राष्ट्रीय प्रौद्योगिकी संस्थान मेघालय
NATIONAL INSTITUTE OF TECHNOLOGY MEGHALAYA
DEPARTMENT OF MECHANICAL ENGINEERING
&
CENTRAL INSTRUMENTATION FACILITY

WORKSHOP ON RECENT TRENDS IN 3D MODELLING AND 3D PRINTING

Organized
by
Department of Mechanical Engineering & Central Instrumentation Facility
NIT Meghalaya Shillong-793003

About the workshop

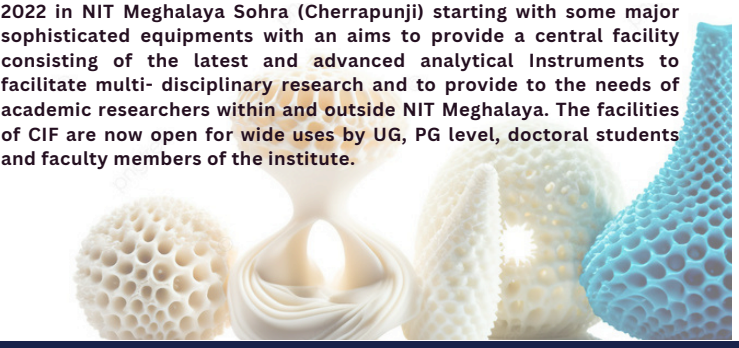
The main target of the workshop is to train the participants for the upcoming digital manufacturing in the form of 3D modeling and 3D printing. The experts are from various premier institute and industry from the country. The participants are academician, research scholars M.Tech, B. Tech, poly-technique students who will get a new direction of research and industrial application with the consideration of recent emerging trend in Additive Manufacturing Technology. The five day workshop will cover lectures interaction and hands-on-training through offline mode. The session will have sufficient interaction session to clear doubts

Department of Mechanical Engineering

The Department of Mechanical Engineering, NIT Meghalaya started in 2013 with an intake of 33 in B. Tech. The department started its M. Tech in the year 2015 with an intake of 15 in the field of Fluid and Thermal Engineering. The intake in M. Tech was increased to 25 at present. The department started its Ph.D. in the year of 2015. The Department has produced several Ph.D. till date, while several other candidates are in an advanced stage of submission of submission of their theses. The department has organized one international conference in the year 2018 and several other workshops successfully. The faculty members in the department have a judicious mix of young energetic people with senior professors. The faculty members are involved in executing several sponsored projects and consultancy works. The Depertment of Mechanical Engineering is NBA accredited.

Central Instrumentation Facility

The Central Instrumentation Facility (CIF) was inaugurated on 1st April 2022 in NIT Meghalaya Sohra (Cherrapunji) starting with some major sophisticated equipments with an aims to provide a central facility consisting of the latest and advanced analytical Instruments to facilitate multi- disciplinary research and to provide to the needs of academic researchers within and outside NIT Meghalaya. The facilities of CIF are now open for wide uses by UG, PG level, doctoral students and faculty members of the institute.



NIT Meghalaya

NIT Meghalaya's campus is located in the Bijni Complex in Laitumkhrah, around 2 kilometers from Shillong's Police Bazar. The institute was formed in 2010, and its permanent campus of around 450 acres is currently under built in Shora, Cherrapunjee. The institute constantly outperforms in terms of publications, sponsored research, consultancy projects, student performance, ranking, and other metrics. The valley's stunning vista, breathtaking local viewpoints, spectacular landscapes, and lakes have made the city one of the country's most popular tourist destinations. The nearest airports are Umroi in Shillong and LGBI in Guwahati, which are around 35 and 130 kilometers away, respectively, while the nearest railway station is Guwahati, which is approximately 100 kilometers from Shillong.
In NIRF-2022, NIT Meghalaya secured the 72nd NIRF Rank and was also ranked 16th among the 'Top 25 Government Engineering Colleges' by Outlook-ICARE Rankings 2022.

Theme of the workshop

- Empowering Engineering Excellence through Additive Manufacturing
- Design Innovation, Materials Exploration, Optimizing Techniques and Applications with Additive Manufacturing
- Recent emerging trends in Additive Manufacturing and its processes
- Implementation of Additive Manufacturing in Research Frontiers and Academic Applications
- Implementation of Additive Manufacturing in Industrial Application

Target Participants

- Faculty Members from AICTE approved institutions, Research Scholars, PG Scholars, B. Tech, Diploma.
- Participants from the Government Sector (Bureaucrats/Technicians/Participants from Industries, etc.), and Staff.

Venue:
The workshop will be conducted through offline mode at National Institute of Technology Meghalaya

A Five Day Workshop on Emerging Additive Manufacturing Technologies From 22-July-2024 To 26-July-2024

Program Schedule

Day	Session	Theme	Timing
1.		Inaugural Session	10.30 AM -11.00 AM
			11.00 AM -11.30 AM
	Session -1	Application of 3D Modelling in 3D printing	11.30 AM -01.00 PM
		Lunch break	1.00 PM -02.30 PM
	Session -2	Hands-on 3D Modelling	02.30 PM -04.00 PM
2.	Session -1	Basics of 3D printing	10.00 AM -11.30 AM
	Session -2	Application of 3D printing	11.30 AM -01.00 PM
		Lunch break	1.00 PM -02.30 PM
	Session -3	Hands-on 3D printing software	02.30 PM -04.00 PM
3.	Session -1	Product design and development using 3D printing	10.00 AM -11.30 AM
	Session -2	Research progress in composite 3D printing	11.30 AM -01.00 PM
		Lunch break	1.00 PM -02.30 PM
	Session -3	Hands-on 3D printing (polymer)	02.30 PM -04.00 PM
4.	Session -1	3D printing of construction material	10.00 AM -11.30 AM
	Session -2	Metal-based 3D printing	11.30 AM -01.00 PM
		Lunch break	1.00 PM -02.30 PM
	Session -3	Hands-on 3D printing (Composite)	02.30 PM -04.00 PM
5.	Session and Hands-on	3D Printing, Metal (Hands-on)	09.00 AM -5.30 PM
		Valedictory	

Resource Person

Our esteemed resource persons include experts from premier institutions such as NIT and IIT, along with seasoned professionals from various industries. These distinguished individuals will deliver lectures and lead interactive sessions throughout the workshop. Participants can expect comprehensive guidance on the theoretical aspects and practical applications of 3D printing, complemented by hands-on training sessions facilitated by industrial personnel.

Registration Details

Category of the Participants	Registration fee (Rs.)
Student participants	2000/-
Academician	3000/-
Industry/Laboratory participants	3000/-

- The registration fee includes, registration kit, certificate, lunch for five days of workshop and local trip.
- The Last date for registration is 15/07/2024

The participants can register through following link

- https://docs.google.com/forms/d/e/1FAIpQLScPLEkSz81nBeCtLlpZR53hzNo26Ub3SuOawkhDH8dbryFlAw/viewform?usp=sf_link

Scan to Register

Coordinators:

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Organising Committee:

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Advisory Committees:

Dr. Harish Chandra Das
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Dean (Public Relations, Branding & Ranking)

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Dr. Paonam Sudeep Mangang
Professor
Department of Humanities & Social Sciences
Dean (Student's Welfare)

Dr. M. Longshithung Patton
Associate Professor
Department of Civil Engineering
Associate Dean (Planning & Development)

Information regarding the Accommodation

Participants attending the 5-day workshop can opt for accommodation in the institute's hostel, available on a paid basis subject to availability

Important Dates:

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