

DIVISION OF MECHANICAL SCIENCES

Research Symposium 2024 (May 10-11, 2024)



VENUE: Faculty Hall, IISc campus, Bangalore

SCHEDULE OF EVENTS

May 10, 2024

Time (hrs.)	Event
08:45 – 09:00	Event inauguration and session introduction
09:00 – 13:00	Session 1: High-Temperature Materials
13:00 – 14:00	Lunch Break
14:00 – 16:40	Session 2: Wind Tunnel Technologies
16:40 – 17:30	Panel Discussion
17:30 – 19:00	Poster Session

May 11, 2024

Time (hrs.)	Event	
09:00 - 12:00	Session 3: Data-Driven Mechanics	
12:00 – 12:45	Panel discussion	
13:00 – 14:30	Lunch Break	
14:00 – 18:00	Session 4: Engineering BTech for the Future and Panel Discussion	
19:00 – 20:00	Finale of 3-minute video contest and Dinner	

Details of the Sessions

Time (hrs.) Speaker Mr. V N Anil Kumar, General Manager, Foundry and Forge Division, 09:00 - 09:40 HAL Prof. Abhik N Choudhury, Materials Engineering, IISc Bangalore 09:40 - 10:10 10:10 - 10:50 Dr. M Sujata, Chief Scientist, Materials Science Division, CSIR-NAL, Bangalore. Tea break 10:50 - 11:05 Dr. Mithun Palit, Head, Powder Processing Group, Defence Metallurgical Research Laboratory (DMRL), Hyderabad 11:05 - 11:45 11:45 - 12:25 Prof. Ashutosh Gandhi, Professor, Metallurgical Engineering and Materials Science, IIT Bombay 12:25 - 13:00 Mr. Akshat Godha, PhD Student, Materials Engineering, IISc Bangalore

Session 1: High-Temperature Materials

Session 2: Wind Tunnel Technologies

Time (hrs.)	Speaker
14:00 –14:05	Introductory Remarks
14:05 – 14:40	Prof. Jonathan F. Morrison, Professor of Experimental Fluid Mechanics, Royal Society Industry Fellow, Department of Aeronautics, Imperial College, London
14:40 – 15:05	Dr. L Venkatakrishnan, Chief Scientist, Head of the Experimental Aerodynamics Division, National Aerospace Laboratories, Bengaluru
15:05 – 15:30	Mr. D. Koner, Group Director, Experimental Aerodynamics, Aeronautical Development Agency, Bengaluru
15:30 – 15:55	Dr. B Deependran, Dy Director Solid Propulsion Research Entity and Project Director Tri-sonic Wind Tunnel, Vikram Sarabhai Space Centre, Thiruvananthapuram
15:55 – 16:15	Tea break
16:15 – 16:27	Talk by Sajjan Raj Keshari, PhD student, Department of Mechanical Engineering, IISc
16:28 – 16:40	Talk by Sushmitha Janakiram, PhD student, Department of Aerospace Engineering, IISc
16:40 – 17:30	Panel Discussion on "Future needs of wind tunnel testing in India – an industry perspective"
	Moderator: Prof. Sourabh S. Diwan, AE, IISc Panelists: L Venkatakrishnan (NAL), B Deependran (VSSC), D Koner (ADA), A Vadivelan (ADE), V V S Narayan (HAL) Manish Garg (TVS motors)
	Concluding Remarks: Prof G Jagadeesh, AE, IISc

Session 3:	Data-Driven	Mechanics
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Time (hrs.)	Speaker
09:00 – 9:45	Prof. Karthik Duraisamy, Professor, Aerospace Engineering Director, Michigan Institute for Computational Discovery & Engineering (MICDE) University of Michigan, USA.
9:45 – 10:15	Prof. Huck Beng Chew, Associate Professor, Department of Aerospace Engineering, University of Illinois at Urbana-Champaign, Urbana, USA.
10:15 – 10:30	Tea Break
10:30 – 11:00	Prof. Balaji Srinivasan, Professor, Department of Mechanical Engineering, Indian Institute of Technology Madras, India.
11:00 – 11:30	Dr. Alireza Moradzadeh, Computational Scientist, NVIDIA, USA.
11:30 – 12:00	Prof. Akshay Joshi, Assistant Professor, Mechanical Engineering, Indian Institute of Science, Bangalore, India.
12:00 – 12:45	Panel Discussion on "Data Driven Techniques in Mechanical Sciences"
	Moderator: Prof. Pikee Priya, MTE, IISc Panelists: Prof. Balaji Srinivasan (IIT Madras), Prof. Rishita Das (IISc), Prof. Akshay Joshi (IISc), Dr. Avinash Kumar (Intel)

Session 4: Engineering BTech for the Future

Time (hrs.)	Speaker
14:00 – 14:45	Prof. Sudhir Jain, Vice Chancellor, Banaras Hindu University, Varanasi, India
14:45 – 15:30	Prof. B Ravi, Director, NIT Surathkal, Surathkal, India
15:30 – 16:00	Dr. Megha Navalgund, Section Manager – Advanced Design Tools (BEC), GE Aerospace
16:00 – 17:00	Panel Discussion
17:00 - 18:00	Prof. Benjamin Linder, Professor, Olin College, Boston, MA, USA