a brighter future.

On 05.09.2024, The Teacher's Day celebration at the ICFAI University Tripura was marked by a series of engaging activities. During the seminar, several faculty members shared their thoughts and experiences about the importance of education and the role of teachers. These speeches provided valuable insights into the educational journey and inspired both students and fellow educators.



Figure 11: *Cake-Cutting ceremony on the occasion of Teacher's Day celebration at Department of Chemistry.*



Figure 12: *Speech by Prof. Dr. Swarnali Nath Choudhury, Dean of Placement, IUT.*

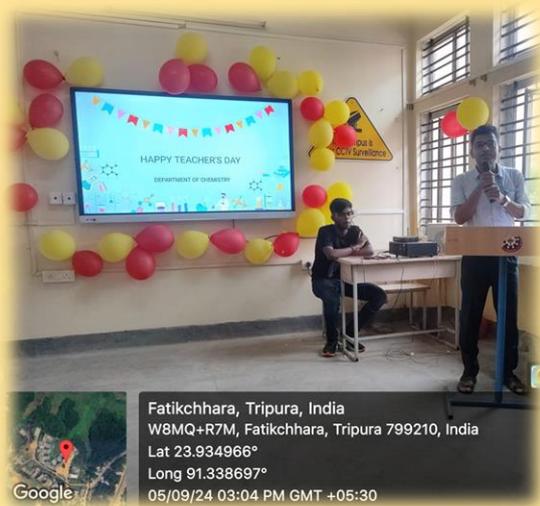


Figure 13: *Speech by Dr. Ganesh Chandra Paul, HOD, Dept. of Chemistry on the occasion of Teacher's Day celebration at Department of Chemistry..*



Figure 14: Speech by Dr. Subhadip Roy on the occasion of Teacher's Day celebration at Department of Chemistry.

“Mole Day” celebration

‘Mole Day, celebrated annually on October 23 from 6:02 a.m. to 6:02 p.m., commemorates Avogadro's Number (6.02×10^{23}), a cornerstone of chemical science. This unique day is observed worldwide to foster interest in chemistry and its role in understanding the universe. The Department of Chemistry, ICFAI University Tripura, takes great pride in organizing a special celebration each year, making the event a significant platform for knowledge dissemination and engagement. This year, the department hosted the Mole Day celebration on November 19, 2024, with the theme emphasizing the importance of chemistry in our daily lives and its broader implications in science and innovation. The program aimed to enlighten young minds about the critical role of chemistry in shaping the modern world and inspire the next generation of scientists and innovators.



Figure 15: Commencement of the event with a lamp-lighting ceremony.



Figure 16: Welcome address by Prof. Dr. Biplab Halder, Hon'ble Vice Chancellor, ICFAI University Tripura.



Figure 17: Special note address by Prof. Dr. Priyangshu Rana Borthakur, Dean, FST, ICFAI University Tripura.



Figure 18: *Speech by Chief Guest Dr. Mithun Roy, Associate Professor, Department of Chemistry, NIT Agartala, Tripura, India..*



Figure 19: *Dr. Ganesh Chandra Paul, Assistant Professor and Head of the Department of Chemistry delivering vote of thanks.*



Figure 20: Group Photo on the occasion of Mole Day at Department of Chemistry.



Figure 21: Flyer of Mole day celebration on 19th November, 2024 at the Department of Chemistry, IUT.

International webinar on Awareness of Trends in Technology: Application of Quantum Mechanics in the Modern Era

The Department of Chemistry has organized an international webinar on “Awareness of Trends in Technology: Application of Quantum Mechanics in the Modern Era” on 21st February, 2025. The webinar was hosted by Dr. Subhadip Roy, Assistant Professor and Associate Dean of

R&D, Department of Chemistry, IUT. The program began with the welcome address of Dr. Ganesh Chandra Paul, Assistant Professor & Head, Department of Chemistry, IUT. In his speech, Dr. Paul had explained the importance of such a webinar. He welcomed the resource person, Dr. Shyama Charan Mandal, who gave his talk on such an interesting topic. In his talk, Dr. Mandal had mentioned the application of quantum mechanics in modern research has transformed how scientists approach catalysis, material design, and molecular interactions. The vote of thanks was proposed by Dr. Tufan Singha Mahapatra, Assistant Professor, Department of Chemistry, IUT.

THE ICFAI UNIVERSITY TRIPURA
Department of Chemistry
Organizes
International Webinar
on
**Awareness of Trends in Technology:
Application of Quantum Mechanics in the Modern Era**
Date: 21/02/2025, Time: 9:30 AM (IST)
Registration link: <https://forms.gle/YLeADJ4dgTLX6RkE9>

Chair:
Prof. (Dr.) Biplab Halder
Vice Chancellor, The ICFAI University, Tripura

Speaker:
Dr. Shyama Charan Mandal
Postdoctoral researcher at Stanford University and SLAC National Accelerator Laboratory, USA.

