



Reportage

June 22

A quarterly newsletter of NIT Manipur

रिपोर्टेज

(एनआई टी मणिपुर का तिमाही समाचार पत्र)

जून, २०२२



राष्ट्रीय प्रौद्योगिकी संस्थान मणिपुर, भारत केंद्र सरकार द्वारा वित्त पोषित संस्थान उच्च शिक्षा के विभिन्न स्तरों पर गुणवत्तापूर्ण तकनीकी शिक्षा प्रदान करने के लिए स्थापित किया गया है। यह २००७ में संसद के एक अधिनियम द्वारा "राष्ट्रीय महत्व के संस्थान" के रूप में स्थापित और विकसित दस नए एनआई टी में से एक है। राष्ट्रीय प्रौद्योगिकी संस्थानों (एनआई टी) में से एक के रूप में, संस्थान के पास वैश्विक मानक के अनुसार सक्षम तकनीकी और वैज्ञानिक जनशक्ति का उत्पादन करने के लिए अभियांत्रिकी एवं प्रौद्योगिकी और विज्ञान में उच्च गुणवत्ता वाली शिक्षा प्रदान करने की जिम्मेदारी है। संस्थान अभियांत्रिकी एवं प्रौद्योगिकी, विज्ञान, मानविकी और सामाजिक विज्ञान के कई पाठ्यक्रम में बैचलर ऑफ टेक्नोलॉजी, मास्टर ऑफ टेक्नोलॉजी, विज्ञान में स्नातकोत्तर और पीएच.डी. कार्यक्रम प्रदान करता है।



राष्ट्रीय प्रौद्योगिकी संस्थान मणिपुर



निदेशक का संदेश

प्रिय मित्रों और एनआई टी मणिपुर के शुभचिंतक

मुझे संस्थान के सूचना पत्र 'रिपोर्टेज' का पहला संस्करण प्रस्तुत करते हुए खुशी हो रही है।

सूचना पत्र का वर्तमान संस्करण संस्थान के लिए एक महत्वपूर्ण और मील का पत्थर है। महामारी के कारण शिक्षण-सीखने की प्रक्रिया में कई चुनौतियों के बावजूद, हमारे शिक्षकों, अधिकारियों, एम् कर्मचारियों और छात्रों ने कड़ी मेहनत करते हुए और सही भावना से सभी मुद्दों पर काबू पाने की कोशिश की है, इससे मुझे बहुत खुशी होती है। कई चुनौतियों और बाधाओं के बावजूद एनआईआरएफ रैंकिंग में निरंतर सुधार में हमारे शिक्षकों, अधिकारियों, कर्मचारियों और छात्रों का दृढ़ता और धैर्य प्रदर्शित होता है।

मुझे आपको यह बताते हुए खुशी हो रही है कि कोविड के बाद की इस दुनिया में कई चुनौतियों के बावजूद एनआईटी मणिपुर तेजी से आगे बढ़ रहा है। कई बाधाओं का सामना करने के बावजूद इस परिसर में अनुसंधान और सीखना कभी नहीं रुका है।

यह सूचना पत्र इस युवा संस्थान की वृद्धि और विकास और शिक्षा जगत की महान ऊंचाइयों को अगले स्तर तक ले जाने के इसके संकल्प की गवाही देता है। संस्थान धीरे-धीरे बढ़ रहा है, जो २०२१ में ११४ वें स्थान से २०२२ में १०८ रैंक में लंबा खड़ा होने में सक्षम है। संस्थान को एनआईआर एफ रैंकिंग में आने के लिए वर्ष में शीर्ष १०० इंजीनियरिंग कॉलेजों के स्तर तक पहुंचाने के उद्देश्य से पूरे एनआई टी मणिपुर परिवार द्वारा निरंतर प्रयास किए गए हैं।

जय हिन्द

प्रो. (डॉ.) गौतम सूत्रधार

निदेशक, एनआई टी मणिपुर



REPORTAGE

(A quarterly Newsletter of NIT Manipur)

June, 2022



National Institute of Technology Manipur, India a centrally funded technical institution had been set up to impart quality technical education at various levels of higher learning. It is one of the ten new NITs established and developed as “**Institute of National Importance**” by an act of Parliament in 2007. As one of the National Institute of Technology (NIT), the Institute has the responsibility of providing high quality education in Engineering and Technology, and Sciences to produce competent technical and scientific manpower as per global standard. The Institute offers **Bachelor of Technology, Master of Technology, Master of Science and PhD** programmes in several disciplines of Engineering and Technology, Sciences and Humanities and Social Science.



