



33rd Annual Students' Symposium

Department of Materials Engineering

Program Schedule

9th January 2020

Timing / Session	Session A (Lecture Theatre)	Session B (Seminar Hall)
09:30am - 10:00am	Inaugural Session (@ Lecture Theatre)	
10:00am - 11:00am	Invited Talk 1 (Dr. Gouthama, IIT Kanpur) (@ Lecture Theatre)	
11:00am - 11:20am	Tea Break	
11:20am - 12:20pm	Invited Talk 2 (Dr. G. Madhusudan Reddy, DMRL) (@ Lecture Theatre)	
12:30pm - 02:00pm	Lunch Break	
02:00pm - 03:40pm	Oral Presentation (O1A (5-9))	Oral Presentation (O1B (5-9))
03:40pm - 05:00pm	Oral Presentation (O1A (1-4))	Oral Presentation (O1B (1-4))
05:00pm - 06:00pm	Poster Presentations and Micrography	
07:00pm	Dinner	

10th January 2020

Timing / Session	Session A (Lecture Theatre)	Session B (Seminar Hall)
10:00am - 11:20am	Oral Presentation (O2A (1-4))	Oral Presentation (O2B (1-4))
11:20am - 11:30am	Tea Break	
11:30am - 01:00pm	Panel Discussion (Dr. U. Chandrasekhar, Dr. Manjini S, Suchismita Sanyal) (@ Lecture Theatre)	
01:00pm - 02:30pm	Lunch Break	
02:30pm - 04:10pm	Oral Presentation (O2A (5-9))	Oral Presentation (O2B (5-9))
04:10pm - 05:00pm	Invited Talk 3 (Dr. Susmita Dash, Mechanical Engineering, IISc) (@ Lecture Theatre)	
05:00pm - 05:30pm	Concluding Remarks and Prize Distribution (@ Lecture Theatre)	
05:30pm - 06:00pm	High Tea	
06:00pm	Cultural Programme (@ Lecture Theatre)	



33rd Annual Students' Symposium

Department of Materials Engineering

Oral Presentation Schedule

9th January 2020

Timing / Session

02:00pm - 02:20pm
02:20pm - 02:40pm
02:40pm - 03:00pm
03:00pm - 03:20pm
03:20pm - 03:40pm
03:40pm - 04:00pm
04:00pm - 04:20pm
04:20pm - 04:40pm
04:40pm - 05:00pm

Session A (Lecture Theatre)

O1A5: Bandla Divya Sri
O1A6: Gyan Shankar
O1A7: Soumita Mondal
O1A8: Abhinav Arya
O1A9: Aashranth B
O1A1: Ashutosh Jangde
O1A2: Ananya Tripathi
O1A3: Shanmukha Kiran Aramanda
O1A4: Saurabh Mohan Das

Session B (Seminar Hall)

O1B5: Subhasish Maiti
O1B6: Anupam Mishra
O1B7: Sushmita
O1B8: Anbukkarasi Rajendran
O1B9: Shrutee L
O1B1: Padmavathy Nagarajan
O1B2: Shweta Shekar
O1B3: Sagar Nilawar
O1B4: Fiyanshu Kaka

10th January 2020

Timing / Session

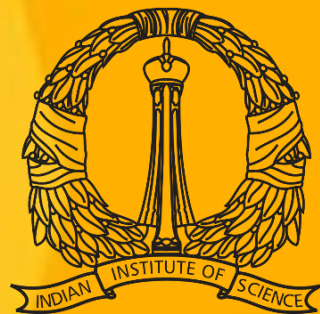
10:00am - 10:20am
10:20am - 10:40am
10:40am - 11:00am
11:00am - 11:20am
02:30pm - 02:50pm
02:50pm - 03:10pm
03:10pm - 03:30pm
03:30pm - 03:50pm
03:50pm - 04:10pm

Session A (Lecture Theatre)

