International Conference on Metals and Materials Research (ICMR 2016)
June 20-22, 2016
Indian Institute of Science, Bangalore, India

List of Posters

The following is the list of 49 posters to be presented at the conference. These are being presented by senior PhD students from 14 institutions. The posters are arranged in the alphabetical order of the Institutes. Within each institute the posters are arranged in the alphabetical order of the presenting author.

1.	Nano Titanium dioxide Incorporated Phosphate Coatings on Low Carbon Steel for Corrosion Protection **Pravin P. Deshpande** and Vaibhav S. Kathavate *COEP, Pune*
2.	Study of Aging Induced Degradation of Fracture Resistance for Alloy 617 **Aditya Narayan Singh**, A. Moitra, P. Bhaskar, G. Sasikala, Arup Dasgupta, A. K. Bhaduri and A. Moitra *IGCAR, Kalpakkam*
3.	Spinodal Decomposition and ω Transformation in Binary V-Ti and Ternary V-Ti-Cr Alloys **Chanchal Ghosh**, Joysurya Basu, Divakar R and E Mohandas *IGCAR, Kalpakkam*
4.	Corrosion behavior of TiZrHfNbTa high entropy alloy in nitric acid containing halide ions **J. Jayaraj** and U. Kamachi Mudali *IGCAR, Kalpakkam*
5.	Evolution of crystallographic texture and microstructure in sputter deposited NiMnGa thin films and their influence on magnetic properties. **Amit Sharma**, S. Mohan and Satyam Suwas *IISc, Bangalore*
6.	Long term thermal stability of a new solar selective absorber coating **Atasi Dan**, Kamanio Chattopadhyay, Harish C. Barshilia and Bikramjit Basu *IISc, Bangalore*
7.	Isolation of pristine MXene from Nb4AlC3 MAX phase: A first-principles study **Avanish Mishra**, Pooja Srivastava, Hiroshi Mizuseki, Kwang-Ryeol Lee and Abhishek K. Singh *IISc, Bangalore*
8.	Development of wrought Mg-Li based alloys with improved strength and ductility **Chandra Shekhar Perugu**, Subodh kumar and Satyam Suwas *IISc, Bangalore*
9.	Formation of amorphous phase by supressing the binary intermetallic compound with equiatomic substitution **S. Kashyap** and B. S. Murty *IISc, Bangalore*
10.	Grain boundary crystallography in polycrystalline yttria stabilized cubic zirconia with varying densities and grain sizes **Maya K. Kini** and Atul H. Chokshi *IISc, Bangalore*
11.	Fabrication and tuning the nanoporous channel in nanoporous membranes derived using crystallization induced phase separation in polymeric blends **Maya Sharma**, Giridhar Madras and Suryasarathi Bose *IISc, Bangalore*

12.	High temperature and high strength aluminium alloys by Dispersions of Al_9Ni_2 intermetallic compound **P. Padaikathan** and K. Chattopadhyay *IISc, Bangalore*
13.	Tin Whisker Growth from Electro-deposited Sn films: Role of Crystallographic Texture, Stress and Substrate **Piyush Jagtap** *IISc, Bangalore*
14.	Shear Flow Induced Cellular Morphological And Functionality Changes In A Microfluidic Device **Sharmistha Naskar**, Bikramjit Basu and V. Kumaran *IISc, Bangalore*
15.	3D powder printing of resorbable calcium phosphate scaffold for low load-bearing application using novel phytic acid binder **Sourav Mandal**, Susanne Christ, Uwe Gbureck and Bikramjit Basu *IISc, Bangalore*
16.	Three Dimensional Inkjet Powder Printing of Ti-6Al-4V based Scaffolds with Homogeneous and Gradient Porosity **Srimanta Barui**, Alok Kumar, Sourav Mandal and Bikramjit Basu *IISc, Bangalore*
17.	Intriguing aspects of growth, structure and properties of molecular-scale Au nanowires **Subhajit Kundu** and N. Ravishankar *IISc, Bangalore*
18.	Phase transformation and biocompatibility study of metastable β Ti-Nb-Sn alloy for orthopedic applications **Sumit Bahl**, Satyam Suwas and Kaushik Chatterjee *IISc, Bangalore*
19.	Phase-field study of the electric current induced void evolution and grain-boundary grooving **Supriyo Chakraborty** and Abhik Choudhury *IISc, Bangalore*
20.	Multi-phase flow model of a blast furnace SmitaKamble, **Vinci Mojamdar** and Govind S. Gupta *IISc, Bangalore*
21.	Phase Transformations in Al-based Quasicrystalline Intermetallics during Mechanical Milling Processing and Characterization of AlCoCrFeNi and AlCoCrFeNiMn High entropy alloys (HEAs) via Mechanical Alloying **Vikas Shivam** and N. K. Mukhopadhyay *IIT BHU, Varanasi*
22.	Microstructure and Mechanical properties of Sn reinforced Al–Cu–Fe quasicrystalline matrix composite **Yagnesh Shadangi**, Kausik Chattopadhyay and N. K. Mukhopadhyay *IIT BHU, Varanasi*
23.	Application of secondary aging for rising environmentally assisted cracking resistance of AA 7010 **M. Ajay Krishnan** and V. S. Raja *IIT Bombay*
24.	Hydrogen evolution on magnesium during anodic polarization: A consequence of enrichment of noble alloying elements **Poorwa Gore**, Nick Birbilis and V. S. Raja *IIT Bombay*
25.	Green Synthesis and Stability of Pristine Free Standing Silver Metal Nanoparticles by Cryomilling **Nirmal Kumar** and Krishanu Biswas *IIT Kanpur*

