

3rd International Conference on Current Trends in Materials Science and Engineering (CTMSE 2021)

Organised by

Department of Basic Science and Humanities
Institute of Engineering & Management, Kolkata
11-13 March 2021

Programme Schedule

[All time slots mentioned are in Indian Standard Time]

Day 1 -11.03.2021

Time (Indian Standard Time)	Speakers	Event
4:00 PM - 4:30 PM	Prof. Satyajit Chakrabarti , Chancellor, UEM, Kolkata and President, IEM Dr. Satyajit Chakrabarti , Director, IEM, Kolkata Prof. Arun Kumar Bar , Dean of Engineering, IEM, Kolkata Prof. Prabir Kumar Das , HOD, BSH, IEM, Kolkata	Inauguration Zoom Link: https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117
4:30 PM – 5:30 PM	Prof. Yoshichika Otani , ISSP, University of Tokyo and RIKEN, Japan	Plenary Talk Topic : Novel functional topological antiferromagnet Session Chair: Prof. Anjan Barman, S. N. Bose National Centre for Basic Sciences https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117
Technical Session I: Invited Talks Session Chair: Prof. Alope Kanjilal, Shiv Nadar University Zoom Link : https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117		
Time (Indian Standard Time)	Speaker	Topic
5:30 PM - 6:15 PM	Prof. Oscar Iglesias , University of Barcelona, Spain	Aggregates and Dipolar Interactions in Nanoparticle Assemblies for Magnetic Hyperthermia
6:15 PM - 7:00 PM	Prof. Del Atkinson , Durham University, UK	Magnetic/heavy metal thin-film interfaces: Proximity-induced magnetisation, spin transport and the Dzyaloshinskii - Moriya interaction
7:00 PM - 7:45 PM	Dr. Tapati Sarkar , Uppsala University, Sweden	Interfacially coupled magnetic nanocomposites
8:00 PM –9:30 PM	*Contributed Oral Sessions 1 and 2	

Day 2 (12.03.2021)

Keynote Talk Session Chair: Prof. G. P. Srivastava, University of Exeter, UK Zoom Link: https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117		
Time (Indian Standard Time)	Speaker	Topic
4:00 PM –5:00 PM	Prof. Mandar M Deshmukh , TIFR	Superconductivity and magnetism in van der Waals materials
Technical Session II Session Chair: Prof. G. P. Srivastava, University of Exeter, UK Zoom Link : https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117		
Time(Indian Standard Time)	Speaker	Topic
5:00 PM –5:45 PM	Dr. Steven Heppleston , Exeter University, UK	Building better materials by predicting the properties of interfaces: water splitting.
5:45 PM - 6:30 PM	Dr. Montserrat Rivas , University of Oviedo, Spain	Rapid Diagnostic Tests for Medicine and Food: The Role of Magnetic Nanomaterials
6:30 PM -7:15 PM	Dr. Debraj Choudhury , IIT Kharagpur	Multiferroicity and enhanced Photovoltaic effect in Bi-Fe co-doped BaTiO ₃
7:15 PM - 8:00 PM	Prof. Maciej Krawczyk , Adam Mickiewicz University, Poznan, Poland	Coupling of co- and contra-directional waves as a method of controlling spin waves
8:15 PM- 9:45 PM 8:15 PM-9:15 PM	** Contributed Oral Sessions 3 ** Poster Session 1,2	

Day 3 (13.03.2021)

Plenary Talk Session Chair: Dr. Subhankar Bedanta, NISER, Bhubaneswar Co-chair: Prof. Prabir Kr. Das, IEM Zoom Link: https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117		
Time (Indian Standard Time)	Speaker	Topic
10:00 AM - 11:00 AM	Prof. Tanusri Saha Dasgupta , S. N. Bose National Centre for Basic Sciences	Understanding & Prediction of Quantum Materials via Modeling & Computation
Technical Session – III : Invited Talks Session Chair: Dr. Subhankar Bedanta, NISER, Bhubaneswar Co-chair: Dr. Soumen Nandy, IEM Zoom Link: https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117		