O2A1: Shobhit Pratap Singh
O2A2: Priya Goel
O2A3: Anuj Dash
O2A4: Vivek Kumar C
O2A5: Radhika Wazalwar
O2A6: Sarvesh Kumar
O2A7: Arnab De
O2A8: Ajay Rijal
O2A9: Shailendra Verma

Session B (Seminar Hall)

O2B1: Manisha Behera
O2B2: Bikramjit Karmakar
O2B3: Deepak Kumar
O2B4: Vijayendra Shastri
O2B5: Nidhish Sagar
O2B6: Aman Gupta
O2B7: Bhalchandra Bhadak
O2B8: Sri Saravana
O2B9: Sumeet Khanna



33rd Annual Students' Symposium
Department of Materials Engineering
Oral Presentation Titles

9th January 2020, Session A (Lecture Theatre)

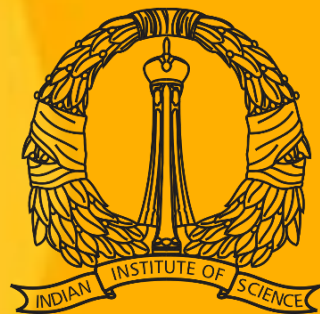
Name	Title
O1A1: Ashutosh Jangde	Evolution of plasma electrolytic oxidation coatings formed on Mg alloy utilizing various alkaline electrolytes with and without glycerol additive and its corrosion behavior
O1A2: Ananya Tripathi	Mechanical behaviour of Ni-(x)Al, x = Pt and Pd
O1A3: Shanmukha Kiran A	Exotic structures in Sn-Te eutectic system
O1A4: Saurabh Mohan Das	Exploring the oxidation mechanism of γ'-strengthened Co-Ni-Al-Mo-Ta alloy system
O1A5: Bandla Divya Sri	Creep behavior of Ni-based concentrated solid solution alloys
O1A6: Gyan Shankar	Evolution of recrystallization texture in face centered cubic material
O1A7: Soumita Mondal	Effect of scandium addition on the evolution of microstructure and texture in AA2195 aluminium alloy under high pressure torsion
O1A8: Abhinav Arya	Understanding the torsion behavior of cold-drawn Ni microwire
O1A9: Aashranth B	Crystallographic orientation changes resulting from large plastic strains and complex deformation paths



33rd Annual Students' Symposium
Department of Materials Engineering
Oral Presentation Titles

9th January 2020, Session B (Seminar Hall)

Name	Title
O1B1: P Nagarajan	Cell Responsive Phytochemical Based Polyactive Nanoformulation for Targeted Delivery
O1B2: Shweta Shekar	Organic molecule based chemiresistive sensor for the detection of hexavalent chromium
O1B3: Sagar Nilawar	3D-Printed surface functionalization polymer scaffolds for bone tissue regeneration
O1B4: Fiyanishu Kaka	Optimizing characteristics of morphology to improve the performance of polymer solar cells.
O1B5: Subhasish Maiti	Hierarchical Arrangement in PVDF/PMMA blends with an Active Polyamide-Graphene Oxide Quantum Dot Surface towards Forward Osmosis Desalination
O1B6: Anupam Mishra	Enhancement of piezoelectric response by tuning structural heterogeneity in Na_{0.5}Bi_{0.5}TiO₃ based ceramics by varying A-site stoichiometry
O1B7: Sushmita	EMI Shielding Properties in Hybrid Polycarbonate based Nanocomposites: A Mechanistic Overview
O1B8: A Rajendran	Microstructure Evaluation of TIG-welded In617-SS304 dissimilar joint
O1B9: Shrutee L	Gas powder flow in packed bed with cohesive zone



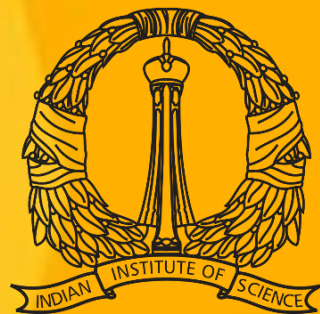
33rd Annual Students' Symposium
Department of Materials Engineering
Oral Presentation Titles

10th January 2020, Session A (Lecture Theatre)