Figure 22: Flyer of the virtual webinar.

Dr. Ganesh Chandra Paul (Presenting)

Subhadip Roy

28 others

Dr. Prasanta Sutradhar

People

Mute all Add people

Search for people

IN MEETING

Contributors

Dr. Prasanta Sutra... (You) Meeting host

Aditi Patary

Adrija Bhattacharjya

AMITAVA SHARMA

Amranali Das

Bipasha Datta and Ritisha Saha can now join this meeting

9:28 AM | azg-kztu-nno

Figure 23: Dr. Subhadip Roy initiating the virtual webinar.



Figure 24: *Dr. Ganesh Chandra Paul delivering the welcome address.*

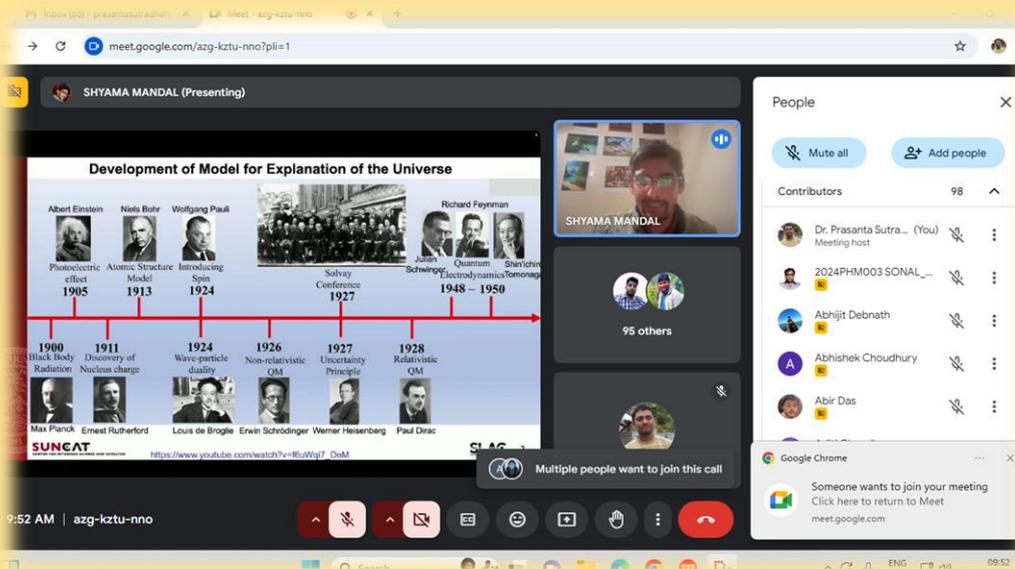


Figure 25: *Dr. Shyama Charan Mandal highlighting key milestones in the evolution of quantum mechanics.*



Figure 26: *Vote of Thanks by Dr. Tufan Singha Mahapatra.*

Career Prospects in Chemistry

Chemistry is a dynamic and multifaceted field offering a wide array of career opportunities across various sectors. The seminar titled "Career Prospects in Chemistry" was organized by Department of Chemistry, The ICFAI University Tripura to provide participants with insights into the diverse career paths available to chemistry postgraduates and to guide them on how to navigate these paths successfully. On 09.05.2025, **Dr. Ganesh Chandra Paul**, Assistant Professor and Head of the Department of Chemistry, provided an in-depth exploration of the various career opportunities available to chemistry postgraduates.



Figure 27: *Career Prospects in Chemistry: Introduction Session by Dr. Ganesh Chandra Paul at The ICFAI University, Tripura*



Figure 28: *Exploring the Role of Chemistry in Daily Life and Industry by Dr. Ganesh Chandra Paul*

CAMPUS DRIVE FOR RECRUITMENT

The **Department of Chemistry, ICFAI University Tripura**, proudly acknowledges the placement achievements of its **B.Sc. and M.Sc. Chemistry students (2022-2025 & 2023-2025 batches)**. These accomplishments highlight the students' dedication, academic excellence, and the department's commitment to career development.

M.Sc. Chemistry (2023-2025) – Placement Offers

- **Akhangsha Paul (23IUT0090019)**
Designation: Academic Counselor
Organization: Ediglobe

B.Sc. Chemistry (2022-2025) –Placement Offers

1. Adrija Bhattacharjee (22IUT0060035)

Organization: *Academor*

Role: Business Development Associate

SUMMER INTERNSHIP PROGRAM

Summer internship program is the integral part of our bachelors and master degree curriculum, of ICFAI University, Tripura. In this academic session (2024-2025) students of Department Chemistry have done their IP during the summer holidays from 26th May, 2025 to 18th July, 2025. Students can bag an internship through various means since our University gives ample opportunities to the students to interact with some highly prestigious institutions. During their internship the students have to submit a weekly report to their respective mentor and after the completion of the IP project they have to submit a final report.