NATIONAL INSTITUTE OF TECHNOLOGY MANIPUR



FROM THE Director's Desk

Dear friends and well-wishers of NIT Manipur

I am happy to present the **first edition** of the Institute newsletter 'Reportage'.

The current edition of the newsletter is a significant and an important milestone for the institute. Despite the many challenges to the teaching-learning process due to the pandemic, it's heartening to see our staff (faculty as well as non-teaching) and students putting up a tough fight and overcoming those issues in the right spirit. The tenacity and grit of our faculty and students are amply exhibited in our constant improvements in NIRF rankings inspite of many many challenges and constraint.

I am glad to inform you that NIT Manipur is fast moving forward despite the multiple challenges in this post-Covid world. Research and learning have never stopped in this campus despite the many odds that we have faced. This newsletter bears a testimony to the growth and development of this young institute and its resolve to scale the great heights of academia to the next level. The Institute has been gradually growing, being able to stand tall in 108 rank in 2022 from 114th in 2021. Constant efforts have been put in by the whole NIT Manipur family with an aim to make the institute reach the level of top 100 engineering colleges in the year to come in NIRF Ranking.

Jai Hind

Prof. (Dr.) Goutam Sutradhar

Director, NIT Manipur



NEWS & EVENTS



North-East Research Conclave

The North East Research Conclave was held at the Indian Institute of Technology Guwahati from May 20th to 22nd 2022. National Institute of Technology, Manipur took part in the conclave. The team of the institute led by Director NIT Manipur, Prof. (Dr.) Goutam Sutradhar consisted of 14 teaching and non-teaching staff and 19 students. The research activities and other achievements of the institute were showcased. The show stopper of the institute's presentation was the products of M/s Kumshungbam, a startup company founded by Dr. Wangkheirakpam Sujata of the Chemistry Department.



Yoga day Observation

NIT Manipur, along with the rest of the world, celebrated the 8th International Yoga Day on the 21st of June, 2022 on the theme "Yoga for Humanity". The teaching, and non-teaching staff as well as the students participated in this year's function under the overall supervision of our Director, Prof. Dr. Gautam Sutradhar. This year's Observation was a significant one, considering the increasing importance of health awareness in the post-Covid world. The observation not only underlined the health benefits of Yoga but also its role in maintaining and securing a fruitful life.



Talk on Popular Science

Prof. A. Surjalal Sharma, US Fulbright-Nehru Fellow and a Fellow of American Physical Society, Director at the Goddard Planetary Heliophysics Institute, University of Maryland, USA delivered a talk on Artificial Intelligence & Machine Learning in Dynamical Systems on 19th May, 2022 with the audience from Science and Engineering.

Workshop and Training Conducted

The Institute is actively participating in the training and providing awareness to the faculties and students in the state as well as in the north east. In the past semester, 19 workshops/short term training under the new education policy (2020), AICTE, Unnat Bharat Abhiyan, ATAL, Directorate of Environment & Climate Change, Govt. of Manipur were conducted.

RESEARCH & INNOVATION



Experimental Test Facility of Jet Impingement Cooling

- P.I. Dr. Dushyant Singh, Assistant Professor, Mechanical Engineering.

This research work and experimental test facility for standardized testing of Jet Impingement Cooling techniques useful for industries R&D section, academic institutions and India Govt. research agencies such as HAL, DRDO & ISRO etc.

Design and construction of low-cost water treatment plant:

- P.I. Dr. Potsangbam Albino Kumar, Associate Professor, Civil Engineering.

A low-cost water treatment plant based on roughing and biosand filter for treatment of village pond was designed and constructed for Kameng and Maklang villages, Lamsang, Manipur. The plant required no chemical treatment and required no maintenance for nearly 6 years. The project is under the funding of NECTAR, DST, Govt. of India. Compared to commercial water, the recovery of the cost can be achieved within a year.



