



NIT Meghalaya

MEGH-DARPAN

NITM @ October, 2025



Contact us

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National Institute of Technology Meghalaya

(An Institute of National Importance)

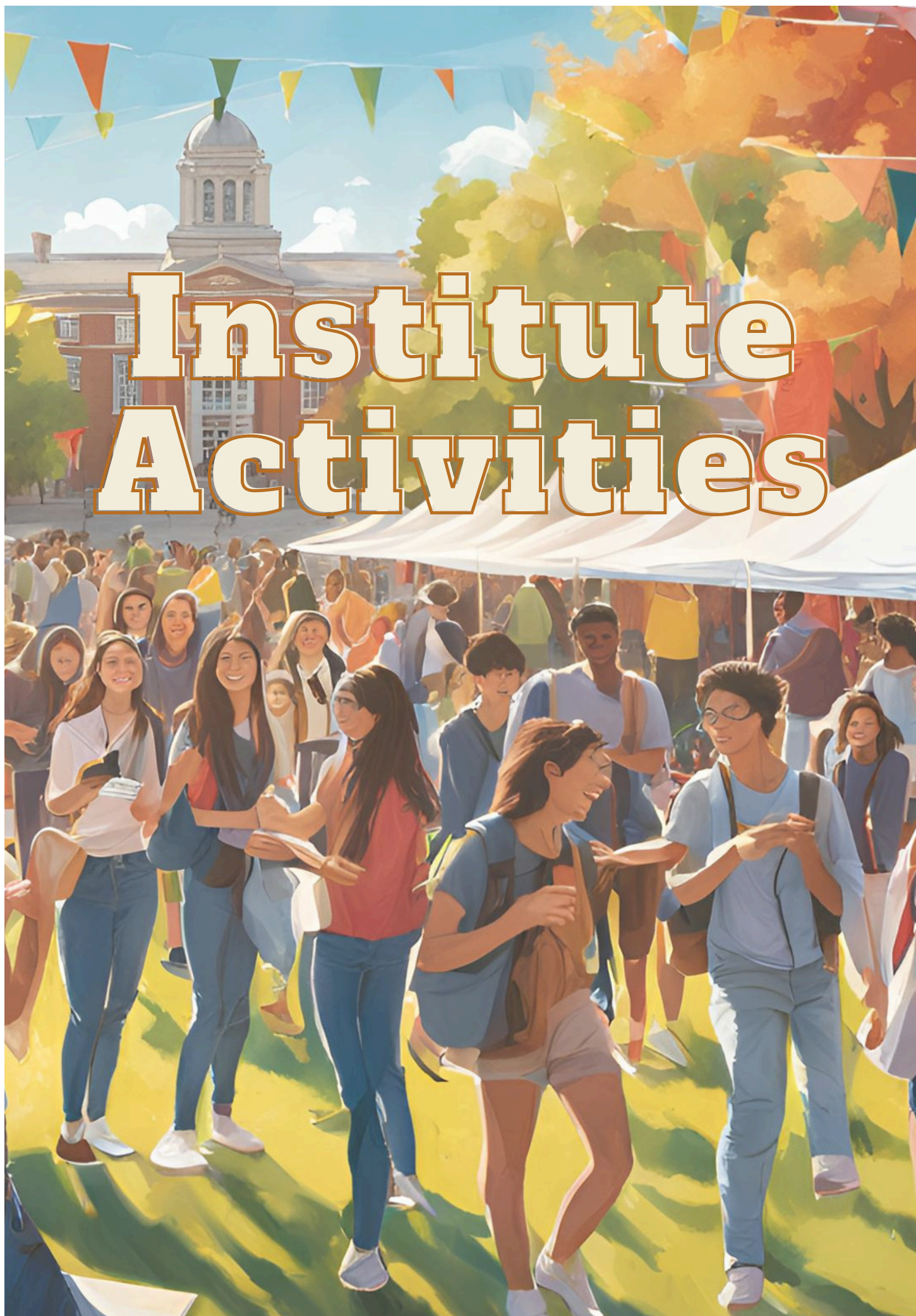
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**INSTITUTE MAGAZINE
NIT MEGHALAYA**

FIFTH Edition

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Institute Activities



Nasha Mukh Bharat Abhiyaan

As part of the Nasha Mukh Bharat Abhiyaan, a Drawing Competition was organised by the Student Activity Centre (SAC), NIT Meghalaya, to create awareness among students about the ill effects of substance abuse and the importance of a healthy lifestyle. The event witnessed enthusiastic participation from students, who expressed their creativity through thought-provoking and inspiring artworks highlighting the campaign's theme.



Organizers and participants of Nasha Mukh Bharat Abhiyaan

The prize distribution ceremony was held on 8th September 2025, where the winners were felicitated for their outstanding contributions. The program not only encouraged artistic expression but also served as a platform to spread the message of a drug-free and responsible society.

Swachhata Pakhwada 2025

The Student Activity Center (SAC), NIT Meghalaya, organized a series of activities under Swachhata Pakhwada 2025 from 9th to 13th September 2025 with the objective of promoting cleanliness, hygiene, and environmental responsibility among students and staff.



Swachhata Pakhwada Pledge taking ceremony

The week-long program commenced with the Swachhata Pledge on September 9th at the Senate Hall, where participants committed themselves to upholding cleanliness and sustainable practices. On 10th September, an Essay Writing Competition was held at the Seminar Hall on the theme "Role of Citizens to Make Swachhata Pakhwada Successful", followed by a Painting Competition on 11th September, where students creatively expressed their ideas on cleanliness and hygiene.



Painting Competition

On 12th September, a Plantation Drive was carried out in front of the Admin Block, where faculty, staff, and students actively participated in planting saplings to enhance greenery on campus. The celebrations continued on 13th September with a Nukkad Natak (Street Play) at the Lecture Hall, which conveyed impactful messages on cleanliness and hygiene. This was followed by a spirited Rally and a Hostel Cleaning Drive across the campus, encouraging students to take responsibility for maintaining a clean and healthy environment.



Students participating in Swachhata Pakhwada 2025

Har Ghar Tiranga 2025

NIT Meghalaya celebrated Har Ghar Tiranga 2025 with great enthusiasm and patriotic spirit. As part of the program, the National Flag was distributed to all faculty, staff, and students, and flags were displayed across the campus to mark the occasion.