In this year, the Department of Chemistry, ICFAI University has placed their students in various organizations of Tripura. Our 30 B.Sc. chemistry students have done their internship in CIPET, Agartala, where they learnt about the preparation and analysis of polymer and plastic materials. Our 25 M.Sc. students were placed in different institutions and organizations like IICT Hyderabad, Tripura State Pollution Control Board, ONGC and Tripura University. During this project they have an exposure to the recent research and developments in chemistry

SPECIAL ACADEMIC ACHIEVEMENT

The Department of Chemistry, **ICFAI University Tripura**, takes immense pride in recognizing the outstanding achievements of its **B.Sc. Chemistry (2022-25) students** who have successfully qualified for prestigious national-level entrance examinations for postgraduate studies. Their dedication and hard work reflect the department's commitment to academic excellence and career advancement.

JAM 2025 (Joint Admission Test for Masters)

The following students have qualified for **JAM 2025**, a highly competitive examination conducted for admission into premier institutions such as **IITs, IISc, and NITs** for master's programs in Chemistry and related disciplines:

- BRU ELVIS REANG (22IUT0060001)
- ANKITA GUHA (22IUT0060027)
- NINOBI DEBBARMA (22IUT0060037))
- SARBANI DAS (22IUT0060039)

Their success in JAM 2025 is a testament to their academic rigor and determination, opening doors to higher education opportunities in premier institutions.



Figure 29: Photos of JAM qualified students.

CREATIVE EXPRESSIONS

1. Dr. Tufan Singha Mahapatra, Assistant Professor, Department of Chemistry, was invited to deliver an “Invited Lecture” at a National Seminar on “Recent Advances in Chemistry Research and Translation (ReACT-2025)” organized by IISER Kolkata from 31st January to 1st February 2025, at IISER Kolkata on the topic ‘Light-Emitting Lanthanide(III)-Based Coordination Polymers and Coordination Polymer Gels’.

2. Dr. Tufan Singha Mahapatra, Assistant Professor, Department of Chemistry, was invited to deliver an “Invited Lecture” at a National Seminar on “Nature, Culture, Politics and Technology in the Context of Climate Change: The Way Forward” on March 4th and 5th March 2025 at Tripura University on the topic: Light-Emitting Lanthanide(III)-Based Materials for UV-Shielding and Explosive Detection.



Figure 30: Picture of Dr. Tufan Singha Mahapatra while delivering a speech during the conference.

3. **Dr. Amitava Sharma**, Assistant Professor, Department of Chemistry, was invited to deliver an “Invited Lecture” Organized by Maharaja Bir Bikram College on March 17th 2025 at Maharaja Bir Bikram College on the topic: **Unravelling Molecular Mysteries: Advances and Challenges in Quantum Chemistry**.



Figure 31: Picture of Dr Amitava Sharma during his talk.

SCIENTIFIC PUBLICATIONS

Research and Publications 'CHEMINEWS' (2024-25)

All the faculty members from the Chemistry Department are devoted to research-related activities and during this course of time (*July 2024 to June 2025*), the faculty members published a total of **six (6) research articles** in reputed international journals, **one (1) Book**.

The **Research Article** details are as follows in chronological order:

(1) In *November 2024*, **Dr. Tufan Singha Mahapatra (corresponding author)**, along with his PhD student and **Dr. Saheli Roy (co-author)** published a research article under the **Nature-Indexed** category in the international journal named ‘Inorganic Chemistry’ from the American Chemical Society with an Impact Factor of 4.7.

Publication details are as follows:

Title: Light-Emitting Coordination Polymers: Stimuli-Responsive Gels, PMMA-Based Composite Films, and UV-Shielding

