

National Conference
on
Advances in Materials Science and Technology
(AMST 2026)

📍 **Venue:** Auditorium, The ICFAI University Tripura
and
online platform (Google meet)

📅 **Dates:** 1–3 June 2026

PROGRAMME SCHEDULE



DEPARTMENT OF PHYSICS
ICFAI SCIENCE SCHOOL
THE ICFAI UNIVERSITY, TRIPURA
TRIPURA 799210, INDIA

PROGRAMME SCHEDULE

Day 1 (Offline mode) 1 June 2026, Monday	
Inauguration Session	
10:00 am – 10.:05 am	Felicitation of the dignitaries
10:05 am – 10.:10 am	Lighting of the lamp
10:05 am – 10:15 am	Inaugural song by students
10:15 am – 10:25 am	Welcome Address and inauguration by Prof. (Dr.) Biplab Halder, Honourable Vice-Chancellor, ICFAI University Tripura
10:25 am – 10:30 am	Overview of the conference by Dr. Gobinda Pradhan, Convener, AMST 2026
10:30 am – 10:35 am	Vote of thanks by Dr. Camelia Das, HOD, Department of Physics, Co-Convener, AMST 2026
Tea Break (10:35 am -11:00 am)	
Plenary Session-1 Session Host : Dr. Sourav Chattopadhyay	
11:00 am - 11:45 am	Prof. Syed Arshad Hussain Tripura University, Tripura, India Title: Biomemristors as the Next Generation Memory Devices
11:45 am - 12:30 pm	Dr. Biswajit Saha, NIT Agartala, Tripura, India Title: Multifunctional polyaniline composites on flexible cellulose substrate for electronic and biomedical applications
Lunch Break (12:30 pm - 2:30 pm)	
Technical session-1 (Contributory talk/oral)	
Time	Name/Affiliation/Title of talk
2:30:-3:30 pm	<i>Details of the talk are attached at the end (Annex I)</i>
Tea Break (3:30 pm -4:00 pm)	
Day 2 (Online mode) 2 June 2026, Tuesday	
Plenary Session-2 Session Host: Dr. Gobinda Pradhan	
9:30 am -10:15 am	Dr. Ashish Kumar Mishra IIT BHU, Varanasi, India Title: 2D Nanomaterials: Optoelectronics and Energy Applications
10:15 am - 11:00 am	Dr. Binay Kumar Hazra, IIT Guwahati, Guwahati, Assam, India Title: Spin Transport Across Non-Collinear AFM/Ferromagnet Bilayers

Technical session-2 (Contributory talk/oral)	
Time	Name/Affiliation/Title of talk
11:00 am- 1:00 pm	<i>Details of the talk are attached at the end (Annex II)</i>
Lunch Break (1:00 pm - 2:30 pm)	
Plenary Session-3 Session Chair: Dr. Gobinda Pradhan	
2:30 pm - 3:10 pm	Dr. Mahesh Peddigari IIT Hyderabad, Telangana, India Title: Artificial relaxor ferroelectric ceramic thick films for energy storage applications
Technical session-3 (Contributory talk/oral)	
Time	Name/Affiliation/Title of talk
3:10 pm- 5:00 pm	<i>Details of the talk are attached at the end (Annex III)</i>
Day 3 (Online mode) 3 June 2026, Wednesday	
Plenary Session-4 Session Chair: Dr. Camelia Das	
9:30 am - 10:10 am	Dr. Bhagaban Kisan JNU Delhi, Delhi, India Title: Magnetic and dielectric study on BZT-BCT ceramic sample
10:10 am - 10:50 am	Dr. sanjib Nayek NIT Warangal, Telangana, India Title: BaTiO ₃ based lead free relaxor ferroelectric for energy storage and electrothermal applications
Technical session-4 (Contributory talk/oral)	
Time	Name/Affiliation/Title of talk
10:50 am- 1:00 pm	<i>Details of the talk are attached at the end (Annex IV)</i>
Lunch Break (1:00 pm - 2:30 pm)	
Technical session-5 (Contributory talk/oral)	
2:30 pm- 4:00 pm	<i>Details of the talk are attached at the end (Annex V)</i>
4:00 pm- 4:20 pm	Valedictory Session