Celebration of Har Ghar Tiranga 2025

A rally was also organised, where participants actively took part in spreading the message of unity and national pride. To add more vibrancy, a selfie booth was set up, allowing everyone to capture memorable moments with the Tiranga. The celebration reflected the collective commitment of the NIT Meghalaya fraternity towards honouring the spirit of India's independence and fostering national integration.



Celebration of Har Ghar Tiranga 2025

National Sports Day 2025



Badminton Tournament organized in celebration of National Sports Day

National Sports Day 2025 was celebrated at NIT Meghalaya from 29th to 31st August with enthusiastic participation from students, faculty, and staff, honouring hockey legend Major Dhyhan Chand. The three-day event featured various indoor and outdoor activities, including yoga, athletics, badminton, table tennis, carrom, chess, and fun games, promoting fitness, teamwork, and sportsmanship. A special yoga and fitness workshop highlighted the importance of physical and mental well-being. The celebrations concluded with a prize distribution ceremony recognizing outstanding participants. The event successfully reinforced NIT Meghalaya's commitment to fostering a balanced campus culture combining academics, fitness, and character-building.



Yoga and Fitness Workshop

National Space Day 2025

The Astronomy Club of NIT Meghalaya, under the Student Activity Centre (SAC), organised a series of events on 22nd and 23rd August 2025 to celebrate National Space Day. The programs were aimed at inspiring students towards space science and exploration.

The events included a Quiz Competition, Essay Competition, and Poster Session on 22nd August, followed by an Expert Talk and Star Gazing Session on 23rd August. The competitions witnessed enthusiastic participation, showcasing students' knowledge, ideas, and creativity. The star-gazing activity offered a practical experience of observing celestial bodies through telescopes.

The highlight was the online talk by Dr Rahul Kothari, Assistant Professor, IIT Mandi, who spoke on Non-Euclidean Geometry and its applications in space science. The session was engaging and interactive.

Overall, the celebration generated excitement, awareness, and curiosity about space among students, and all events were conducted successfully.



Star Gazing session

Swachhata Utsav 2025

As part of Swachhata Utsav 2025, NIT Meghalaya organised a series of impactful activities promoting cleanliness, sustainability, and community responsibility.

- **Swachhata Awareness:** The EBSB Club distributed specially designed A3 posters in hostels to spread the message of cleanliness and inspire students to maintain a sustainable environment.
- **Waste to Art (22nd Sept 2025):** Students creatively transformed waste materials into artistic and functional items, highlighting recycling, upcycling, and eco-friendly practices.
- **Saifai Mitra Suraksha Sivr (23rd Sept 2025):** A health camp was conducted for the institute's cleaning staff by the medical officer, emphasising occupational health, safety, and well-being.

Ek Din Ek Ghanta Ek Sath (25th Sept 2025): Students and staff participated in a one-hour campus cleaning drive, reflecting collective responsibility and promoting sustainable habits.



Participants and organizers of Swachhata Utsav 2025

Empowering Vision Through Touch: Four- Party MoU Signed to Promote Learning for Visually Impaired Students Using DotPad

In a remarkable stride toward inclusive and technology-driven education, a Memorandum of Understanding (MoU) was recently signed among Dot Pad Inc., Seoul, Kellogg University College, Oxford University, the Foundation for Innovation in Health, Kolkata, and the National Institute of Technology (NIT) Meghalaya.

The partnership seeks to empower visually impaired students by introducing the DotPad, an innovative tactile graphic display device that allows learners to visualize digital content, images, and diagrams through touch. This groundbreaking technology opens new possibilities for accessibility, especially in Science, Engineering and Mathematics where visual interpretation plays a critical role.

Through this collaboration, the four institutions will jointly work on developing tactile learning content, training educators and students, and conducting research on inclusive pedagogical models. The initiative aims to build a sustainable framework for integrating tactile technologies into mainstream education and promoting digital inclusion across learning environments.



Delegates from four institutions showcase the signed MoU for advancing inclusive education through DotPad.

Representatives from each organization expressed their shared vision of creating an equitable academic ecosystem where technology bridges barriers rather than reinforces them. The MoU reflects a collective commitment to innovation, accessibility, and empowerment – paving the way for a future in which every learner, regardless of ability, can explore and understand the world through touch and technology.

Student-Faculty Interaction during Induction Programme 2025



Students attending the Student- Faculty Interaction programme

The Department of Computer Science and Engineering organised. The Student-Faculty Interaction as part of the Induction Programme on 22nd August 2025 (Friday) from 10:00 am to 11:00 am. The freshers from B.Tech, M.Tech, and MCA were warmly welcomed by the faculty. The session started with an address by the head of the Department spoke about the importance, vision, and opportunities offered by the department. Faculty members then introduced themselves, explained their roles, shared their areas of expertise, and highlighted the academic and research opportunities available to students. The freshers were also informed about how



Student-Faculty Interaction during Induction Programme 2025

classes will be conducted through a mix of theory sessions, lab work, projects, and interactive discussions to build both knowledge and practical skills. The interaction gave students a clear picture of the department's academic culture and the supportive environment provided for their growth. The session ended on a motivating note, encouraging students to take part in academics, research, and co-curricular activities to make the most of their journey in the department.



Students attending the
Student- Faculty Interaction programme

South Korean Delegates of DotPad Technologies Meet CSE Faculty to Advance Curriculum for Visually Impaired Students

In an inspiring step toward inclusive education, a team of delegates from DotPad Technologies, South Korea, recently visited the Department of Computer Science and Engineering (CSE) to discuss curriculum innovations tailored for visually impaired students.

The meeting brought together global expertise and local academic insight, with both sides united by a common goal—making computer science education truly accessible for all.

DotPad Technologies is internationally recognised for its groundbreaking work in refreshable braille displays and tactile graphic devices. During their visit, the delegates showcased how their technology has transformed learning experiences in universities abroad.

Faculty members of the CSE department, in turn, shared the department's ongoing efforts and challenges in designing inclusive teaching methods for courses such as

programming, algorithms, and systems design.