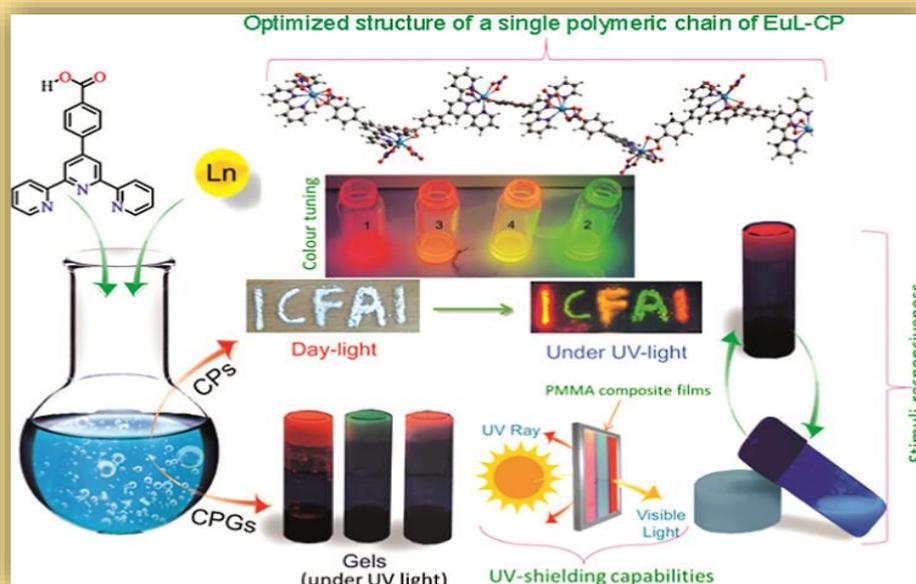
Authors: Bilash Chandra Roy, Vishwakarma Ravikumar Ramlal, Dipmalya Basak, Suvramalya Basak, **Saheli Roy**, Samrat Ghosh, **Tufan Singha Mahapatra***

Inorganic Chemistry 2024, 63, 48, 23044-23056 (Article)

Publication Date (Web): November 15, 2024

Citation: 6 (till date)

Link: <https://doi.org/10.1021/acs.inorgchem.4c04333>



(2) In March 2025, **Dr. Tufan Singha Mahapatra (corresponding author)**, along with his PhD and MSc students, published a research article under the SCI category in the international journal named 'Polyhedron' from Elsevier with an Impact Factor of 2.6.

Publication details are as follows:

Title: Isostructural square planar mononuclear copper(II) and nickel(II) complexes: Catecholase and phenoxazinone synthase activity, protein and DNA-binding insights, and molecular docking

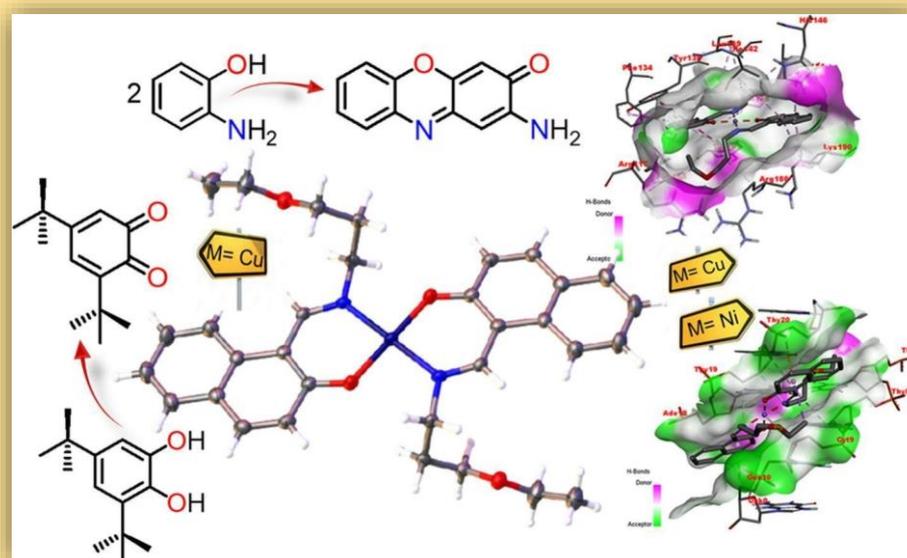
Authors: Bilash Chandra Roy, Ernest Debarma, Dipanwita Chakraborty, Biswajit Dey, Dipmalya Basak, Susanta Ghanta, **Tufan Singha Mahapatra***

Polyhedron, Volume 273, 1 May 2025, 117492 (Article)

Publication Date (Web): 15 March 2025

Citation: 6 (till date)

Link: <https://doi.org/10.1016/j.poly.2025.117492>



(3) In December 2024, **Dr. Swarnali Nath Choudhury (corresponding author)**, along with her MSc students, published a research article under the **UGC Care** category in the Journal named 'Journal of Bioresources'. Publication details are as follows:

Title: Natural indicator for acid base titration from ethnobotanical resources of Tripura, India using green chemistry principles

Authors: Swarnali Nath Choudhury*, Biplab De, Subrata Das, Dwaipayan Banik, Akash Das, Akash Datta, Barnana Chakraborty, Susmita Pal, Ajay Mili, Mary Naksang