Time (Indian Standard Time)	Speaker	Topic
11:00 AM–11:45 AM	Prof. Anjan Barman, S. N. Bose National Centre for Basic Sciences	Application of Spin-Orbit Effects in Spintronic and Magnonic Devices
11:45 AM - 12:30 PM	Dr. P. K. Muduli, IIT Delhi	Spin-orbit torque and Dzyaloshinskii-Moriya interaction in quantum material heterostructures
12:30 PM- 1:15 PM	Dr. Arabinda Haldar, IIT Hyderabad	Self-biased nanomagnets for energy-efficient magnonic application
1:15 PM - 2:15 PM	Break	
Technical Session – IV : Invited Talk Session Chair: Dr. M Venkata Kamalakar, Uppsala University, Sweden Session co-chair: Dr. Samapika Das Biswas Zoom Link: https://zoom.us/j/95334225925?pwd=NG1mUmhJR3Nna0pxZ3JCTWwwdINyQT09 Meeting ID: 953 3422 5925 Passcode: 148117		
Time (Indian Standard Time)	Speaker	Topic
2:15 PM - 3:00 PM	Dr. Somnath C Roy, IIT Madras	A beautiful world of one dimensional nano and heterostructures
3:00 PM-3:45 PM	Prof. Anindya Deb, IISc Bangalore	Crash Safety Design of Lightweight Energy-Efficient Vehicles
3:45 PM - 4:30 PM	Dr. Niladri Banerjee, Loughborough University, UK	Super Spintronics – towards ultra-low dissipation spin-electronics.
4:30 PM - 5:15 PM	Dr. Sudipta Dutta, IISER Tirupati	Strain Tunable Magnetic States in 2D van der Waals Hetero-Bilayers
5: 30 PM - 7:00 PM	***Poster Session 3 and Contributed Oral Sessions 4,5,6	
7:30 PM - 8:00 PM	Concluding Remarks and Poster/Oral Awards	

Contributed Sessions

[*Day 1 \(11.03.2021\)](#)

8:00 PM –9:30 PM

Oral Session – 1

Topics: Environmental and Green Materials, Polymers, composite and ceramic materials

Session chair: Dr. Pratap Mukherjee, IEM, Dr. Tina De, IEM and Dr. Krisanu Deyasi, IEM

<https://meet.google.com/rgx-qbio-twz>

Oral Session -2

Topics: Computational Materials, Semiconductor Devices

Session Chair: Dr. Molly De Raychoudhuri, WBSU, Dr. Soumyadipta Pal, IEM and Prof. Arnab Basu, IEM

<https://meet.google.com/kgv-ugzw-kdr>

****Day 2 (12.03.2021)**

8:15 PM -9:45 PM

Oral Session - 3

Topic: Magnetic Nanostructures

Session Chair: Dr. Jaibardhan Sinha, SRM Institute of technology, Prof. Sreemoyee Ganguly, UEM and Prof. Mousumi Pal, IEM

<https://meet.google.com/rgx-qbio-twx>

****Day 2 (12.03.2021)**

8:15 PM -9:15 PM

Poster Session -1

Session Chair: Dr. Ruchira Mukherjee, IEM, Santanu Das, IEM and Prof. Ayan Panja, IEM

meet.google.com/yrb-ktmr-tge

Poster Session -2

Session Chair: Dr. Niladri Banerjee, Loughborough University, UK, Prof. Biswadip Basu Mallik, IEM, Prof. Ranabir Banik, IEM

meet.google.com/uhy-cjgz-pvc

*****Day 3 (13.03.2021)**

5:30 PM -7:00 PM

Oral Session -4

Topics: Emerging Materials and Applications

Session Chair: Dr. Kakoli Dutta, IEM and Prof. Amartya Mukherjee, IEM

<https://meet.google.com/rgx-qbio-twx>

Oral Session -5

Topics: Nanomaterials and Nanotechnology

Session Chair: Prof. Susanta Sinha Roy, Shiv Nadar University, Prof Arun Kumar Bar, IEM and Prof. Abhishikta Bhattacharyay, IEM

<https://meet.google.com/kgv-ugzw-kdr>

Oral Session -6

Topics: Engineering application of Materials

Session Chair: Prof. Saswati Barman, IEM, Dr. Sudipta Datta, IISER Tirupati

<https://meet.google.com/upp-qokf-zxy>

Poster Session -3

Session Chair: Dr. Sukanta De, Presidency University, Dr. Senjuti Khanra, IEM and Dr. Koyel Ganguly, IEM

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