At the heart of the discussion was a shared commitment: ensuring that visually impaired students are not only able to access digital content but also equipped to compete on equal footing with their peers in the fast-evolving tech industry. Together, the two teams explored ways of embedding assistive technologies into the classroom, revising assessment models, and providing teachers with the necessary training to support inclusive pedagogy.

The CSE faculty welcomed the dialogue, noting that such international partnerships pave the way for research collaborations, pilot projects, and curriculum redesigns that could have long-lasting impact. The session concluded with an agreement to establish a joint working group that will design a practical roadmap for rolling out accessibility-driven initiatives in the coming academic year.

This exchange between South Korea and India stands as more than just an academic dialogue—it is a meaningful step toward building inclusive digital classrooms, where technology ensures no learner is left behind.

One-Day Field Trip to Bamboo Value Addition

Date of Visit: August 8th, 2025

Location: Roka Cane and Bamboo Works in Umroi, Ri Bhoi District, Meghalaya

Conducted for: Visits to bamboo-based enterprises

Conducted By: PRIME Startup Hub, Meghalaya

Faculty Visited: Dr. Yanrenthung Odyuo and Dr. Rwivoo Baruah

Objective: To gain insights into the bamboo-based bioeconomy, explore potential avenues for innovation in gaps found in bamboo-based enterprises, and discover any opportunities for collaboration between NITM and bamboo-based enterprises in Meghalaya.

Visit Highlights:

- Interaction with Mr. Roka of Roka Cane and Bamboo Works
- To visually inspect machines associated with bamboo works.
- Understand key concerns of the entrepreneurs in bamboo-based enterprises.



A glimpse of the visit

Key Take aways:

- Bamboo sawdust is a major by-product of bamboo-based enterprises. It could be utilized for biotransformation into value-added products like animal feeds.
- About 60% of raw bamboo is wasted during processing. Efficient designing of bamboo processing machines could help these bamboo-based businesses.



A glimpse of the visit

Conclusion:

Overall, the visit left a lasting impression, emphasising the importance of startups exploration and showcasing the product's capabilities for both the local and global markets.

Field Visit to S. R. (India) Bio Products, Byrnihat, Meghalaya

Purpose:

A field visit was conducted to S. R. (India) Bio Products, Byrnihat, Meghalaya, on June 13, 2024, to understand the challenges faced by the bamboo industry in the region. The company primarily focuses on the production of bamboo charcoal and the efficient removal and management of its byproducts, including liquid extracts and bio-tar generated during the carbonisation process.

During discussions, key issues were identified, such as the need for improved processing technologies, environmental

management of byproducts, and value addition strategies to utilise bamboo charcoal and its derivatives more effectively. Addressing these challenges can contribute to a more sustainable and economically viable bamboo industry in Meghalaya.

Alignment with UN Sustainable Development Goals (SDGs):

- 1) SDG 9 (Industry, Innovation and Infrastructure): Encouraging innovation in bamboo processing technologies and value-added products.
- 2) SDG 12 (Responsible Consumption and Production): Promoting sustainable management of bamboo resources and environmentally responsible handling of byproducts.
- 3) SDG 13 (Climate Action): Supporting low-carbon production practices using bamboo-based alternatives and efficient carbonization methods.
- 4) SDG 15 (Life on Land): Encouraging sustainable utilization of bamboo resources to prevent ecological degradation.

Visiting faculties:

Professor Gitish K Dutta, Professor, Department of Chemical and Biological Sciences

Dr Naba K Nath, Associate Professor, Department of Chemical and Biological Sciences

Dr Rajat Subhra Das, Assistant Professor, Department of Mechanical Engineering

Dr Biplab Debnath, Assistant Professor, Department of Mechanical Engineering

Piyush Chakraborty, Professor of Practice



Group photo of visiting faculties

Benefits / Skills Obtained / Knowledge Gained:

- Gained insights into industrial-scale bamboo charcoal production and its byproduct management.
- Understood the environmental and technological challenges in the bamboo sector, particularly regarding sustainable processing.
- Learned about the scope of value addition in bamboo charcoal derivatives, which can enhance local economic opportunities.
- Developed awareness of how sustainable bamboo-based industries can support rural livelihoods while aligning with climate and environmental goals.



A glimpse of the visit

IDEATHON 2025: Pitching Innovation, Igniting Change

The Entrepreneurship Cell of NIT Meghalaya, in collaboration with the Institute Innovation Council (IIC), organised IDEATHON 2025— a dynamic platform for students to pitch their startup ideas and showcase their entrepreneurial spirit. The event aimed to nurture creativity, connect young innovators with industry mentors, and select the best team to represent NIT Meghalaya at Eureka 2025 (IIT Bombay), with a chance to advance to the Tigerlaunch Global Finals at Princeton University.

eld at the NIT Meghalaya campus, the full-day event featured enthusiastic participation from 20 teams across departments, presenting innovative solutions before an esteemed panel of evaluators. Distinguished guests included Shri James P.K. Sangma (Chairman, MIDC), Mr. Anirban Paul (Advisor, MIDC), and professors Ayon Bhattacharjee and Diptendu Sinha Roy from NIT Meghalaya. Their inspiring insights emphasized the power of ideas, sustainable innovation, and entrepreneurship as a driver of societal progress.



Ideathon 2025

Guests praised the event's organisation, diversity, and impact, while offering constructive feedback on improving storytelling and problem framing in pitches. Students described the experience as transformative, motivating them to pursue their startup ideas beyond the classroom.

IDEATHON 2025 has not only celebrated innovation but also strengthened NIT Meghalaya's role as a growing hub for entrepreneurship in the North East. The event's success marks a milestone in fostering young changemakers ready to ignite meaningful transformation through ideas that matter.

Plasma Technologies for Entrepreneurship

The programme was jointly organised by the National Institute of Technology (NIT) Meghalaya, North East Centre for Technology Application and Reach (NECTAR), and AIC – IPR Plasmatech Innovation Foundation, IPR, Gandhinagar (An Atal Incubation Centre of Institute for Plasma Research, DAE, supported by AIM-NITI Aayog)

Venue: NIT Meghalaya, Shillong

Date: September 6, 2024



A glimpse of the visit

Objectives:

- To discuss the plasma technology and its potential in developing start up ideas.
- To provide detail aspects of IPR and its relevance in start-ups.
- To raise awareness among participants about the role of the North East Centre for Technology Application and Reach (NECTAR) in supporting start-ups in the northeastern region.