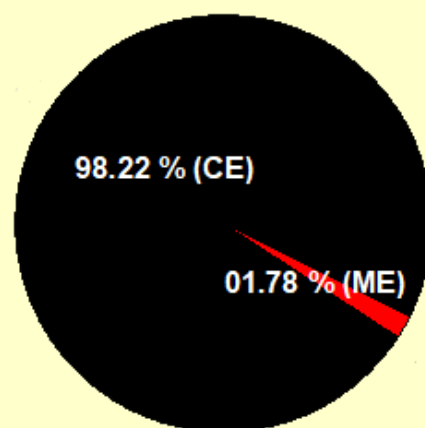
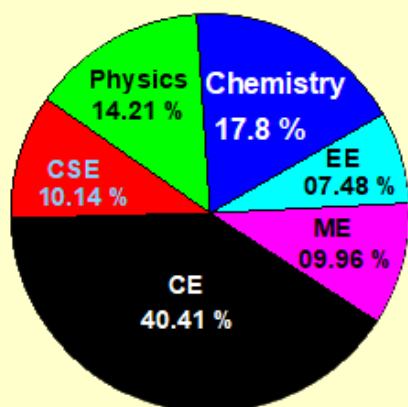
RESEARCH PROJECT & CONSULTANCY WORK

Sponsored Research Project

Grand total : Rs 4.734 Cr

Consultancy work

Grand total : Rs 0.3969 Cr



1. ONGOING CORE RESEARCH GRANT (DST-SERB) FELLOW



Novel cooling techniques for substrate exposed to very high temperature

Dr. Dushyant Singh, Asst. Prof.
Dept. of Mechanical Engineering



Investigation on Metal-Free Approaches towards C-C and C-Heteroatom Bond Formation for the

Dr. Chandi C. Malakar, Asst. Prof.
Dept. of Chemistry



A Geospatial based Approach for the identification and assessment of Watershed Health Condition in Loktak Lake, Manipur, India

Dr. Bakimchandra Oinam, Assoc. Prof
Dept. of Civil Engineering



Computational Fluid Dynamics Modelling for Optimization of Sedimentation Tank

Dr. Thiyam Tamphasana Devi, Asst. Prof
Dept. of Civil Engineering



Ionic-Copolymer melts: Behaviour near electrified interface, Structural reorganization and response under mechanical shear

Dr. Shagolsem Lenin Singh, Asst. Prof
Dept. of Physics



A Novel TDNN-LiGRU approach for CS ASR Meiteilon-English

Dr. Yambem Jina, Asst. Prof
Dept. of Computer Science Engineering



Carbon decorated mixed metal oxides for photo and electro catalytic degradation of organic dyes and pesticides

Dr. Loushambam Herojit Singh, Asst. Prof
Dept. of Physics



Computational studies on investigation of the potential role of metal-based compounds as the inhibitors of SARS-CoV-2 as well as other aggressive mutant strains of SARS-CoV-2.

Dr. Mithun Roy, Asst. Prof
Dept. of Chemistry



Practical implementation of non-fragile sliding mode controller based non-isolated universal on-board battery charger for electrical vehicle.

Dr. Mrinal Kanti Sarkar, Asst. Prof.

Dept. of Electrical Engineering

2. CLIMATE CHANGE PROGRAMME DIVN., DST, GOVERNMENT OF INDIA



Adaptive Water Balance Schematization at Sub-Basin Scale for Dynamic Climatic

Dr. Ngangbam Romeji, Asst. Prof.

Dept. of Civil Engineering

Co-PI: Dr. S. Saravanan, Asst. Prof., NIT Tiruchirappalli

3. NORTH EAST CENTRE FOR TECHNOLOGY, APPLICATION AND RESEARCH (NECTAR) AUTONOMOUS SOCIETY UNDER DEPARTMENT OF SCIENCE AND TECHNOLOGY, GOVERNMENT OF INDIA



Construction of Low cost Water Treatment plan based on roughing and biosand filters for Lamsang Villages under Imphal West District, Manipur

Dr. Potsangbam Albino Kumar, Assoc. Prof.

Dept. of Civil Engineering

4. INDIAN SPACE RESEARCH ORGANIZATION (ISRO)



*Flood Early Warning Systems (FLEWS) – Manipur**

Dr. Ngangbam Romeji, Asst. Prof.