26.	Bulk Preparation of Graphene: Synthesis and Application **Shikhar Misra** and Krishanu Biswas *IIT Kanpur*
27.	New insights for modeling strain hardening behaviour in age hardenable Al alloys **Sumeet Mishra**, ManasijYadava, Kaustubh Kulkarni and N. P. Gurao *IIT Kanpur*
28.	Microstructure, mechanical and oxidation properties of Ti-Al-Ni-Cr-Co-Fe based multi-component alloys **R. Anand Sekhar**, Niraj Nayan, G. Phanikumar and Srinivasa R. Bakshi *IIT Madras*
29.	Implication of grain boundary engineering on high temperature hot corrosion of alloy 617 K. Deepak, Sumantra Mandal, **C. N. Athreya**, Dong-Ik Kim, B. de Boer and V. Subramanya Sarma *IIT Madras*
30.	Phase Prediction Studies in AlCoCrFeNi High Entropy Alloy **Guruvidyathri K**, Ravikirana, Mayur Vaidya, Hari Kumar K. C and B. S. Murty *IIT Madras*
31.	Phase evolution in nanocrystalline AlCoCrFeNi by varying sequence of elemental additions: Novel approach to alloy synthesis using mechanical alloying **Mayur Vaidya**, Anil Prasad, Abhinav Parakh and B. S. Murty *IIT Madras*
32.	Sol-gel synthesis of yttrium monosilicate **Raghunandan Subbarao**, M. Kamaraj and Ashutosh S. Gandhi *IIT Madras*
33.	Effect of Deformation Temperature on Tensile and Fracture properties of Al 2014 alloy processed through Multidirectional Forging **Amit Joshi**, K. K. Yogesha, Nikhil Kumar and R. Jayaganthan *IIT Roorkee*
34.	Effect of annealing on the improvement of mechanical properties of low stacking fault energy Cu-Al alloys processed by cryorolling **Dasharath S M** and Suhrit Mula *IIT Roorkee*
35.	Electrophoretic Coating of Nanostructured Hydroxyapatite on Mg-3Zn Alloy for Orthopaedic Application **Manoj Kumar R**, Kishor Kumar Kuntal, Sanjay Singh, Pallavi Gupta, Bharat Bhushan, P. Gopinath and Debrupa Lahiri *IIT Roorkee*
36.	Effect of Grain refinement on Mechanical behavior of Mg-2Gd-2Zn Processed through Multiaxial Forging and Rolling **Raviraj Verma**, R. Jayaganthan, S. K. Nath and A. Srinivasan *IIT Roorkee*
37.	Predicting the stability of an HEA: a first-principles analysis **Meha Bhogra**, Umesh V. Waghmare and S. Ranganathan *JNCASR, Bangalore*
38.	Nanoscale quantitative magnetic information by EMCD and HREELS **D. S. Negi**, B. Louky and R. Datta *JNCASR, Bangalore*
39.	Novel Refractory High-Entropy Alloys Mo_xNbTiV_xZr(x = 0.3, 0.5, 0.75, and 1.0) **Ko-Kai Tseng** and Jien-Wei Yeh *National Tsing Hua University, Taiwan*
40.	Microstructural evolution of In-situ Al-Mg_2Si composites **Prosanta Biswas**, Manas Kumar Mondal and Durbadal Mandal *NIT Durgapur*

41.	Phase field Study of Static Recrystallization and Phase Transformation during intercritical annealing of dual phase steels **Ayush Suhane**, Akash Bhattacharjee and Gerald Tennyson *TRDDC, Pune*
42.	Mathematical Modelling of Grain Growth during Reheating **Himanshu Nirgudkar**, Saurabh Mangal, Savya Sachi and Gerald Tennyson *TRDDC, Pune*
43.	Multiscale Modelling of Deformation Behavior **Srimannarayana Pusuluri**, Danish Khan, Arshdeep Singh, Pramod Zagade and B. P. Gautham *TRDDC, Pune*
44.	Indentation Response of Microcrystalline and Nanocrystalline Ti-Ni-Cr-Co-Fe High Entropy Alloy **Abhijit,** G. M. Reddy and Koteswara Rao V. Rajulapati *Univ. of Hyderabad, Hyderabad*
45.	Strain hardening and flow properties of Nimonic C-263 alloy at different strain rates and temperatures **Jhansi Jadav**, Koteswara Rao V. Rajulapati, N. Eswara Prasad and K. Bhanu Sankara Rao *Univ. of Hyderabad, Hyderabad*
46.	Influence of Parent Metal Microstructure on the Creep Behaviour of Ti6Al4V Friction Welds **Rahul**, K. V. Rajulapati, G. M. Reddy, T. Mohandas and K. Bhanu Sankara Rao *Univ. of Hyderabad, Hyderabad*
47.	Superplastic behaviour of a new variant of AA 5456 alloy **J. Varghese**, K. A. Padmanabhan, K. S. Suresh and D.V.V. Satyanarayana *Univ. of Hyderabad, Hyderabad*
48.	An atomic cluster model to understand localized deformation behavior in metallic glass **K.S.N. Satish Idury**, B. S. Murty and Jatin Bhatt *VNIT, Nagpur*
49.	Effect of Varying Soaking Period during Cryogenic Treatment of Cubic Boron Nitride (CBN) Cutting Inserts **Swamini Chopra**, S. A. Pande, K. N. Pande , D. R. Peshwe and V. G. Sargade *VNIT, Nagpur*