

## **TechConnect 2024 – Symposiums Department of Civil Engineering (CE)**

at

## Indian Institute of Technology Bombay (Organised by the Industrial Research and Consultancy Centre) 17<sup>th</sup> December 2024 – 14:00 hrs to 17:00 hrs Room No. 32, Third Floor, VMCC

| Time                      | Session   | Speakers /                       |
|---------------------------|---|----------------------------------|
|                           |   | <b>Panellists/Moderator</b>      |
| 14:00 hrs to<br>14:15 hrs | Department Overview and<br>Traffic control, safety, and<br>management   | Prof. Tom V Mathew               |
| 14:15 hrs to<br>14:30 hrs | Design and development of<br>structures and systems against<br>blast, impact and shock  | Prof. Manish Kumar               |
| 14:30 hrs to<br>14:45 hrs | Technology driven solutions for<br>transportation infrastructure<br>development   | Prof. Avijit Maji                |
| 14:45 hrs to<br>15:00 hrs | Modelling Human Behavior in<br>Modern Urban Transport<br>Systems to Design Effective<br>Transport Policies  | Prof. Sangram Krishna<br>Nirmale |
| 15:00 hrs to<br>15:15 hrs | Phase Field Modelling in<br>Mechanics and Multiphysics  | Prof. Tushar Kanti Mandal        |
| 15:15 hrs to<br>15:45 hrs | Poster Presentations  | ·                                |
|                           | Poster 1: "Large-Scale Hydrological Modeling System (LSHMS):<br>An Indigenous Software for Hydrological Predictions in Data-<br>Scarce Regions" by Prof. Basudev Biswal and his team. |                                  |

|                           | Poster 2: "3D Concrete Printing - An innovative construction<br>technology" by R. Swami Ranga Reddy and Prof. M. N. Shariff<br>Poster 3: "Damage Detection and Assessment in Advanced |  |
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|                           | <b>Composite Structures Using Ultrasonic Guided Wave</b>  |  |
|                           | Propagation" by Akshay P. Kalgutkar, B. Ramana Raja and Prof.<br>Sauvik Banerjee  |  |
|                           | Poster 4: "Vibration and Impedance Based Monitoring of  |  |
|                           | Structures" by Mayank Kamal, Lukesh Parida, Prof. Sauvik  |  |
|                           | Banerjee  |  |
|                           | Poster 5: "Acoustic Emission-Based Structural Health  |  |
|                           | Monitoring of Masonry and Concrete Structures Repaired with   |  |
|                           | Textile Reinforced Matrix (TRM)" by Nikhil Holsamudrkar, Prof.  |  |
|                           | Sauvik Banerjee   |  |
|                           | <b>Poster 6: "Phase Field Revolution in Mechanics and</b>   |  |
|                           | Multiphysics" by Prof. Tushar Kanti Mandal  |  |
| 16:00 hrs to<br>17:00 hrs | Software demonstration, Lab visits, Networking  |  |
|                           | Software demonstration - LSHMS - by Prof. Basudev Biswal  |  |
|                           | and his team.   |  |
|                           | Visit of Concrete 3D printing Lab (HSL) - Prof. Shariff and   |  |
|                           | his team  |  |
|                           | Visit of SHMR Lab (in VMCC) - Prof. Suvik Banerjee and his team   |  |