A glimpse of the visit

Benefits of the program

Students (external participants from colleges of Shillong, and students from Nit Meghalaya), particularly from physics and engineering backgrounds, learned about plasma technology and how it can be converted to meaningful ideas that can lead to potential start-ups. Students also learned about what the IPR is, why it is important, and how to file a patent. They have also been Introduced to NECTAR and its role in advancing technology-based solutions to address existing challenges by utilizing resources unique to the northeastern region of India.

Angel Investment/VC Funding Opportunity for Early-Stage Entrepreneurs on “Startup Financing”

A webinar titled “Startup Financing” was held on August 30, 2025, organised by the E-Cell and Startup & Incubation Cell of NIT Meghalaya. The session was delivered virtually by Prof. M. Shameem Jawed, Associate Professor of Finance at IIM Visakhapatnam, who is well known for his expertise in entrepreneurship, venture capital, and startup strategy. Around 20 participants attended physically, and 35–40 joined virtually.

Objectives

1. To guide budding entrepreneurs in developing a vision for their startups.
2. To address challenges in financial planning.
3. To explain key concepts such as venture capital, equity, debentures, and exit strategies.
4. To inspire students to explore their entrepreneurial potential.

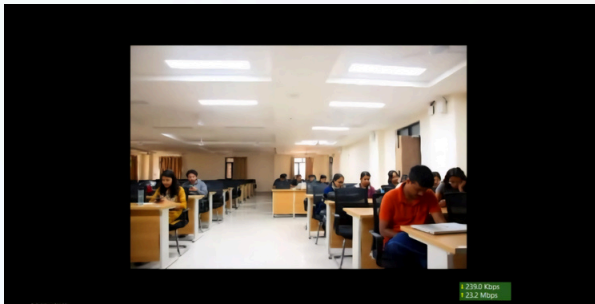
Highlights of the Session

- Prof. Jawed encouraged audience interaction from the beginning.
- Used Shark Tank examples to explain startup pitching.
- Discussed ImpactGuru and other investing platforms.
- Demonstrated SWOT analysis and various financing instruments.
- Explained funding stages, business ups and downs, and remedies for failure.
- The event was broadcast via Zoom and shown on a smart screen in Block D Seminar Hall, with a DSLR setup for audience interaction.

Outcomes

- Sparked curiosity and entrepreneurial thinking among students.
- Encouraged faculty–student engagement and discussion.

- Introduced practical insights into startup financing.
- Inspired new incubation-based activities at NIT Meghalaya.
- Strengthened NIT Meghalaya's identity as a management and business-oriented institution.



The audiences who were witnessing a noteworthy screen seminar experience and were broadcasted to the speaker.

YUKTI Innovation Challenge 2025

The YUKTI Innovation Repository, initiated by the Ministry of Education's Innovation Cell (MIC), provides a national platform for recording and showcasing innovations from academic institutions. It connects academia with industry and government to strengthen India's innovation ecosystem.

At NIT Meghalaya, the Institution's Innovation Council (IIC) has actively promoted participation in YUKTI to encourage students and faculty to document their ideas, seek mentorship, and engage in national innovation programs.

Registered Innovations (4 Total)

1. Living Grid – AI-Integrated Smart Grid for Self-Healing and Efficient Power Management

Innovator: Arush Raman | TRL: 3

AI-based smart grid system for efficient energy management and real-time analytics.

2. 3D Printing of Modular Shoes Using Composite Materials

Innovator: Donaldson Nonglang | TRL: 1

Sustainable, customizable footwear using 3D printing and composite materials.

AICTE Productization Fellowship (APF)

The APF supports innovators in converting ideas into market-ready products with funding, mentorship, and incubation support. From NIT Meghalaya, two innovations—Living Grid and 3D-Printed Modular Shoes—were verified and recommended for APF consideration.

Key Outcomes

- Total Innovations Registered: 4
- Recommended for APF: 2
- Benefits: National visibility, mentorship, and funding opportunities.
- Impact: Strengthened innovation and entrepreneurship culture at NIT Meghalaya, supporting the national vision of Atmanirbhar Bharat.

Outreach Programme On “Effects Of Smartphone Usage On Adolescence”

Date: 25 July 2025

Organized by: Guidance & Counselling Centre, NIT Meghalaya

Venues: Ramakrishna Mission Secondary School, Mawmluh & Laitryngew

The Guidance & Counselling Centre, NIT Meghalaya, organized an outreach programme on “Effects of Smartphone Usage on Adolescence” on July 25, 2025, extending its mental health awareness efforts to local schools. The event aimed to educate adolescents about the psychosocial and behavioral effects of smartphone overuse, including nomophobia, sleep disruption, stress, and social isolation, while encouraging balanced digital habits and self-regulation.

Sessions were conducted at Ramakrishna Mission Secondary Schools, Mawmluh and Laitryngew, engaging a total of 179 students. The workshops were led by Ms. Insaralang Syiemlieh, Ms. Jenyvieve Marwein, and Dr. Swathisha P. from NITM's Guidance & Counselling Centre.



Ramakrishna Mission Secondary School

The program featured interactive presentations, role-plays, group discussions, and reflection circles, helping students explore smartphone habits and their impact on mental well-being.



Group Photo with the students of Ramakrishna Mission Secondary School

Students responded enthusiastically—sharing experiences, analyzing screen time, and developing practical strategies like digital detox routines and tech-free family hours. Teachers also appreciated the informative and participatory format. The initiative significantly improved awareness and self-reflection among participants, with many expressing a willingness to adopt healthier technology

habits. Both schools conveyed interest in future collaborations, marking the outreach as a successful step toward youth mental health and digital well-being promotion.



Students attending the outreach programme

SLD Screening

Date of Screening: 28.08.2025

Target Group: First Semester Students

Total Students Screened: 200

Conducted As Per: Ministry of Education Orders

Purpose of the Screening:

The screening was carried out in compliance with directives issued by the Ministry of Education, aiming to identify students with Specific Learning Disabilities (SLD) at the earliest stage to ensure timely support and interventions.