Journal of Bioresources 12 (2): 129 – 136, October – December, 2024

Publication Date (Web): 31.12.2024

Link: <http://doi.org/10.5281/zenodo.14892455>

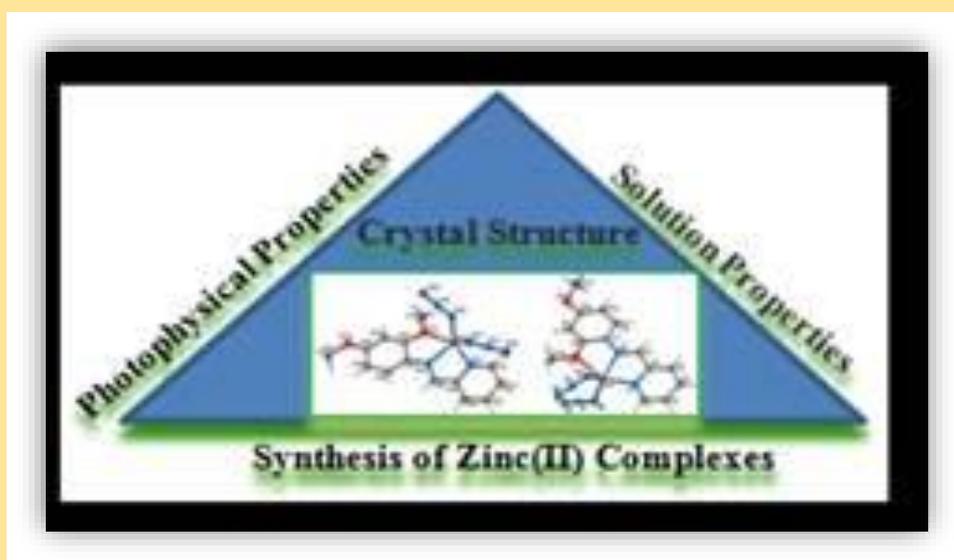
(4) In February 2025, **Dr. Subhadip Roy**, coauthored an article in *Journal of Coordination Chemistry* (Publisher: Taylor & Francis, Impact factor: 2.1, SCIE Indexed). The study was conducted through international collaboration involving The ICFAI University Tripura (India), Lodz University of Technology (Poland), University of Southern Denmark (Denmark), and the National Institute of Technology Agartala (India).

Title: Synthesis, characterization and photophysical properties of some water soluble Zn(II) azide complexes with (E)-2,4-dimethoxy-N-((pyridin-2-yl)methylene)benzenamine derived from 2-pyridinecarboxaldehyde

Authors: Sajal Kundu,* Pirkha Debbarma, **Subhadip Roy**, Lesław Sieroń, Soumitra Dinda, Waldemar Maniukiewicz*

Journal of Coordination Chemistry, 78(7), 636–648.

Link: <https://doi.org/10.1080/00958972.2025.2458644>



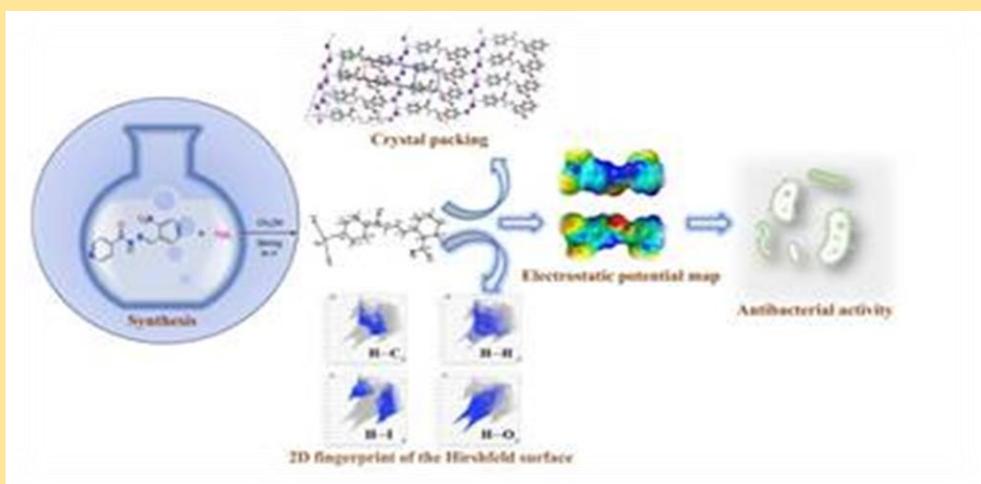
(5) In March 2025, **Dr. Subhadip Roy**, as one of the corresponding authors, published an article in *New Journal of Chemistry* (Publisher: Royal Society of Chemistry, Impact factor: 2.5, SCIE Indexed). The study represents a collaborative research effort involving Dr. Subhadip Roy (The ICFAI University Tripura, India) with researchers from Nagaland University, Government Degree College Dharmanagar, UPES Dehradun, Presidency University Kolkata, University of Washington (USA), GITAM University, Baku State University (Azerbaijan), and the University of Maragheh (Iran).

