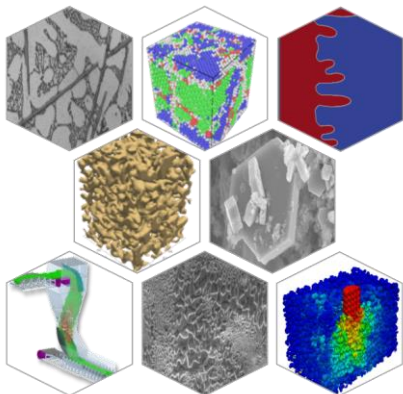


An online workshop on
**Recent Advances in Materials
and Mechanics (RAMM-2022)**

12th & 13th November, 2022
(A SERB sponsored workshop)



School of Minerals, Metallurgical & Materials Engineering
Indian Institute of Technology Bhubaneswar
Arugul, Jatni - 752050, Odisha, India

Scope of the workshop

The theme of the workshop encompasses the wide spectrum of the recent developments in the design, fabrication, processing, characterization and mechanics of materials for energy, battery, next generation steels, high entropy alloys, nanomaterials and smart materials for structural and functional applications.

Speakers

Some of the Invited Speakers:

- Dr. Appala Naidu G., IIT Jodhpur
- Dr. Amritendu Roy, IIT Bhubaneswar
- Dr. Animesh Mandal, IIT Bhubaneswar
- Dr. Chandra Sekhar Tiwari, IIT Kharagpur
- Dr. Debalay Chakrabarti, IIT Kharagpur
- Dr. Eswar Prasad Korimilli, IIT Indore
- Dr. Kallol Mondal, IIT Kanpur
- Dr. Manas Mukherjee, IIT Madras
- Dr. Kisor Kumar Sahu, IIT Bhubaneswar
- Dr. Rajesh Korla, IIT Hyderabad
- Dr. Rajdip Mukherjee, IIT Kanpur
- Dr. Ratna Kumar Annabathula, IIT Madras
- Dr. Ravi K.R., IIT Jodhpur
- Dr. Sarath Kumar GV, Ashok Leyland, Chennai
- Dr. Sivaiah Bathula, IIT Bhubaneswar
- Dr. Sisir Mantry, CSIR-IMMT, Bhubaneswar
- Dr. Syed Khaderi, IIT Hyderabad
- Dr. Veerababu, DMRL, Hyderabad

Venue



Online on MS Teams

[Click here to join the meeting](#)

Meeting ID: 482 340 141 978

Passcode: TSSipm

Registration

No registration fee: **Free**

Last date for registration : 9th Nov, 2022

Registration Link: <https://forms.gle/qS9mVgrcia4PEfMJA>

Coordinators

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Program Schedule

Day 1 - 12 th November, 2022			
9:25	- 9:30	Welcome and opening remarks	Kodanda & Animesh
9:30	- 10:10	Light-Responsive Liquid Crystal Thin Films	Prof. Ratna Kumar Annabattula, IIT Madras
10:10	- 10:50	Advances in Thermal Spray Coatings: An Industrial Perspective	Dr. Sisir Mantry, CSIR-IMMT, Bhubaneswar
10:50	- 11:00	Break	
11:00	- 11:40	Development & Indigenization of High Strength Steels for Naval Applications	Dr. Veerababu R, DMRL, Hyderabad
11:40	- 12:20	Deformation behavior of binary metallic and nanoglasses	Prof. Eswar Prasad, IIT Indore
12:20	- 14:00	Lunch Break	
14:00	- 14:40	Engineering materials at the atomic scale for energy, environment, and healthcare applications	Prof. Chandra Sekhar Tiwary, IIT Kharagpur
14:40	- 15:20	High entropy alloys for high temperature applications	Prof. Korla Rajesh, IIT Hyderabad
15:20	- 15:30	Break	
15:30	- 16:10	Failure analysis industrial and automotive components	Dr. Sarath Kumar GV, Ashok Leyland, Chennai
16:10	- 16:50	High temperature aluminium alloys	Prof. Animesh Mandal, IIT Bhubaneswar
16:50	- 17:30	Simulation of Martensitic Transformations in Ti and Zr alloys	Prof. Appala Naidu Gandhi, IIT Jodhpur

Day 2 - 13 th November, 2022			
9:30	- 10:10	Can Iron protect Iron from corrosion?	Prof. Kallol Mondol, IIT Kanpur
10:10	- 10:50	Development of Indigenous Metal Additive Manufacturing Machine	Prof. Ravi K. R., IIT Jodhpur
10:50	- 11:00	Break	
11:00	- 11:40	Metal Foams: Processing, Properties and Applications	Prof. Manas Mukherjee, IIT Madras
11:40	- 12:20	Grain growth in thin film: Insights from phase-field simulations	Prof. Rajdip Mukherjee, IIT Kanpur
12:20	- 13:00	Future of Materials and Manufacturing: A hybrid DFT-Machine Learning protocol for 2D functional materials	Prof. Kisore Kumar Sahu, IIT Bhubaneswar
13:00	- 14:00	Lunch Break	
14:00	- 14:40	Graphical solution of wave equation	Prof. Syed N. Khaderi, IIT Hyderabad
14:40	- 15:20	Genesis of grain size variation in microalloyed steels	Prof. Debalay Chakraborty, IIT Kharagpur
15:20	- 15:30	Break	
15:30	- 16:10	Piezoelectric composites for energy harvesting	Prof. Amritnendu Roy, IIT Bhubaneswar
16:10	- 16:50	Capturing network topology into scaling laws of open-cellular materials	Prof. K.R. Mangipudi, IIT Bhubaneswar
16:50	- 17:00	Vote of thanks and closing remarks	Kodanda