List of Speakers for Technical Talks

Annex I				
Technical session -1 (offline)				
1 June 2026, Monday				
Session Chair: Dr. Ganesh Adhikary				
SL No	Time	Name	Affiliation	Title
1.	2:30-2:40 pm	Bidyut Bhattacharjee	The ICFAI University Tripura	A DFT study to compare the influence of sulfur vacancy on bandgap engineering of 2H WS ₂ monolayer and bilayer
2.	2:40-2:50 pm	Souramita Acharjee	ICFAI University Tripura	A short review on the Optoelectronic properties of Janus WSSe monolayer
3.	2:50-3:00 pm	Namita Das	ICFAI University Tripura	Investigation of magnetic properties of MnBi unit cell and MnBi supercell by using DFT+U computational method
4.	3:00-3:10 pm	Shyamashree Roy	ICFAI University Tripura	Review on optical, electronic and mechanical characterization of palladium diselenide (PdSe ₂) by using first principle calculation
5.	3:10-3:20 pm	Punam Podder	ICFAI University Tripura	Structural and Magnetic Properties of Iron Rich Soil from Selected Regions of Tripura, India

Annex II**Technical session -2 (online)****2 June 2026, Tuesday****Session Chair: Dr. Bibhabasu De**

SL No	Time	Name	Affiliation	Title
1.	11:00-11:10 am	Suparna Bhattacharjee	Gauhati University	Synthesis of TiO ₂ Nanoparticles and TiO ₂ /ZnS Nanocomposites by Microwave Irradiation Technique and their Characterization
2.	11:10-11:20 am	Rajat Kanti Saha	Captain Williamson Sangma State University	Nonlinear Dynamical Analysis and Calibration of Fabricated Fe-doped ZnO nanoparticles
3.	11:20-11:30 am	Sajal Sahu	Prabhat Kumar College	Copper Nanoparticles as Potential Agents for Gallstone Dissolution: A Spectroscopic Study of Their Interaction with Cholesterol and Bilirubin
4.	11:30-11:40 am	Sakshi Singh	Dr. B.R. Ambedkar National Institute of Technology	Analysis of Thermal Transport Properties of Polyester Wadding Nonwoven Fabrics
5.	11:40-11:50 am	Anindita Deka	B. Borooah College (Autonomous)	Controlled Evolution of Gold Nanoparticles on Silicon Through Surface Topography and Annealing
6.	11:50-12:00 noon	Anwasha Deb	National Institute of Technology Agartala	Silver Nanowires ink Based Flexible Electrodes for Room Temperature Ammonia Gas Sensing Applications
7.	12:00-12:10 pm	Pintu Barman	Kamrup College, Chamata	In-situ XPS Investigation of Thermally Evolved Ag-Au Bimetallic Nanoparticles from Size-Selected Ag Clusters on Au Thin Films
8.	12:10-12:20 pm	Shraboni Ray	Assam University	MXene Nanocomposite for Brain-inspired Neuromorphic Computing
9.	12:20-12:30 pm	Dr. Hemen Kakati	Nalbari College	Fabrication of Functionally Graded Coatings and Bulk Materials by Magnetron Sputtering: Microstructure and Properties
10.	12:30-12:40 pm	Ajay Kumar Saw	YBN University	Magnetic and magneto-transport study of Epitaxial half doped PSMO thin film
11.	12:40-12:50 pm	Bandana Gogoi	D. N. Govt. College	Low temperature magnetization process in superparamagnetic nanoparticle system and influence of magnetic dipolar interaction on magnetic anisotropy
12.	12:50-1:00 pm	Dr. Manisha Kumari	Government Engineering College Bhojpur	Metal/Metal Oxide Nanoparticles – A matter of concern for forensic environmental toxicology

Annex III**Technical session -3 (online)****2 June 2026, Tuesday****Session Chair: Dr. Arunabha Saha**

SL No	Time	Name	Affiliation	Title
1.	2:30-2:40 pm	Dr. Ankita Joshi	Laxman Singh Mahar Campus, Pithoragarh (SSJU, Almora)	Density functional studies on B, N-doped coronene and its donor-acceptor substituted derivatives
2.	2:40-2:50 pm	Rudra Narayan Saha	Dr. B.R. Ambedkar National Institute of Technology	Bridging Pharmacopeial and Textile Numbering Systems for Surgical Sutures: A Mathematical Framework
3.	2:50-3:00 pm	Sebika Sonowal	NERIST	Hydrogen Storage in Ni-Doped Boron-Silicon Nanocages: A Density Functional Theory Investigation
4.	3:00-3:10 pm	Asakho	Kohima Science College	Elastic mechanical thermodynamic and thermoelectric properties of pristine and Magnesium doped CaSe: a density function theory study
5.	3:10-3:20 pm	Purnima Dutta	NERIST	Germanium-Based Alkali Metal Doped Nanoclusters with Significant Static and Dynamic Nonlinear Optical Responses: A DFT Study
6.	3:20-3:30 pm	Sudhanshu Singh	Dr. B.R. Ambedkar National Institute of Technology	Structural Performance of 3D Printed Sandwich Composites
7.	3:30-3:40 pm	Anik Shrivastava	G.M. Momin Women's College	Role of Aluminum in Reshaping Local Order and Structural Stability of Cu-Zr Amorphous Alloys using Molecular Dynamics Simulation