Screening Process:

- The screening was conducted on 28th August 2025 for all first-semester students.
- A total of 200 students underwent the screening process.
- Standard screening tools and protocols recommended by educational and clinical guidelines were followed.

Conclusion and Recommendations:

- The early screening initiative is crucial in identifying students with learning difficulties to provide timely academic support and accommodations.
- Continuous monitoring and periodic follow-up are recommended to ensure that any emerging concerns are promptly addressed.
- It is also suggested to maintain regular communication with the student's treating psychiatrist to align academic support with therapeutic progress.

Personality Development Session And Personality Type Screening

A Personality Development Session was organised on September 4, 2025, at LH3, exclusively for first-year BTech students, with special support from the Student Counselling Volunteer Team. The session aimed to promote self-awareness, confidence, and interpersonal understanding among new students.

Key topics included an introduction to personality development, the importance of communication, emotional intelligence, adaptability, and an overview of the Big Five Personality Traits—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Students participated in a personality screening using the Big Five Inventory (BFI), which helped them identify their dominant traits and reflect on areas for growth. A group activity, led by student volunteers, encouraged peer interaction, teamwork, and stress relief through fun and collaborative games.

- The session witnessed enthusiastic participation, fostering an open and positive environment.



Students attending the Personality Development Session

Students appreciated the blend of scientific insight and engaging activities, which helped them gain a deeper understanding of themselves and their peers. Overall, the session effectively met its objectives of encouraging personal growth, inclusivity, and confidence-building among first-year students.

International Conference On "Smart Materials and Sustainable Solutions for Climate Resilience (SMSSCR-2025)" 2-4 August 2025

The International Conference on Smart Materials and Sustainable Solutions for Climate Resilience (SMSSCR-2025) was held from August 2–4, 2025, organized by the Department of Civil Engineering, NIT Meghalaya, under the convenorship of Dr. Ganesh Chandra Dhal and Dr. Dibyendu Adak. Conducted in hybrid mode, the event brought together researchers, industry professionals, academicians, and policymakers to discuss the pivotal role of smart materials in promoting climate resilience and sustainability.

The conference focused on innovative material technologies for renewable energy, sustainable infrastructure, and green urban development. Key discussions highlighted eco-friendly and biodegradable materials, circular economy practices, energy-efficient systems, and disaster-resilient solutions.



A Glimpse of SMSSCR- 2025

Major themes included:

- Smart materials for sustainability
- Renewable energy materials
- Climate change mitigation and carbon capture
- Eco-friendly construction materials
- Circular economy approaches (recycling, upcycling, waste reduction)
- Smart sensors for environmental monitoring
- Water and wastewater treatment
- Disaster-resilient materials
- Policy integration and sustainable governance



Inauguration of SMSSCR- 2025

Overall, SMSSCR-2025 served as a collaborative platform fostering interdisciplinary dialogue and emphasizing the transformative potential of smart materials in achieving global sustainability and climate adaptation goals.



Keynote Speakers of SMSSCR- 2025

Suicide Prevention Day Activities

- The Campus Counseling Cell, in collaboration with YOURDOST, organized a three-day event from September 10–12, 2025, at the Senate Hall (Block-C), NIT Meghalaya, to mark World Suicide Prevention Day (September 10th). The initiative aimed to promote mental well-being, reduce stigma around mental health, and encourage open dialogue among students, faculty, and staff, in line with the Ministry of Education’s mental health directives.
- The program began with a Quotation Competition on the theme “Changing the Narrative”, inviting creative expressions of hope, resilience, and awareness. On September 11, the YOURDOST team conducted a Suicide Prevention Awareness Lecture covering early signs of

distress, the importance of seeking help, and the role of peers and family in supporting those in need. Participants were also introduced to YOURDOST's online counselling platform, emphasising its confidentiality, accessibility, and range of wellness resources.

- The event concluded with a Gift Distribution Ceremony on September 12, where winners of the quotation competition were felicitated with certificates and gifts. Selected quotes were displayed on digital platforms to inspire positivity across campus.
- The initiative received overwhelmingly positive feedback from students and faculty. Participants appreciated the interactive and informative sessions, as well as the creative outlet provided through the competition. The program helped initiate open conversations on mental health, and there was a notable rise in counselling inquiries following the event – reflecting its success in raising awareness and fostering a supportive campus environment.

Departmental Orientation For PhD Scholars

An Orientation Programme was organised by the department for the newly inducted PhD scholars on August 29, 2025, by the department of HS. It included an orientation of the students by the faculty members of the department around the following themes: PhD Rules and Regulations, Rules regarding Attendance and Leave, Disciplinary Rules, Orientation regarding Classes and Courses and various Departmental Activities. It was followed by a Game Session for students and refreshments.



Scholars attending the Orientation

World Statistics Day 2025

A quiz competition was conducted among B. Tech, M.Tech, M.Sc., and Ph.D. students, on 25th September 2025, as a part of the precelebration of the World Statistics Day 2025.



Students participating in the Quiz competition

“Semiconductor Fabrication, Packaging and Testing” Workshop

The Department of Electronics and Communication Engineering, NIT Meghalaya, organized a five-day Workshop and Training Program on “Semiconductor

Observance of World Suicide Prevention Day

The Department of Humanities and Social Sciences, NIT Meghalaya, hosted an impactful and informative event to mark World Suicide Prevention Day on September 10, 2025.



Scholars and faculty members attending the event

The event sought to promote awareness regarding suicide prevention, encourage open discussions, and nurture a feeling of hope and support among the academic community. The participants were the students and faculty members of the department, and the Counsellors of the Institute Ms. Insalarang Syiemlieh and Ms. Genevieve Marwein. The event was coordinated by Ms. Deimaphimo Mawa and Dr. Swathisha P.

Formation of the E-Cell, NITM



Entrepreneurship-Cell NIT Meghalaya, is a student-driven initiative recently formed, aims to be Northeast India's premier innovation hub. It fosters entrepreneurship by connecting students with resources and mentorship, bridging the gap between ideas and application.



Participants of the 5-Day Workshop

Fabrication, Packaging, and Testing” from August 25–29, 2025.

