

### Day-1, November 05, 2025

| Time/Venue           | Ambedkar Auditorium                                                                                                                                                                   |                                                                                                                                                           |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08:00 am – 09:30 am  | <b>Registration</b>                                                                                                                                                                   |                                                                                                                                                           |
| 10:00 am – 10:30 am  | <b>Inauguration Session</b>                                                                                                                                                           |                                                                                                                                                           |
| 10:30 am – 11:00 am  | Photo Session, Tree plantation followed by the High Tea                                                                                                                               |                                                                                                                                                           |
| <b>Session Chair</b> | <b>Dr. Madhuri W.</b>                                                                                                                                                                 |                                                                                                                                                           |
| 11.00 am – 12.00 pm  | <b>Plenary Lecture, Dr. Satoru Yoshimura</b>                                                                                                                                          |                                                                                                                                                           |
| 12:00 pm – 01:00 pm  | <b>Keynote by Dr. Parthiban Ramasamy, Eric Schmid Institute Austria</b>                                                                                                               |                                                                                                                                                           |
| 01.15 pm – 02.15 pm  | <b>Lunch Break (@Foodys)</b>                                                                                                                                                          |                                                                                                                                                           |
|                      | <b>Technical Sessions</b>                                                                                                                                                             |                                                                                                                                                           |
| <b>Session Chair</b> | <b>Dr. B. B. Lahiri</b>                                                                                                                                                               | <b>Dr. Akshay Singh</b>                                                                                                                                   |
|                      | <b>Session-1 (VOC Gallery-1)</b>                                                                                                                                                      | <b>Session-2 (Ambedkar Auditorium)</b>                                                                                                                    |
| 02:30 pm – 03:00 pm  | <b>Dr. K. Ramesha, CECRI, Kariakudi</b><br>Battery Storage: Material Innovations and Challenges                                                                                       | <b>Dr. Ramakanta Naik, IOC Bhubaneswar</b><br>Metal (Bi, La, Ni)-doped CdTe Nanomaterials for Optoelectronic and Photodetector Applications               |
| 03:00 pm – 03:30 pm  | <b>Dr. Jathish Kumar, IISER Tirupati</b><br>Chiral Light Emitting Nanomaterials: From Fundamentals to Applications                                                                    | <b>Dr. Sunil Singh Kushvaha, NPL Delhi</b><br>Heterojunction of GaN and topological insulator Bi <sub>2</sub> Se <sub>3</sub> for Optoelectronics devices |
| 03:30 pm – 04:00 pm  | <b>Dr. Pratap Vishnoi, JNCASR, Bengaluru</b><br>From Visible to Near Infrared: Emission Engineering in Lead-free Low-Dimensional Hybrid Metal Halide Perovskites                      | <b>Dr. Aravinda Babu, DMRL</b>                                                                                                                            |
| 04:00 pm - 04:15 pm  | <b>Tea Break</b>                                                                                                                                                                      |                                                                                                                                                           |
| <b>Session Chair</b> | <b>Dr. Sunil Singh Kushvaha</b>                                                                                                                                                       | <b>Dr. Ankur Rastogi</b>                                                                                                                                  |
| <b>Time/Venue</b>    | <b>Session-3 (VOC Gallery-1)</b>                                                                                                                                                      | <b>Session-4 (Ambedkar Auditorium)</b>                                                                                                                    |
| 04:15 pm – 04:45 pm  | <b>Dr. Srinath, University of Hyderabad</b><br>Spin-phonon coupling, magneto-caloric effect and critical phenomena in Ga <sub>1-x</sub> Al <sub>x</sub> FeO <sub>3</sub> orthoferrite | <b>Dr. François Courvoisier, University of Franche Comte, France</b><br>Ultrafast laser-induced extrusion of nano-rods                                    |
| 04:45 pm – 05:15 pm  | <b>Dr. Kiran Kumar M, BARC, Mumbai</b><br>High Temperature Oxidation of Zr Alloys and Development of Accident Tolerant Fuel Cladding Approaches                                       | <b>Dr. R. Jayavel, Anna University</b><br>Two Dimensional Functional Nanostructures for Sustainable Energy Storage Applications                           |
| 05:15pm – 05:45 pm   | <b>Dr. P. D. Babu, BARC, Mumbai</b><br>Incommensurate Magnetic Structure of Ho <sub>3</sub> Co and its magnetism under high pressure                                                  | <b>Dr. B. B. Lahiri, IGCAR, Kalpakkam</b><br>Magnetic fluid hyperthermia: recent insights from numerical modelling and future challenges                  |
| 06:00 pm – 07:30 pm  | <b>Cultural Event (@Foodys)</b>                                                                                                                                                       |                                                                                                                                                           |
| 07:30 pm onward      | <b>Dinner (@Foodys)</b>                                                                                                                                                               |                                                                                                                                                           |

