



राष्ट्रीय प्रौद्योगिकी संस्थान मिजोरम  
NATIONAL INSTITUTE OF TECHNOLOGY MIZORAM

**THE  
COMPENDIUM**

October, 2022  
Vol.~ I, Issue~ IV

Monthly Newsletter

# Director's Message



**Prof. S. Sundar**  
**Director**  
**NIT Mizoram**

*Greetings !!*

*This is the fourth issue of the first volume of the Institute newsletter 'THE COMPENDIUM'. It is a short collection of advancement of our students, teaching fraternity and staff during the month of October, 2022.*

*I appreciate the Editorial team for their relentless effort in bringing out 'THE COMPNDIUM'. I congratulate faculty members and students for their publications, participation in academic events, organising academic activities and other notable achievements.*

*I wish all the readers a happy reading !!*



# Editor~ In~ Chief's Message



Dr. Shuchi  
Asst. Prof.  
Dept. of HSS (English)

*Warm Greetings !!*

*I am pleased to bring out the fourth issue of the Institute monthly newsletter, 'THE COMPENDIUM: a synopsis of events and academic prosperity of NIT Mizoram'.*

*The highlights of the current issue are academic & outreach activities and wide spectrum of research & development at NIT Mizoram for the month of October, 2022..*

*I express my heartfelt gratitude towards the Director, NIT Mizoram, Prof. S. Sundar for his encouragement and support.*

*I extend my sincere thanks to the Editor, Dr. Saurav Suman for all his helps and technical supports.*

*I also thank all my colleagues (faculty & office staff) and students of NIT Mizoram for their support by sending their achievements to us.*

## **EDITORIAL BOARD**



**Chairman**  
Prof. S. Sundar  
Director  
NIT Mizoram



**Editor-in- Chief**  
Dr. Shuchi  
Assistant Professor  
Dept. of HSS (English)



**Editor**  
Dr. Saurav Suman  
Assistant Professor  
Dept. of Mechanical Engg.

### **SOCIAL MEDIA CELL**



**Nodal Officer**  
Dr. Surender Ontela Assistant Professor  
Dept. of BS (Mathematics)

### **STUDENT MEMBER**



**Mr. K. Santha Ram**  
Research Scholar  
Dept. of HSS (English)

## RESEARCH AND DEVELOPMENT

### ❖ FDP/WORKSHOPS ORGANIZED

#### ❖ 5-day workshop on Underwater Communication: Technologies and Opportunities

National Institute of Technology Mizoram organized a 5-day workshop on Underwater Communication: Technologies and Opportunities, sponsored by IIT Guwahati Technology Innovation and Development Foundation from 18<sup>th</sup> October to 22<sup>nd</sup> October 2022 in online mode.

**About the Programme:**  
Underwater communication is a prosperous research area. Recent developments in underwater communication enable real-time contact with underwater sensors, vehicles, and other instruments offering novel ocean observation capabilities that may change future oceanographic operations. Exploring research challenges in underwater communication systems has become a substantial part of the current research domain. **The main objective** of this five-day workshop is to provide insight into the emerging research opportunities in underwater communication systems in terms of design and application to the end users.

**Resource Persons:**

- ❖ Prof. S.K. Dwivedy, IIT Guwahati
- ❖ Prof. Arijit Sur, IIT Guwahati
- ❖ Dr. Sonali Chouhan, IIT Guwahati
- ❖ Dr. Pravas Ranjan Sahu, IIT Bhubaneswar
- ❖ Prof. L. Lolit Kumar Singh, Mizoram University
- ❖ Dr. Bikramaditya Das, VSSUT
- ❖ Dr. Avilash Sahoo, NIT Meghalaya

**Target Participants:**  
B.Tech / M.Tech / PhD Students & Faculty

**Registration Details:**  
There will be a registration fees of ₹1,000 for the programme. Interested participants should apply through the [LINK](#).  
**N.B:** Bank Details are stated in the registration form.

**Important Dates:**  
Last date of application: **14.10.2022**  
Intimation of acceptance: **16.10.2022**

**Patron:**  
Prof. S. Sundar  
Director, NIT Mizoram

**Coordinator:**  
Dr. Chaitali Koley  
Assistant Professor (ECE), NIT Mizoram  
[chaitali.ece@nitmz.ac.in](mailto:chaitali.ece@nitmz.ac.in)

**Convener:**  
Dr. Sushanta Bordoloi  
Asst. Prof. & HoD (ECE), NIT Mizoram

**Organizing Committee:**  
Dr. Anumoy Ghosh, Asst. Prof. (ECE)  
Dr. Rudra S. Dhar, Asst. Prof. (ECE)  
Dr. Pragati Singh, Asst. Prof. (ECE)  
Dr. Remika Ngangbam, Asst. Prof. (ECE)

**About NIT Mizoram:**  
The Ministry of Education (Shiksha Mantralaya), Govt. of India vide its order no. F. 23-13-2009-TS-III Dated 30th of Oct. 2009 and 3rd March 2010, had decided to set up ten new NITs that included NIT Mizoram which started in the year 2010 in the state of Mizoram with an objective to impart education, research & training leading to B.Tech, M.Tech & PhD. Degrees.