The event was co-sponsored by Maverick Technologies, Guwahati, and aimed to enhance participants’ understanding of semiconductor design, fabrication processes, and testing methodologies.

As part of the program, a new Semiconductor Laboratory was inaugurated on August 25, 2025, by Dr. Jamil Akhtar, Chief Scientist, Professor (AcSIR), and Ex-Director (Retd.), CEERI Pilani. The inauguration took place in the presence of Prof. Pinakeswar Mahanta, Director, NIT Meghalaya, and Dr. Roy P. Paily, Professor, IIT Guwahati.

The workshop provided hands-on training sessions, expert lectures, and demonstrations, offering participants valuable exposure to emerging trends and practical aspects of semiconductor technology and research.



A glimpse of the 5-day Workshop and Training Program

Internal Smart India Hackathon 2025:

E-Cell in collaboration with IIC, conducted this event eight teams were selected to represent NITM at the national level.



Participants at the Smart India Hackathon

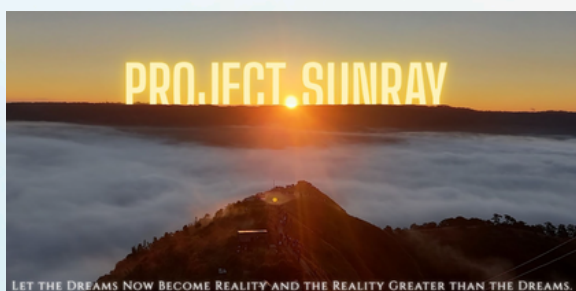
E-cell also had successfully conducted these events to impose and emphasize entrepreneurship skills among students

- **“If I Were a CEO” – Social Media Challenge**
- **Capacity Building Program on Design and Entrepreneurship (CBDE)**
- **Startup Webinar on “Startup Financing” by Prof. Jawed (IIM Visakhapatnam)**



Photo: CBDE Event conducted by E-cell

E-Cell's upcoming Project SUNRAY will build a statewide innovation network, using bootcamps and festivals to connect communities and support grassroots ideas.



Project Sunray

Induction Programme 2025

Program Goals and Academic Orientation

The NIT Meghalaya Induction Programme 2025 was designed to nurture discipline, confidence, and academic readiness in new students, welcoming them to the institute. The program featured academic interactions with faculty, introductions to administrative bodies like the Placement and Entrepreneurship Cells, and assessments of English and computer proficiency to plan future support.

Personal Development and Cultural Immersion

Personal development was also emphasized through counselling sessions on emotional well-being by YourDOST and inspiring talks on discipline and self-awareness. A 5-day SPICMACAY cultural workshop immersed students in traditional arts, including Sattriya dance, Sanchipat painting, mime, and Hindustani classical music.

Engagement, Exposure, and Program Outcome

Students engaged in interactive quizzes, sports, and alumni mentoring sessions. External visits to NESAC (showcasing ISRO's technology), Thangkharang Park, and a Youth Convention provided broader exposure. The program concluded by successfully instilling a sense of confidence and belonging in the new students as they began their journey.



Research and Development

Publications

Journal Articles

- Aritra Narayan Hisabia and Manideepa Saha, New Properties of Semipositive Matrices and Polyhedral Cones, Operators and Matrices, Vol 19, No 2(2025), 275-294
- Rabul Saikia, Sakshi Gupta, Anupam Sarma, Ngangbam Herojit Singh, Deepak Gupta, Muhammad Attique Khan, Ashit Kumar Dutta, Salam Shuleenda Devi, "MHAOSL-Net: A Global Context-Aware Attention Free Transformer Network With Orthogonal SoftMax Layer to Detect Subtypes of Acute Lymphoblastic Leukemia", International Journal of Imaging Systems and Technology, vol. 35, pp. e70189, 2025
- Kakali Baruah, Ajit Kumar Singh, Sourav Das, Sweta Sucharita Sahoo, Kalpana Kumari, Anupam Nath Jha, Atanu Singha Roy, Common Nefafu (Clerodendrum colebrookianum L.)-Mediated Silver Nanoparticles for Physicochemical Insights into the Protein Corona Formation and Inhibition of Fibrillation of Human Serum Albumin. Langmuir, 2025, 41, 35, 23405–23422
- P. Saha, S. Sarmah, P. K. Majii, M. Kar, A. Dev and T. Bora, Modification in the structural and dielectric properties of ErCrO₃ on Fe substitution, Solid State Communications, 404, 116071, 2025.
- Sadia Nudrat, Bilash Maity, Kalpana Kumari, Madhurima Jana, Atanu Singha Roy, Spectroscopic and computational insights into binding of daphnetin with pepsin: Inhibition of pepsin fibrillation and identification of amyloidogenic core region. Int. J. Biol. Macromol., 2025, 321, 146232.
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Journal Articles

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- Tikaram Subedi and Debraj Roy, Revisiting -J semicommutative rings, *Indian Journal of Pure and Applied Mathematics* 56 (2025), 1222-1229.
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Book Chapters

- Emerging Transition Metal Dichalcogenides (TMDCs) in Semiconductor Design. Malvika, Ashutosh Srivastava, Jagritee Talukdar, Rajan Singh, Prabhat Singh, Jami Venkata Suman. eBook Published: 30 September 2025. DOI: 10.1201/9781003543923-4. CRC Press
- Hujon, A.V., Singh, T.D., Amitab, K. (2025). Leveraging Reinforcement Learning for Enhanced English-Khasi NMT in Low Resource Settings. In: Garg, L., Kesswani, N., Brigui, I. (eds) *AI Technologies for Information Systems and Management Science*. ISMS 2025. Lecture Notes in Networks and Systems, vol 1479. Springer, Cham. https://doi.org/10.1007/978-3-031-95017-9_38