Dept. of Civil Engineering



Synthesis of spinel structured lithium based soft ferrimagnets for application in satellite communication

Dr. Mamata Maisnam, Asst. Prof.

Dept. of Physics

5. TIFAC, MINISTRY OF SCIENCE AND TECHNOLOGY



Tele digital health pilot project for Kamjong district, Manipur.

Dr. Benjamin A. Shimray, Asst. Prof.

Dept. of Electrical Engineering

6. CENTRAL POLLUTION CONTROL BOARD, MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA



Random verification of annual inventory on hazardous waste management.

Dr. Thiyam David Singh, Assoc. Prof.

Dept. of Chemistry

7. MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY (MIETY)



Speech technologies for north eastern languages

Dr. Yambem Jina Chanu, Asst. Prof.

Dept. of Computer Science and Engineering

8. THE INDIAN COUNCIL OF MEDICAL RESEARCH (ICMR), NEW DELHI



Novel cobalt(III)-based bio-reductive prodrug modeling for hypoxia selective chemotherapeutic steering of hypoxia-inducible factors (HIF)

Dr. Mithun Roy, Asst. Prof

Dept. of Chemistry

STUDENTS CORNER:

TOP PLACED OFFERS OF THE YEAR



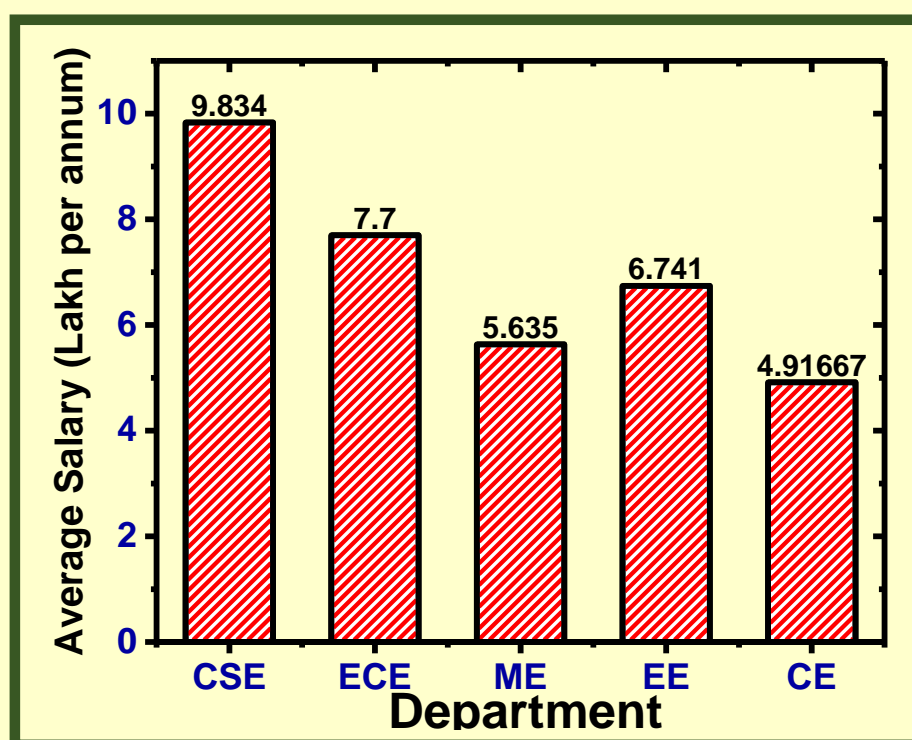
Mr. Anurag Raj, CSE
Placed in Amazon,
Package: 47 LPA



Ms. Anushka Tiwari, CSE
Placed in Microsoft,
Package: 45 LPA



Mr. Biswas Bordia, CSE
Placed in Newzera,
Package: 37 LPA



A total student of 140 from B.Tech as well as M.Tech were recruited through placement in the year 2022. The reputed companies such as Samsung, Infosys, IBM, Microsoft, Byjus, Amazon, Newzera, TCS, TATA, BEL, L & T, FIAT etc have trusted the Institute and reflected with an increase in the number of student placed from the consecutive years.



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