Title: Insights into the spodium bonding characteristics of a bactericidal Hg(II) complex

Authors: A. H. Sheikh, R. B. Choudhury, V. K. Deb, T. Shahnowaz, S. Mukherjee, K. Pramanick, W. Kaminsky, N. A. Choudhury, **S. Roy,*** R. Shukla,* A. V. Gurbanov, G. Mahmoudi* and S. Adhikari,*

New J. Chem., 2025, **49**, 7900-7909

Link: <https://doi.org/10.1039/D5NJ00983A>



(6) In May 2025, **Dr. Ganesh Chandra Paul**, as one of the corresponding authors, published an article in *International Journal of Chemical Studies* a peer review journal in the field of chemical science domain.

Title: A brief overview on electrochemical CO₂ reduction

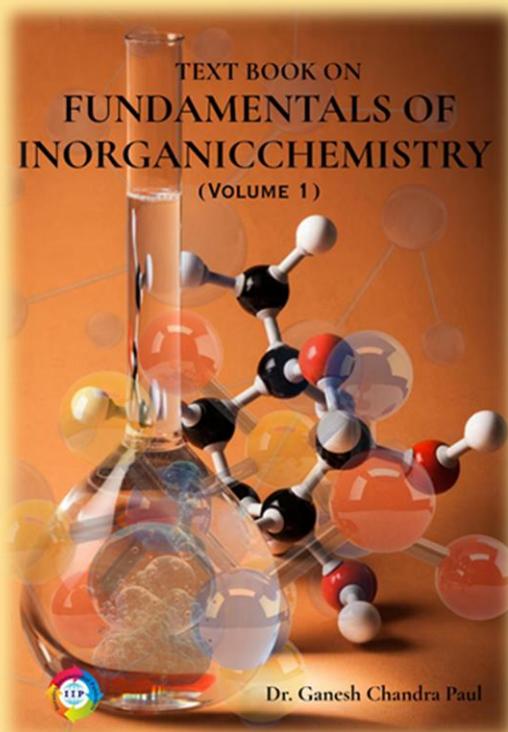
Authors: Ganesh Chandra Paul*

Int. J. Chem. Stud., 2025, **13**(4), 18-25

Link: <https://www.doi.org/10.22271/chemi.2025.v13.i4a.12553>

Edited Book/Book

Dr. Ganesh Chandra Paul, Assistant Professor and Head of the Department, authored the textbook Fundamentals of Inorganic Chemistry (Vol 1), published in June 2025 by Iterative International Publishers (Selfygage Developers Pvt. Ltd.), ISBN: 978-93-7020-846-9.



Book Chapters

The **Book Chapter** details are as follows:

In Feb 2025 a Book was edited and published in IGI Global Scientific Publishing with ISBN No. DOI: 10.4018/979-8-3693-7101-5.ch010

Book Title: Evolving Landscapes of Research and Development: Trends, Challenges, and Opportunities

Editor Dhananjoy Datta (dattadhananjoy@gmail.com), Vishal Jain (vishal.jain@sharda.ac.in), Biplab Halder (halderb@icfaiuniversity.in), UTTIYO RAYCHAUDHURI (Uttiyo.raychaudhuri@du.edu), Suman Kumar (skumar@troy.edu),

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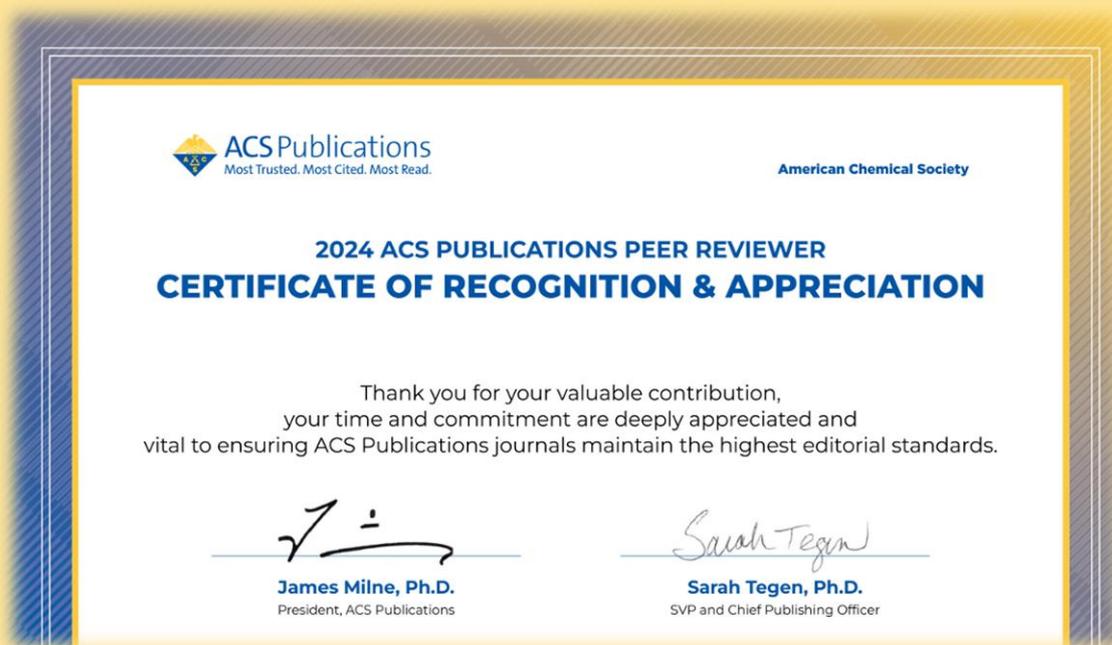
Author: **Dr. Swarnali Nath Choudhury**