Conference Papers

- Deepak Kumar, Dharendra Prasad Yadav, Kasturi Chakraborty "Spatial Cross Attention based Lightweight Deep Learning Model for Enhanced Tree classification in Satellite Images", 4th International Conference for Advancement in Technology (ICONAT 2025), 19-21 September 2025
- J. Potsangbam, H. Kumar, SS Devi, "Ensemble Classifier for Real-Time Breast Cancer Classification on Histopathology Images", 3rd International Conference on Data Science and Network Engineering (ICDSNE), 25-26 July 2025.
- Badavath N. and Sahoo S. "Ensemble of frequency ratio and statistical index methods for landslide susceptibility mapping in east Jaintia hills, Meghalaya". *Smart Materials and Sustainable Solutions for Climate Resilience (SMSSCR-2025)*. NIT Meghalaya, India, 02-04 August, 2025.
- Samal, Rasmiranjan, Naveen, Badavath and Sahoo, Smrutirekha. "Geotechnical site characterization of NIT Meghalaya located at Cherrapunji, Meghalaya". *Smart Materials and Sustainable Solutions for Climate Resilience (SMSSCR-2025)*. NIT Meghalaya, India, 02-04 August, 2025.
- Samal, R., Sahoo, S. (2025). "Seismic Stability Analysis of a Bamboo Grid Reinforced Slope Based on Non-linear Time History Analysis". In: Singh, S.B., Gopalarathnam, M., Roy, N. (eds) *Proceedings of the 3rd International Conference on Advances in Concrete, Structural, and Geotechnical Engineering—Volume 2*. ACSGE 2024. Springer Proceedings in Materials, vol 30. Springer, Singapore.

Patent

- Suraj Gupta. et al. (2025). Production Apparatus for Bamboo-Fiber-Based Biodegradable Films with Substrate and Substrate Free Configuration, Indian Patent Application No. 202531068340. Filed July 17, 2025.

Delivered Talks

- **Dr. Harshit Joshi** participated and delivered flash talk in 1st edition of the Early Career Researchers (ECR) Symposium 2025 organised by National Organic Symposium Trust (NOST) at IISER Bhopal from June 27 to June 29, 2025.
- **Dr. Kaushik Talukdar** participated and delivered an invited talk in Frontiers and Advances in Chemistry: Theory and Synthesis (FACTS) 2025 held at Ashoka University, Haryana from August 1 to August 3, 2025.
- **Prof Dr. Ravi Xavier Fernandes** from Physikalisch-Technische Bundesanstalt (PTB) Braunschweig, Germany visited NIT Meghalaya and delivered a Talk on “Physico Chemical Fundamentals of Combustion”.
- **Dr. Atanu Singha Roy:** Invited Talk delivered in the International Conference on Nano Structured Materials and Nanocomposites (ICN 2025) September 12-14, 2025, Mahatma Gandhi University, Kottayam, Kerala [Online Mode].
- **Dr. Manoj Kumar Singh**, Assistant Professor, Department of Civil Engineering, Shiv Nadar Institution of Eminence, Greater Noida, Uttar Pradesh, India delivered an Expert Talk on the topic “Linking Adaptive Thermal Comfort And Building Thermal Performance” on 30.6.2025
- **Prof. Sudipta De**, Adjunct Faculty, Department of Mechanical Engineering, NIT Meghalaya, delivered a talk on "Rethinking Sustainable Development: Shifting Mindsets, Breaking Boundaries, and Advancing Interdisciplinary studies and Research" on 31.07.2025
- **Dr Biswajit Deb, Associate Professor, SMIT Silkkim**, delivered an invited talk on Variation in Graph Domination with focus on P3 Convexity on 21-08-2025 at Department of Mathematics, NIT Meghalaya.
- **Dr. Atanu Singha Roy:** Invited Talk delivered in the International Conference on Advances in Chemical Sciences (ACS – II) at NEHU during September 24-26, 2025.
- Delivered a talk by **Dr. Suraj Gupta** on the topic “Reinventing Hydropower: Sustainable and Climate-Resilient Innovations in Small and Distributed Hydro Energy Systems” in AICTE-funded Faculty Development Programme (FDP) titled, “GREEN HORIZON: Interdisciplinary Approaches to Emerging Renewable Energy Technologies and Climate Sustainability” held on 15th -20th September 2025, organised by Regent Education and Research Foundation Group of Institutions.
- **Dr. Kaushik Talukdar** delivered a flash talk in the ACS Fall 2025 Global Virtual Symposia on August 19, 2025.
- Delivered a talk by **Dr. Smrutirekha Sahoo** on "Understanding Rainfall-Triggered Landslides: Mechanisms, Case Evidence, and Mitigation Approaches" for a Five-Day Faculty Development Program on “Soil Stabilization of Hill Roads”, scheduled from 8th to 12th September 2025 at Department of Civil Engineering, NIT Arunachal Pradesh.
- Delivered a talk by **Dr. Jagritee Talukdar** on “Application of TMDC materials in FET based sensing technologies” for a Five-day Workshop on “Advances in Semiconductor Technologies: Challenges and Opportunities” organized by Department of Electronics & Communication Engineering at National Institute of Technology Meghalaya, Sohra (Cherrapunji) and sponsored by Anusandhan National Research Foundation (ANRF) from 15th to 19th September 2025.

PhD Awarded



Name: Moirangthem Rabindra Singh

Roll no: P19CS012

Supervisor: Dr. Surmila Thokchom

Co-supervisor: Dr. Soumen Moulik

Thesis title: Certificateless Schemes for Data Security in IoMT System

ODE date: 18/07/2025

Name: Mr. Susovan Chanda

Roll no: P16CS001

Supervisor: Prof. Diptendu Sinha Roy

Thesis title : Enhancing IoT Security through Context-Aware Deep Learning and Advanced Encryption Techniques



Name: Suresh Panchala

Roll no: P21EC009

Supervisor: Dr. Shravan Kumar Bandari

Thesis title: Analytical Framework and Performance Analysis of Intelligent Reflecting Surface-Aided 6G Communication Systems

ODE date: 25/09/2025

Name: Rabul Saikia

Roll no: P21EC003

Supervisor: Dr. Salam Shuleenda Devi

Co Supervisor: Prof. (Dr.) Anupam Sarma, Prof. & Head, Dept. of Oncopathology, Dr. B. Borooah Cancer Institute, Guwahati

Thesis Title: Development of Computer-aided Diagnostic System for Acute Leukemia Detection from Peripheral Blood Smear Images

ODE Date: 22/09/2025





Faculty & Student Achievements

- **Dr. Suraj Gupta** attended a Two day Pedagogy workshop under CBDE program at **NIT Silchar** from 05-06 September 2025.