VOC Gallery-1 : Ground Floor, Technology Tower  
Ambedkar Auditorium : Ground Floor, Technology Tower



## Day-2, November 06, 2025

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| <b>Session Chair</b> | <b>Dr. S. Srinath</b>                                                                                                                                                 | <b>Dr. P. D. Babu</b>                                                                                                                                         |
| <b>Time/Venue</b>    | <b>Session-5 (VOC Gallery-1)</b>                                                                                                                                      | <b>Session-6 (TT513)</b>                                                                                                                                      |
| 09:00 am – 09:30 am  | <b>Dr. Abdul Azeem, NIT Warangal</b><br>A sustainable approach for developing supercapacitor electrodes from industrial waste for energy storage applications         | <b>Dr. K. G. Suresh, IIT Bombay</b><br>Recent studies on spintronic and topological aspects of certain Heusler alloys                                         |
| 09:30 am – 10:00 am  | <b>Dr. Narayanasamy Vijayan, NPL Delhi</b><br>Melt-Grown Single Crystals: Growth Dynamics and Functional Properties for Optical and Thermoelectric Applications       | <b>Dr. Ashis Kumar Panda, CSIR-National Metallurgical Laboratory</b><br>Journey of Rapidly Quenched Magnetic Materials to Sensors for Industrial Applications |
| <b>Session Chair</b> | <b>Dr. Ezhil Vizhi R</b>                                                                                                                                              |                                                                                                                                                               |
| 10.00 am – 11.00 am  | <b>Keynote by Dr. M. S. R. Rao, IIT Madras (VOC Gallery-1)</b><br>Diamond: The most versatile ultra wide bandgap quantum material for many technological applications |                                                                                                                                                               |
|                      | <b>Tea Break</b>                                                                                                                                                      |                                                                                                                                                               |
| 11:15 am – 12:45 pm  | <b>Poster presentation at Foodys</b>                                                                                                                                  |                                                                                                                                                               |
| 12.45 pm – 01.45 pm  | <b>Lunch Break (@Foodys)</b>                                                                                                                                          |                                                                                                                                                               |
| <b>Time/Venue</b>    | <b>Session-7 (VOC Gallery-1)</b>                                                                                                                                      | <b>Session-8 (VOC Gallery-2)</b>                                                                                                                              |
| <b>Session Chair</b> | <b>Dr. Manish Kumar Mishra</b>                                                                                                                                        | <b>Dr. Parthiban Ramasamy</b>                                                                                                                                 |
| 02:00 pm – 02:30 pm  | <b>Dr. Shweta Agarwala, Ahmedabad University</b><br>From Green Materials to Biodegradable Devices: Steps towards responsible innovation                               | <b>Dr. P. Savaranan, DMRL Hyderabad</b><br>Permanent Magnetic Thin Films: Prospects for Micromagnetic Devices                                                 |
| 02:30 pm – 03:00 pm  | <b>Dr. Akshay Singh, IISc Bengaluru</b><br>Wafer-scale growth of 2D magnetic materials, and creating single photon emitters in 2D semiconductors                      | <b>Dr. Subramanian Venkatachalam, IIT Madras</b><br>Magnetoelectric composites for multifunctional applications                                               |
| 03:00 pm – 03:30 pm  | <b>Dr. G. L. Samuel, IIT Madras</b><br>Advanced Manufacturing Techniques for Surface Functionalization                                                                | <b>Dr. Binay Kumar, Delhi university</b><br>Flexible Piezoelectric Nanogenerators for Green Energy Harvesting and Sensor Applications                         |
| 03:30 pm – 03:40 pm  | <b>Tea Break</b>                                                                                                                                                      |                                                                                                                                                               |
| <b>Session Chair</b> | <b>Dr. Arivarasu M</b>                                                                                                                                                | <b>Dr. Annamalai Senthil</b>                                                                                                                                  |
| 03:40 pm – 05:40 pm  | <b>Oral Presentation – 1 (VOC Gallery-1)</b>                                                                                                                          | <b>Oral Presentation – 2 (VOC Gallery-2)</b>                                                                                                                  |
| <b>Session Chair</b> | <b>Dr. Atul Thakre</b>                                                                                                                                                |                                                                                                                                                               |
| 05:40 pm – 06:40 pm  | <b>Industry interaction</b> (Laser Science, Jasco, Metrohm, JetSpin, Ant Ceramics)                                                                                    |                                                                                                                                                               |
| 07:30 pm onward      | <b>Dinner (@Foodys)</b>                                                                                                                                               |                                                                                                                                                               |