NIT Mizoram is an Institute situated in the scenic beauty of Mizoram, wrapped between clouds and mountain rocks, which adds to its beauty. Being amongst the most educated states of our country with a literacy rate of 91%, it beholds a very peaceful and calm environment suitable for studies. The Institute, to cope with the present competitive needs, comprises of laboratories with the latest equipments and installed with best & latest software.

**A 5-Day Workshop [ONLINE MODE]**

On

**“Underwater Communication: Technologies and Opportunities”**

Sponsored by

**IIT Guwahati Technology Innovation and Development Foundation**  
(Section 8 Company)

(18<sup>th</sup> Oct - 22<sup>nd</sup> Oct 2022)

at

**NIT MIZORAM**

[www.nitmz.ac.in](http://www.nitmz.ac.in)

### ❖ PUBLICATION (Journal/Conference/Book Chapter)

1. Somnath Maity, S. Sundar, “A Coupled Model for Macroscopic Behavior of Crowd in Flood Induced Evacuation” (<https://doi.org/10.1016/j.physa.2022.128161>) Physica A: Statistical Mechanics and its Application (Vol. 607, 128161)
2. JV Ramana Reddy, Hojin Ha, S. Sundar, “Modelling and Simulation of Fluid Flow through Stenosis and Aneurysm Blood Vessel: a Computational Hemodynamic Analysis” (<https://doi.org/10.1080/10255842.2022.2112184>) Computer Methods in Biomechanics and Biomedical Engineering 2022
3. Prasanth Giri, A. Wylomanska, Aleksandra Grzesiek and Wojciech Żuławiński, S. Sundar, “The Modified Yule-Walker Method for Multidimensional Infinite -Variance Periodic Autoregressive Model of Order 1” accepted for the Journal of the Korean Statistical Society, Springer, Accepted, 2022
4. Lalrinpuia Tlau, Surender Ontela, “Entropy Analysis of Hybrid Nanofluid Flow in a Porous Medium with Variable Permeability Considering Isothermal/Isolux Conditions”

- (<https://doi.org/10.1016/j.cjph.2022.10.001>) Chinese Journal of Physics (Vol.82, Pg no. 239-252) – WoS & Scopus indexed
5. Amlan Jyoti Gogoi, Ajmal Koya Pulikkal, “Clay–Gemini Surfactant Hybrid Materials for Elimination of Inorganic Pollutants: A Comprehensive Review” (2022,10.1016/j.rechem.2022.100586) Results in Chemistry (Vol. 4, Pg no.100586-100603)- ESCI & Scopus indexed
  6. Rozamlia, Jackson Gurung, Ajmal Koya Pulikkal, “Interaction of Metanil Yellow Dye with Cationic Surfactants: Conductometric and Spectroscopic Studies” (2022, 10.1016/j.molliq.2022.120653) Mol. Liq. (Vol. 368, Pg no. 120653-120662)- SCI & Scopus indexed
  7. Iqbal Khan, Mohammad Zakwan, Ajmal Koya Pulikkal, Ricky Lalthazula, “Impact of Unplanned Urbanization on Surface Water Quality of the Twin Cities of Telangana state, India” (2022, 10.1016/j.marpolbul.2022.114324) Marine Pollution Bulletin (Pg no. 114324-114334)- SCI & Scopus indexed
  8. Soumaya Mandal, Soumojit Shee, Santigopal Maity, Debashish Pal, Ayan Kumar Bandyopadhyay, Chaitali Koley, “Design and Simulation of Coaxial Re-entrant cavities for ka-band Multibeam Klystron” accepted for International IEEE Conference on Smart and Sustainable Technologies in Energy and Power Systems (SSTEPS 2022), 7-9th November 2022, at Central University of Haryana, India-Scopus indexed
  9. Naveen Kumar, Debashish Pal, Ayan Kumar Bandyopadhyay, Chaitali Koley, “Total Error Rate and Average channel Throughput Analysis in Fading Channels” International IEEE Conference on Smart Electronics and Communication (ICOSEC 2022), 20-22nd October 2022, at Kongunadu college of Engineering and Technology, Trichy, India- Scopus indexed
  10. Samiran Pramanik, Sylvie Rana, Debasis Mitra, Chaitali Koley, “Design and Analysis of Multifunctional Metasurface for Linear and Circular Polarized Incident Wave” accepted for International Journal of RF and Microwave Computer-Aided Engineering
  11. Anagha Bhattacharya, “MJ-ANFIS Controller-Based RES integration with LF-HVAC System” accepted for IEEE Power India International Conference 2022 – PIICON 2022.
  12. S. Roy, S. Majumder and K. De “Benefits of a Solar-Powered Electric Vehicle Charging Station at the Workplace in India” accepted for IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)

#### ❖ WORKSHOPS/CONFERENCES/STTP/FDP ATTENDED

1. Dharanikota Rupalakshmi attended International Conference on Recent Advances in Fluid Mechanics ICRAFM-2022 Manipal Institute of Technology, MAHE, Manipal from 4th to 6th October 2022

