# <u>Detailed Technical Schedule of 13<sup>th</sup> National Conference on Condensed Matter Physics and Applications (CMPA)- 2025</u>

Day 0: 07/12/2025 (Not mandatory. To participate, one must register using the link shared to all the participants)

Registration: 2:30-3:00 pm

Visit to Central Research Facilities, Department Tour: 3:00 – 4:00 pm

MAHE campus tour: After 4:00 PM

Dinner: 8:00 pm

## Day 1: 08/12/2025

Inaugural Function: 9:00-09:45 am

Photo Session and High Tea: 09:45 to 10:00 AM

**Plenary Lecture**: 10:10 – 11:00 AM

Speaker: Prof. Umesh V. Waghmare, Jawaharlal Nehru Centre for Advanced Scientific Research

(JNCASR), Bengaluru

"Converting Waste Heat to Electricity: Thermoelectric Chalcogenides"

Chair: Dr. Rajendra B. V., Dept. of Physics, MIT Manipal

**Keynote 1:** 11:00 am – 11:40 am

Speaker: Dr. Pavan Nukala, Indian Institute of Science (IISc), Bengaluru

"Visualizing earthquakes in 2D ferroelectrics"

Chair: Dr. Sudha D. Kamath, Dept. of Physics, MIT Manipal

## Poster Session with tea break (11:45-1:00 pm): 60 papers

### Lunch (1:00 pm - 2:00 pm)

**Keynote 2:** 02:00 – 02:40 pm

Speaker: Dr. Angappane, Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru

"'Emerging Trends in Gas Sensors Driven by Advanced Materials Engineering"

**Invited 1:** 02:40 – 03:10 pm

Speaker: Dr. Kiruthika, SASTRA Deemed to be University, Thanjavur

"Flexible and Durable Conducting Fabric Electrodes for Next Generation Wearable

Supercapacitors"

Invited 2: 3:10 -3:35 pm

Speaker: Dr. Manu Patel U. M., Manipal Institute of Technology (MIT), Manipal

"Impact of Binder Materials on Electrochemical Performance of Li-S Battery Cathodes"

Chair: Dr. Ismayil, Dept. of Physics, MIT Manipal

Oral Presentations with tea: 3:45 - 5:15 pm, 6 parallel sessions (42 papers)

Chairs: Prof. Pramoda K. Shetty, Prof. D. Kekuda, Dr. Mahesha M. G., Dr. A. N. Prabhu

Dr. Mamatha D. Daivajna, Dr. Suchand Sandeep

Cultural events 5:30 to 7:30 pm

Dinner: 8:00 pm

### Day 2: 09/12/2025

Breakfast: 8:00 to 8:45 am (Library Auditorium)

**Keynote 3**: 9-00- 9-40 AM

Speaker: Dr. Bivas Saha, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR),

Bengaluru

"Metal/Semiconductor Superlattices: Building Matter Layer-by-Layer"

**Invited 3:** 09:40 – 10:10 am

Speaker: Dr. Sreemanta Mitra, GITAM Deemed to be University, Bengaluru

"Defects in 2D MoS<sub>2</sub>: From Optical Response to Electronic Transport & Their Possible

Correlation"

Chair: Dr. Bhaghyesh, Dept. of Physics, MIT Manipal

Oral Presentations with tea: 10:15-11:15 pm, 6 parallel sessions (30 papers)

Chairs: Prof. Ashok Rao, Prof. Mohan Rao, Prof. Raviprakash, Dr. Gurumurthy S. C. Dr. K. Gowrish

Rao, Dr. K. Panda

Poster Session with tea break (10:45-11:50): 55 papers

Lunch (1:00 pm - 2:00 pm)

**Keynote 4:** 02:00 – 2:40 am

Speaker: Dr. P. Vishwanath, Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru

"Optical studies on size-reduced colloidal monolayer and its utility as a mask for fabricating plasmonic structures"

**Keynote 5:** 2:40 – 3:10 pm

Speaker: Prof. H. S. Nagaraja, National Institute of Technology Karnataka (NITK) Surathkal

"Nanostructured materials for electrodes"

**Invited 4:** 03:10 – 03:40 pm

Speaker: Dr. Mahesh Padaki, Jain Deemed to be University, Bengaluru

"Tunable Porous Electrode material with Enhanced Ion Transport for Next-Generation CDI Water Purification"

Chair: Dr. Poornesh P, Dept. of Physics, MIT Manipal

Tea break and networking: 3:40 to 4:10

Valedictory Function: 4:10-4-50 PM

High tea: 4:50 PM