Chapter Title: Innovative Research and Future Directions: Bridging Tradition With Modern Science With Special Reference to Northeastern India

ISBN: 10.4018/979-8-3693-7101-5.ch010

In addition to carrying out research work, our faculty members are also involved in *reviewing processes* with many reputed journals as *peer reviewers*.

Dr. Subhadip Roy, Assistant Professor, Department of Chemistry, has received the Certificate of Recognition and Appreciation for his valuable contribution and for maintaining the highest editorial standards as a peer reviewer from **American Chemical Society Publications**.



Dr. Tufan Singha Mahapatra, Assistant Professor, Department of Chemistry, has associated with *reviewing processes* with **Royal Society of Chemistry, Elsevier and Wiley VCH** journals as a *peer reviewer*.



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Reviewer Certificate

This certificate is awarded to

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Thank you for reviewing 2 manuscripts in 2024

2 April 2025

Anja Wecker
Editor-in-Chief

Dr. Saheli Roy, Assistant Professor, Department of Chemistry, has been involved in *reviewing processes* with **Scientific Reports** (published by **Nature**) as a *peer reviewer*.



STUDENTS' SPEAK



“I am truly grateful to ICFAI University Tripura for helping me to learn, grow and discover my potential. It is a university where learning meets warmth and ambition meets opportunity, here we are not just a student but a part of a big ICFAI Family. The faculty at ICFAI have been more than just teachers they have been mentors and guides who treated us with kindness and respect. Their friendly demeanour and readiness to help us at all times created a sense of belongingness.

I am grateful to have been surrounded by such compassionate individuals who made the learning experience both meaningful and comforting. ICFAI didn't just give me an education, It gave me an edge. Forever grateful to ICFAI UNIVERSITY TRIPURA.”

Jerrina Jamatia, BSc Chemistry 3rd Year

“It is a privilege to speak about the incredible environment and faculty at ICFAI University. Every corner of this campus encourages us to explore, ask questions, and engage in meaningful discussions. What truly sets ICFAI apart is the dedication of our faculty. They not only have imparted knowledge but also inspire and mentor us to become better individuals. Their guidance and unwavering support have played a vital role in shaping our academic and personal growth.

I am grateful to be part of this university, where both the environment and faculty contribute to our success and development.”

Sarbajit Ghosh, B Sc. Chemistry 3rd Year



“It was my immense luck and fortune to be the part of ICFAI University where I can grow. As a student of ICFAI University Tripura the thing I like the most is the co-operative environment of the faculty members, who are always available for our help and clearing doubt, the classes provided are highly interactive. My three years at ICFAI had been a wonderful experience of learning with prolific exposure to outside. Huge respect, love, and devotion to the entire faculty members and department. One of the most impressive quality of the university is its anti-ragging environment.”

Tania Das Choudhury, B.Sc. Chemistry 3rd Year

‘Being students of the Department of Chemistry, The ICFAI University, Tripura is a matter of pride for us. We are truly thankful to our faculties for their patience, encouragement, and unwavering support from lab works to class works throughout our academic journey. Their mentorship has not only strengthened our understanding of chemistry but has also inspired us to dream bigger and work harder. It is a privilege to be a part of this department, which continuously motivates students to strive for excellence where student and faculty coordination meet the best.’

