

<b><u>Day 2 September 5, 2025</u></b> <b>Two-Day Symposium on Advances in Thermo Fluid Sciences IIT Guwahati</b>	
<b>Session 5 :Session Chair</b> <b>Prof. Santanu De, IIT Kanpur</b>	
9:30 AM - 10:00 AM	<b>Keynote Talk 11:</b> Dr. Naresh Chandra Murmu, CSIR-CMERI Durgapur <b>Title:</b> <i>"Underwater Robotics at CSIR-CMERI: Past, Present and Future "</i>
10:00 AM - 10:30 AM	<b>Keynote Talk 12:</b> Prof. Manas Ranjan Behera, BITS Pilani, Goa Campus <b>Title:</b> <i>"Investigation of coalescence dynamics of a liquid drop at a liquid bath"</i>
10:30 AM - 11:00 AM	<b>Keynote Talk 13:</b> Prof. Tapan K. Mankodi, IIT Guwahati <b>Title:</b> <i>"Accelerating Rarefied Hypersonic Flow Predictions through Machine Learning in Continuum and DSMC Frameworks"</i>
<b>11:00 AM - 11:30 AM</b>	<b>Tea Break</b>
<b>Session 6: Session Chair</b> <b>Prof Debabrata Dasgupta, IIT Delhi</b>	
11:30 AM - 12:00 Noon	<b>Keynote Talk 14:</b> Prof. Ganesh Natarajan , IIT Palakkad <b>Title:</b> <i>"Revisiting the choice of averaging for spatially varying/discontinuous coefficient problems"</i>
12:00 Noon - 12:30 PM	<b>Keynote Talk 15:</b> Prof. Ravi Kumar Arun, IIT Jammu <b>Title:</b> <i>"Microfluidic Lab on a Chip Devices for Affordable Healthcare and Energy Applications"</i>
12:30 PM - 1:00 PM	<b>Keynote Talk 16:</b> Prof. T Sundararajan, IIT Madras <b>Title:</b> <i>"Interface Reconstruction using Higher Order curves for Multi-Phase Flow modeling"</i>
<b>1:00 PM - 2:15 PM</b>	<b>Lunch Break</b>
<b>Session 7: Session Chair</b> <b>Prof. Somnath Roy, IIT Kharagpur</b>	
2:15 PM - 2:45 PM	<b>Keynote Talk 17:</b> Prof. Stéphane Zaleski, Sorbonne Université, Paris <b>Title:</b> <i>"Direct Numerical Simulation of Mass Transfer at the Slag-Metal Interface"</i>
2:45 PM - 3:15 PM	<b>Keynote Talk 18:</b> Prof. Atul Sharma, IIT Bombay <b>Title:</b> <i>"Physics-Informed and Deep Neural Network-based Computational Methods for Accelerating Time-Periodic Unsteady Multi-Physics CFD Simulations "</i>
<b>3:15 PM - 4:00 PM</b>	<b>Tea Break and Poster Session</b>
<b>Session 8: Session Chair</b> <b>Prof. Shaligram Tiwari, IIT Madras</b>	
4:00 PM - 4:30 PM	<b>Keynote Talk 19:</b> Prof. Gautam Biswas, BITS Pilani Goa Campus <b>Title:</b> <i>"Fairy Tale Stories of Fluid Mechanics"</i>
<b>Session 9: Session Chair</b> <b>Prof. Bahni Ray, IIT Delhi</b>	
4:30 PM - 5:00 PM	<b>A Special Session and Valedictory Function</b>