

## EESTER 2020 ORAL Presentations

| SL. No | Name & Affiliation  | Title  | Category                       | Presentation Number | Schedule   |
|--------|---|--|--------------------------------|---------------------|--|
| 1      | <b>Bikash Patra</b><br>National Institute of Science Education and Research, Bhubaneswar, India | Relevance of the Pauli kinetic energy density for semilocal functionals  | Theory Development<br>- Oral 1 | OTD-1               | Day 3<br>16 <sup>th</sup> Dec.<br>2:30 pm<br>IST<br>(15 minutes) |
| 2      | <b>Dr. Igor Di Marco</b><br>Asia Pacific Center for Theoretical Physics, South Korea.           | Determining the Intra-Atomic Exchange Energy in Rare-Earth Adatoms   | Theory Development<br>- Oral 2 | OTD-2               | Day 3<br>16 <sup>th</sup> Dec.<br>2:45 pm<br>(15 minutes)        |
| 3      | <b>Aditi Mandal</b><br>Birla Institute of Technology and Science, Pilani, India                 | Brief description of Plasmon excitation within multiple scattering approach in Photoemission energy loss spectroscopy                        | Theory Development<br>- Oral 3 | OTD-3               | Day 3<br>16 <sup>th</sup> Dec.<br>3:00 pm<br>IST<br>(15 minutes) |
| 4      | <b>Dr. Subhayan Roychoudhury</b><br>Lawrence Berkeley National Laboratory, Berkley, USA         | Neutral excitation density functional theory: a variational first-principles method for simulating excitations in molecules                  | Theory Development<br>- Oral 4 | OTD-4               | Day 3<br>16 <sup>th</sup> Dec.<br>3:15 pm<br>IST<br>(15 minutes) |
| 5      | <b>Santanu Pathak</b><br>Variable Energy Cyclotron Centre, Kolkata, India                       | Precision measurement and electronic structure calculations for understanding the microscopic and macroscopic properties of HfO <sub>2</sub> | Theory Application<br>-Oral 1  | OTA-1               | Day 3<br>16 <sup>th</sup> Dec.<br>3:30 pm<br>IST<br>(15 minutes) |
| 6      | <b>Namrata Jaykhedkar</b><br>Faculty of Natural Sciences, Comenius University, Slovakia         | Theoretical study of temperature dependent behaviour of crystal phases in SrZrS <sub>3</sub>   | Theory Application<br>-Oral 2  | OTA-2               | Day 3<br>16 <sup>th</sup> Dec.<br>3:45 pm<br>IST<br>(15 minutes) |
| 7      | <b>Shashi Bhusan Mishra</b><br>Indian Institute of Technology Madras, Chennai, India            | Formation of a suspended magnetic layer between graphene layers through fluorine intercalation   | Theory Application<br>-Oral 3  | OTA-3               | Day 3<br>16 <sup>th</sup> Dec.<br>4:00 pm<br>IST<br>(15 minutes) |
| 8      | <b>Dr. Tisita Das</b><br>Harish-Chandra Research Institute, Allahabad, India                    | Enhanced Hydrogen Evolution Activity at the Edges of MPSe <sub>3</sub> (M=Mn, Fe) Tri-chalcogenide Layers                                    | Theory Application<br>-Oral 4  | OTA-4               | Day 3<br>16 <sup>th</sup> Dec.<br>4:15 pm<br>IST<br>(15 minutes) |
| 9      | <b>Abhishek Maiti</b><br>Indian Association for the cultivation of Science, Kolkata, India      | Rashia Band Splitting in Methylammonium Lead Iodide: An Insight from Spin-Polarized Scanning Tunneling Spectroscopy                          | Experiment<br>- Oral 1         | OEX-1               | Day 5<br>18 <sup>th</sup> Dec.<br>4:50 pm<br>IST<br>(15 minutes) |

|    |   |  |                        |       |  |
|----|---|--|------------------------|-------|--|
| 10 | <b>Sameer Kumar Mallik</b><br>Institute of Physics,<br>Bhubaneswar, India   | Hysteresis study in salt-assisted CVD grown monolayer MoS <sub>2</sub> field-effect transistor by pulsed I~V technique           | Experiment<br>- Oral 2 | OEX-2 | Day 5<br>18 <sup>th</sup> Dec.<br>5.05 pm<br>IST<br>(15 minutes) |
| 11 | <b>Dr. Rajib Batabyal</b><br>Center for Quantum Devices,<br>Niels Bohr Institute,<br>University of Copenhagen,<br>Denmark | Topological Fermi-arcs and Weyl node connectivity in ferromagnetic Weyl semimetal Co <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub> | Experiment<br>- Oral 3 | OEX-3 | Day 5<br>18 <sup>th</sup> Dec.<br>5.20 pm<br>IST<br>(15 minutes) |
| 12 | <b>Dr. Sofi Suhail Majid</b><br>Institute of Physics,<br>Academia Sincia, Taiwan  | Unveiling the role of V-V dimerization on insulator-metal transition and optical transmittance of VO <sub>2</sub> thin films     | Experiment<br>- Oral 4 | OEX-4 | Day 5<br>18 <sup>th</sup> Dec.<br>5.35 pm<br>IST<br>(15 minutes) |