Anuj Ghosh, B.Sc. Chemistry 2nd Year



“It is a privilege to express my sincere appreciation for the academic environment at ICFAI University. The institution provides a structured and intellectually stimulating atmosphere that fosters critical thinking, analytical reasoning, and scientific curiosity. The campus culture promotes scholarly discussions and encourages students to actively engage in research-oriented learning. What distinctly sets the university apart is the unwavering dedication of its faculty. The professors are highly knowledgeable and approachable, offering not only subject expertise but also meaningful academic mentorship. In the field of Chemistry, their guidance in theoretical concepts, laboratory techniques, and research methodologies has significantly enhanced my scientific understanding and practical competence. Their emphasis on precision, discipline, and ethical research practices has greatly contributed to my academic development. The university also provides excellent laboratory infrastructure and exposure to modern analytical techniques, which are essential at the postgraduate level. This practical training, combined with rigorous coursework, has strengthened my problem-solving ability and prepared me for advanced research and professional challenges. I am deeply grateful to be associated with an institution that prioritizes academic excellence, innovation, and holistic development. My experience at ICFAI University has laid a strong foundation for my future endeavors in research, industry, and higher studies in Chemistry.”

Singdha Bhowmik, M.Sc. Chemistry 2nd Year

LABORATORY FACILITY

Department of Chemistry, ICFAI University Tripura is equipped with advanced scientific instruments, including a Shimadzu UV-visible spectrophotometer and an FT-IR Spectrometer System with ATR Sampling Module.

UV-visible spectrophotometers and FT-IR spectrometers, renowned for their precision and accuracy, are essential instruments used in chemical analysis to characterize unknown compounds prepared in the laboratory. UV-visible spectrophotometers measure the absorption of light in the ultraviolet and visible regions of the electromagnetic spectrum, providing detailed information about electronic transitions in molecules. On the other hand, FT-IR (Fourier Transform Infrared) spectrometers are used to analyse how a sample interacts with infrared light, offering valuable insights into the functional groups and chemical bonds present in the compound. These instruments, with their unparalleled accuracy, are crucial for identifying and understanding the properties of various compounds synthesized in the laboratory.

Our efforts, involving several faculty members from the Chemistry Department, research scholars, and MSc students, have led to measurements on numerous samples. These efforts are expected to yield many good publications in the near future, showcasing our shared commitment to advancing scientific knowledge.



Figure 32: Photos of M.Sc. and B.Sc. Chemistry Laboratory.



Figure 33: *Photo of Chemistry Research Laboratory.*



Figure 34: *Photo of Melting-point apparatus.*



Figure 35: *Photo of Colorimeter.*



Figure 36: *Photo of Conductivity Meter*



Figure 37: *Photo of Hot Plate.*



Figure 38: Photo of Water bath.



Figure 39: Photo of Heating mantle.



Figure 40: Photo of Vacuum pump.



Figure 41: Photo of Hot Plate with magnetic stirrer.

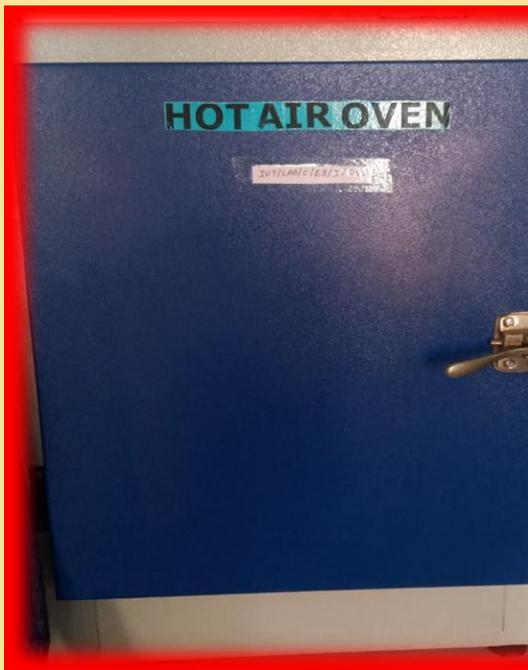


Figure 42: Photo of Hot Air Oven.



Figure 43: Weighing balance



Figure 44: *Photo of Fume Hood in M.Sc. and B.Sc. Chemistry Laboratory*



Figure 45: *Photo of Fume Hood in Chemistry Research Laboratory.*



Figure 46: *Photo of Water distillation unit in Chemistry Research Laboratory.*



Figure 47: *Photo of Rotary Evaporator in Chemistry Research Laboratory.*



Figure 48: *Photo of Shimadzu UV-VIS Spectrophotometer model: UV-1900i in Central Instrumentation Center for Chemistry Research purpose.*



Figure 49: *Photos of BRUKER alpha ii FT-IR Spectrophotometer in Central Instrumentation Center for Chemistry Research purpose.*

CONTACT INFORMATION

Department of Chemistry, ICFAI Science School,
Faculty of Science and Technology

ICFAI University Tripura

Kamalghat, Mohanpur, West Tripura – 799210

Email: ganeshpaul@iutripura.edu.in