- **Dr. Elsa Cherian**, Assistant Professor, Department of Humanities and Social Sciences participated in a Two-Day **CBDE Pedagogy Workshop** on 15th and 16th September 2025 at **National Institute of Technology Calicut**, Kerala under the **Capacity Building for Design & Entrepreneurship (CBDE)** initiative, sponsored by the Ministry of Education, Government of India.

- **Dr. Yanrenthung Odyuo**, Faculty Participation for one day exposure visit organized by **PRIME startup meghalaya**, 08th August 2025.

- **Amarjyoti Mondal**: Best oral presentation award from the Royal Society of Chemistry in the International Conference on Advances in Chemical Science (ACS-II) organized by the Department of Chemistry, NEHU, during **September 24-26, 2025**.

- **Kakali Baruah**: Received N-PDF Position in the **Department of Chemistry** at IISER Bhopal.

- **Nazir Uddin**: Best poster presentation award from the **Royal Society of Chemistry (NJC)** in the **International Conference on Advances in Chemical Science (ACS-II)** organized by the Department of Chemistry, NEHU, during **September 24-26, 2025**.

- **Dr. Pemendra Kumar Pardhi** attended a Two day Pedagogy workshop under CBDE program at **NIT Manipur** from 7-8 Aug. 2025.

- **Arush** and **Aadit Raman** from NIT Meghalaya achieved a historic hat-trick at the **RKM Quiz 2025**, winning for the third consecutive year with top scores.



Arush and Aadit Raman, felicitated with First Prize

- **Dr. Yanrenthung Odyuo** attended a Two day pedagogy workshop under CBDE program at **IIIT Allahabad** from 22nd- 23rd August 2025.

- **Arush Raman** from NIT Meghalaya earned a Gold Honour in **IAAC**, ranking in the global top 1% for astronomy excellence.



Arush Raman



Institute Information



The Department of Mathematics publishes its own magazine, "NITM Bi-monthly," every two months



PPA AGREEMENT BETWEEN NIT MEGHALAYA AND SESOLA POWER RESCO PVT LTD FOR PROCUREMENT OF 800 kW SOLAR POWER



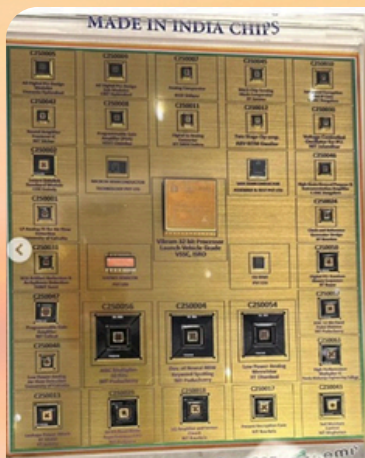
We are pleased to announce that **NIT Meghalaya** have been selected for the **Mahatma Award for Academic Excellence 2025**

शाद्वत गांधी
Eternal Gandhi
An initiative of
Aditya Birla Group

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ADITYA BIRLA GROUP



National Institute Of Technology Meghalaya has designed & fabricated a groundbreaking Integrated Chip Under the #SMDP initiative of @MeityIndia.

Students' Creativity

Rise Young Soul

The morning breaks, the world is yours,
A canvas waiting for your hands.
The past is gone, unlock the doors,
And rise to meet your dreams and plans.

You hold the fire, the light, the voice,
To change the dark and shape the day.
You are the hope, the fearless choice,
The spark that shows a brand-new way.

Don't fear the fall, don't shy from fight;
Your strength will grow with every stride.
The future waits in bold daylight,
And you're the ones who'll turn the tide.

So stand with heart, with mind, with soul,
Let courage be your guiding star;
The world is large, but you are whole;
A shining light, no dream too far.

- Sumarlang Syiemlieh
Btech, ME Department

Cant' Deny!

Can't deny! If I'm a tiger in your gaze,
Can't deny! I'll be a mouse in others' days.
Your view, a fog I cannot break—
A stone to you, a fruit I take.

In weakness, mock me as you will;
In strength—will you point out still?

You raise shoulders proud, untouched by strain,
As if your feet have never met terrain.
Climbs and falls your path may hide,
Yet struggle walks close at every stride.

- Ribait Phawa
Btech, CS Dept



Faculty's Creativity



By Dr. Debabrata Podder
Assistant Professor
Department of Civil Engineering

Thought of the Quarterly Month

“Live as if you were to die tomorrow. Learn as if you were to live forever.”

-Mahatma Gandhi

Translation in Khasi

“Im kumba phin iap noh lashai. Thrang ia ka jingstad kumba phin im shi junom”

-Mahatma Gandhi

Translation in Hindi

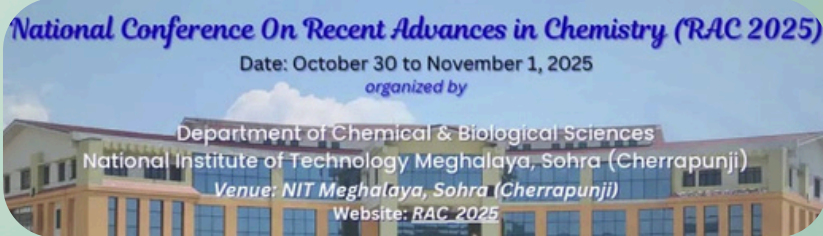
“ऐसे जियो जैसे तुम्हें कल मरना हो, और ऐसे सीखो जैसे तुम्हें हमेशा जीवित रहना हो।”

-Mahatma Gandhi

Highlights

Upcoming Events

National Conference On Recent Advances In Chemistry (RAC) 2025 October 30- November 1, 2025



Ethical Use of AI in Research Workshop October 30- November 04, 2025



Industry Academia and Research Conclave November 13-14, 2025



Cognitia 2025 November 14-15, 2025



International Conference on Intelligent Systems and Network Computing (ICISNC-2026)

International Conference on Intelligent Systems and Network Computing (ICISNC-2026)

(July 09-10, 2026) (Hybrid Mode)



Organized by

Department of Computer Science and Engineering National Institute of Technology Meghalaya -793108, Meghalaya (INDIA)

Conference On Interdisciplinary (COIN) December 12- 13, 2025



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