2. Subhajit Panda attended International Conference on Recent Advances in Fluid Mechanics ICRAFM-2022 Manipal Institute of Technology, MAHE, Manipal from 4th to 6th October 2022
3. Musala Venkata Ramana Reddy attended International Conference on Recent Advances in Fluid Mechanics ICRAFM-2022 Manipal Institute of Technology, MAHE, Manipal from 4th to 6th October 2022
4. Devarsu Radha Pyari attended International Conference on Recent Advances in Fluid Mechanics ICRAFM-2022 Manipal Institute of Technology, MAHE, Manipal from 4th to 6th October 2022

## FACULTY AWARDS & ACHIEVEMENTS

- ✚ Prof. S. Sundar (Director, NIT Mizoram) attended the First Meeting of DST-SERB PAC Members of MATRICS at New Delhi, 20 - 21 October 2022
- ✚ Prof. S. Sundar (Director, NIT Mizoram) has been selected as a *Co-PI* for DST-DAAD Indo German Project under Faculty-Student Exchange
- ✚ Prof. Sundar (Director, NIT Mizoram) has been elected as a *Vice-President* of Indian Society for Mathematical Modelling and Computer Simulation, IIT Kanpur
- ✚ Dr. Saurav Suman (Asst. Prof. & HoD, Mechanical Engineering) got sanctioned a project titled "*Design and Development of an ROV to Perform Underwater Welding and Repairs*" from IITG-TIDF under DST, Gov. of India

### ❖ EXPERT/INVITED TALK /SESSION CHAIRED IN WORKSHOP/STTP/CONFERENCE:

1. Prof. S. Sundar (Director, NIT Mizoram) delivered a talk in International Conference of Gwalior Academy of Mathematical Sciences ICGAMS-2K22 organized by the Department of Applied Sciences and Humanities, Pimpri Chinchwad College of Engineering, Pune on 01<sup>st</sup> October 2022
2. Prof. S. Sundar (Director, NIT Mizoram) delivered a keynote talk and conducted a PhD viva on 3<sup>rd</sup> October at Madurai University
3. Prof. S. Sundar (Director, NIT Mizoram) delivered a talk on "*Mathematics of Machine Learning*" at SIAT College, Chennai on 22<sup>nd</sup> October
4. Prof. S. Sundar (Director, NIT Mizoram) delivered a keynote at an International Conference on Computational PDE and Applications at BITS Goa 2022
5. Prof. Saibal Chatterjee (Dept. of EEE) delivered a talk on "*Mind the Gap. Leave No One and Place Behind*" at The Institution of Engineers (India) Mizoram State Centre, in collaboration with the National Institute of Technology Mizoram, is organizing "Celebration of World Habitat Day" on 15<sup>th</sup> October 2022.

## ❖ FACULTY PROMOTIONS

### **Department of Electrical and Electronics Engineering:**



Dr. Pabitra Kumar Biswas  
Associate Prof.



Dr. Ramesh Kumar  
Asst. Prof Grade I



Dr. Krishnarti De  
Asst. Prof. Grade II



Dr. Suman Mujumder  
Asst. Prof. Grade II

### **Department of Electronics and Communication Engineering:**



Dr. Rudra Sankar Dhar  
Associate Prof.



Dr. Chaitali Koley  
Asst. Prof. Grade I



Dr. Anumoy Gosh  
Asst. Prof. Grade I

### **Department of Basic Sciences:**



Dr. Alok Shukla  
Prof. of Physics



Dr. Ajmal Koya Pulikkal  
Prof. of Chemistry



Dr. Surender Ontela  
Asst. Prof. of Maths  
Grade I

### **Department of Mechanical Engineering:**



Dr. Bachu Deb  
Associate Prof.



Dr. Lalhminganga  
Associate Prof.



Dr. Bidesh Roy  
Associate Prof.

### **Department of Computer Science and Engineering:**



Dr. Sandeep Kumar Dash  
Asst. Prof. Grade II



## Department of Civil Engineering:



Dr. Bijayananda Mohanty  
Associate Prof.



Dr. Sanasam Vipej Devi  
Asst. Grade I



Dr. Ricky Lalthazuala  
Asst. Prof. Grade I

## STUDENTS ACHIEVEMENTS

1. Sajesh A K (Research Scholar in Chemistry) delivered a talk on '*Micro-plastics-Environmental Issues*' at Orientation Program and Felicitation Ceremony organized by Department of Chemistry, H.M. College of Science and Technology, Manjeri, Malappuram, Kerala on 28<sup>th</sup> October 2022.
2. Sajesh A K (Research Scholar in Chemistry) delivered a talk on '*Newly Emerging Issues in Water Pollution*' at One-day seminar on 'Water Pollution' organized by PG Department of Chemistry, Unity Women's College, Manjeri, Malappuram, Kerala on 31<sup>st</sup> October 2022



निवासस्थानं विना न जीवनम्

(WITHOUT HABITAT, THERE IS NO LIFE)