VOC Gallery-1

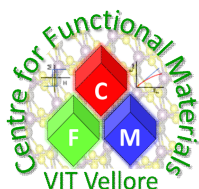
TT513

VOC Gallery-2

: Ground Floor, Technology Tower

: Fifth Floor, Technology Tower

: First Floor, Technology Tower



### Day-3, November 07, 2025

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| <b>Time/Venue</b>    | <b>Ambedkar Auditorium</b>                                                                                                                                              |                                                                                                                                                               |
| <b>Session Chair</b> | <b>Dr. Ramesh M. Thamankar</b>                                                                                                                                          |                                                                                                                                                               |
| 09:00 am – 10:00 am  | <b>Keynote: Dr. R. Ramesh, Rice University, USA (Online)</b>                                                                                                            |                                                                                                                                                               |
| <b>Session Chair</b> | <b>Dr. Palanisami N</b>                                                                                                                                                 | <b>Dr. Ramesh M. Thamankar</b>                                                                                                                                |
| <b>Time/Venue</b>    | <b>Session -9 (VOC Gallery-1)</b>                                                                                                                                       | <b>Session -10 (Ambedkar Auditorium)</b>                                                                                                                      |
| 10.00 am – 10.30 am  | <b>Dr. Mahesh Peddigari, IIT Hyderabad</b><br>Artificial relaxor ferroelectric behavior in aerosol deposited films: Emerging pathway for high energy density capacitors | <b>Dr. Bruno Peixoto de Oliveira, Universidade Federal do Cariri (UFCA), Brasil</b><br>Biomass-based carbon dots: sensing and bioimaging applications         |
| 10.30 am – 11.00 am  | <b>Dr. Vanchiappan Aravindan, IISER Tirupati</b><br>From Dead Li-ion Batteries to High Performance Na-ion Batteries via Solvent-co-Intercalation                        | <b>Dr. Neeraj Sharma, University of New South Wales, AU</b><br>Understanding batteries & battery materials                                                    |
|                      | <b>Tea Break</b>                                                                                                                                                        |                                                                                                                                                               |
| 11:15 am – 11:45 am  | <b>Dr. K. Sethuraman, CUTN, TamilNadu</b><br>Chemical Spray Pyrolysis – A Versatile Technique for Semiconductor Thin Film Preparation                                   | <b>Dr. Rohini Dattatraya Kitture, Deputy Editor Small AND Physical Sciences Portfolio</b>                                                                     |
| 11:45 am – 12:15 pm  | <b>Dr. Manish Kumar Mishra, NCL Pune</b><br>Engineering Motion in the Solid State: Dynamics of Smart Crystalline Materials                                              | <b>Dr. K. Prabhakar, University of Pusan, South Korea</b><br>Intrinsic Versus Extrinsic Electrocatalyst Activity in Water Splitting                           |
| 12:15 pm – 12:45 pm  | <b>Dr. Abha Mishra, IISc, Bengaluru</b><br>MoS <sub>2</sub> -graphene interface for molecular sensing and switching                                                     | <b>Dr. Sayani Majumdar, Tampere University, Finland</b><br>Capacitive In-Memory-Computing: A Device to Systems Level Perspective on the Future of AI Hardware |
| 12.45 pm – 01.45 pm  | <b>Lunch Break (@Foodys)</b>                                                                                                                                            |                                                                                                                                                               |
| <b>Session Chair</b> | <b>Dr. Kaleemulla S</b>                                                                                                                                                 | <b>Dr. Amlan Das</b>                                                                                                                                          |
| <b>Time/Venue</b>    | <b>Session -11 (VOC Gallery-1)</b>                                                                                                                                      | <b>Session -12 (Ambedkar Auditorium)</b>                                                                                                                      |
| 02:00 pm – 02:30 pm  | <b>Dr. Emila Panda, IIT Ghandhinagar</b>                                                                                                                                | <b>Dr. Sumeet Walia, RMIT, AU</b><br>Ultra-thin materials for next-generation electronics and optoelectronics technologies                                    |
| 02:30 pm – 03:20 pm  | <b>Oral Presentation – 3 (VOC Gallery-1)</b>                                                                                                                            | <b>Oral Presentation – 4 (Ambedkar Auditorium)</b>                                                                                                            |
| 03:50 pm – 04:30 pm  | <b>Valedictory Function (Ambedkar Auditorium)</b>                                                                                                                       |                                                                                                                                                               |
| 04:30 pm – 05:00 pm  | <b>High Tea</b>                                                                                                                                                         |                                                                                                                                                               |

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