Annex IV**Technical session -4 (online)****3 June 2026, Wednesday****Session Chair: Dr. Sovan Ghosh**

SL No	Time	Name	Affiliation	Title
1.	11:00-11:10 am	Dr. Dhruva Jyoti Gogoi	Nalbari College	Broadband Microwave Absorbers Using Metamaterials
2.	11:10-11:20 am	Grikanchi K Marak	Mizoram University	Investigation of RF Power-Dependent Band Gap Variation in Ultra-Small CdS Nanoparticles
3.	11:20-11:30 am	Ajay Kumar Saw	YBN University	Magnetic and magneto-transport study of Epitaxial half doped PSMO thin film
4.	11:30-11:40 am	Dr. Rimpi Chakravarty	Indian Institute of Technology Guwahati	Preparation and performance assessment of BaFe _{0.5} Nb _{0.5} O ₃ perovskite for advanced device applications
5.	11:40-11:50 am	Ashish Bijalwan	Pt. Shiv Ram Govt Degree College Tyuni	Liquid Crystal-Gold Grating Based Temperature Sensor
6.	11:50-12:00 noon	Trishamoni Kashyap	J.N. College, Boko	Photocatalytic Performance of Mono and Bimetallic Ag, Au Decorated CN: Effect of Semiconductor and Surface Plasmon Excitation Synergy
7.	12:00-12:10 pm	Sudipta Das	National Institute of Technology Agartala	Cost-effective synthesis of ZnO nanorods via thermal growth for efficient photocatalytic degradation of organic dyes under visible light irradiation
8.	12:10-12:20 pm	B. Kharbangar	Raid Laban College	Estimation of radium content and radon exhalation rate in soil samples of Mawsmi Caves, Meghalaya, India
9.	12:20-12:30 pm	T. Lalthanthuama	Mizoram University	An Introduction to Radio Frequency Heating as a means for Band gap tuning in Nanomaterials
10.	12:30-12:40 pm	Anuj Kanti Nath	Assam University	Investigation of Synaptic plasticity behavior in low dimensional lead-free cesium bismuth iodide perovskite based memristors
11.	12:40-12:50 pm	Pyngrope	Captain Williamson Sangma State University	Indoor radon (²²² Rn) and thoron (²²⁰ Rn) levels and dose assessment in workplaces of North Garo Hills, Meghalaya

Annex V**Technical session -5 (online)****3 June 2026, Wednesday****Session Chair: Dr. Dipayan Chattopadhyay**

SL No	Time	Name	Affiliation	Title
1.	2:30-2:40 pm	Shradha M. S.	Indian Institute of Science Education and Research (IISER), Thiruvananthapuram	Hierarchical Gd-MOF Nanosheets for Superior Pseudocapacitive Energy Storage Application: New Dimension in Supercapacitor
2.	2:40-2:50 pm	Barsha Rani Bora	Kamrup College Chamata	Enhanced Hydrovoltaic Energy Generation via Asymmetric Metal Oxide Architectures
3.	2:50-3:00 pm	Debadrita Dasgupta	National Institute of Technology Agartala	NiO/Fe ₂ O ₃ Nanoparticle Incorporated Polyaniline as Thermoelectric Generator for Energy Harvesting
4.	3:00-3:10 pm	Ganesan Krishnamoorthy	Indian Institute of Technology Guwahati	Smart Near-IR Light-Controlled Drug Delivery Using SDF-1 α -Loaded Chitosan Nanoparticles Coated with Chlorin e6
5.	3:10-3:20 pm	Anabadya Dash	National Institute of Technology Agartala	Room Temperature Resistive CO Sensor Using RuO ₂ Nanorods for Non-Invasive Respiratory Disease Monitoring
6.	3:20-3:30 pm	Sunirmal Bhattacharjee	Bharat Pharmaceutical Technology	Ag-NPs Coated Silk Suture Development and Characterisation: An Innovative Method to Prevent Surgical Site Infections
7.	3:30-3:40 pm	Rahul Rai	FS University	A Comparative Evaluation of Patient-Specific Quality Assurance Techniques for Head and Neck Cancer: Portal Dosimetry Versus ArcCheck
8.	3:40-3:50 pm	Apurba Das	Handique Girls' College	Photo-luminescence in synthetically derived hydroxyapatite: Biomedical Applications
9.	3:50- 4:00 pm	Rahul Chowdhury	Karimpur Pannadevi College	Multiscale Modelling and Experimental Investigation of Nano-Engineered Carriers for Enhanced Transdermal Delivery in Cosmetic Dermatology