Name

Title

O2A1: Shobhit Pratap Singh	An Explanation of Harper-Dorn Creep
O2A2: Priya Goel	Modelling of non-steady state creep behaviour using cantilevers in bending
O2A3: Anuj Dash	Solving the issues of multicomponent diffusion in Ni-Co-Fe-Cr medium entropy alloy
O2A4: Vivek Kumar C	Hot deformation behavior of as cast SP-700 titanium alloy in two phase condition
O2A5: Radhika Wazalwar	Mechanical behavior of tetra-functional epoxy composites in the presence of graphene-based core-shell nanoparticles
O2A6: Sarvesh Kumar	On the development of γ' coarsening resistant CoNiFeCrAlNbTi fcc-based high entropy alloys with promising high temperature mechanical properties
O2A7: Arnab De	Large temperature tuning of emission color of a phosphor by dual use of Raman and Photoluminescence signals
O2A8: Ajay Rijal	Effect of High-Pressure Torsion and Natural Ageing on Hardness of Commercially Pure Cu
O2A9: Shailendra Verma	Prediction of internal stresses in $\gamma + \gamma'$ phases strengthened Co-base superalloys



33rd Annual Students' Symposium
Department of Materials Engineering
Oral Presentation Titles

10th January 2020, Session B (Seminar Hall)

Name

Title

O2B1: Manisha Behera

Fabrication of Cerium Oxide Coated Nanofibers for Cardiac Tissue Engineering

O2B2: Bikramjit Karmakar

Phase Field modelling of Rapid Solidification

O2B3: Deepak Kumar

Establishment of Microstructure-texture-mechanical property relationship in Electron Beam Melted 316L

O2B4: Vijayendra Shastri

Ripple Flow of Liquid Metals

O2B5: Nidhish Sagar

2D Materials

O2B6: Aman Gupta

Atomistic Studies on Elastic and Acoustic Properties of Nanoporous Metals

O2B7: Bhalchandra Bhadak

Phase-field modeling of equilibrium multi-precipitate configurations

O2B8: Sri Saravana

Tailoring biodegradability of nano cellulose-based materials for use in packaging applications

O2B9: Sumeet Khanna

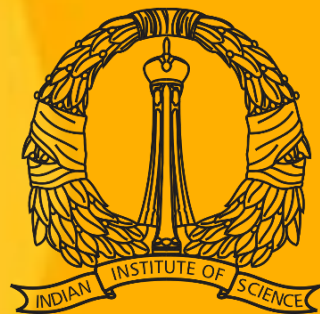
Role of Interfacial Energy Anisotropy in Eutectic Growth



33rd Annual Students' Symposium
Department of Materials Engineering
Poster Presentation Titles

9th January 2020 (04:30pm – 06:00pm)

Name	Title
P01: Parul Yadav	Cellular Senescence in Three Dimensions
P02: Aditi Jain	In vitro disease models for cardiac hypertrophy and muscle degeneration
P03: Ashish Rout	Synthesis and characterisation of cobalt doped BFPT-35 ceramics
P04: Anindo Roy	Biomimetic, Bactericidal Nanoscale Topography On Titanium By Maskless Plasma Etching
P05: S Satyanaryana	Trap state passivation in perovskite solar cells using a bifunctional organic molecule as a Lewis acid-base adduct
P06: Devabharathi Nehru	Fully inkjet printed co-continuous mesoporous oxide for gas sensor application
P07: Babusha	Developing IGZO Thin Film transistors for Flexible Transparent Electronics
P08: Sushree Sangita Priyadarsini	Printed, all solid micro-supercapacitors with morphology tailored co-continuous mesoporous Mn₃O₄



33rd Annual Students' Symposium
Department of Materials Engineering
Poster Presentation Titles

9th January 2020 (04:30pm – 06:00pm)

P09: Chithrambary Reghukumar	FeSe₂ mediated nanosystem for combined chemo-photothermal therapy in cancer treatment
P10: Aishwarya Vijayan Menon	Sea-Mussel-Inspired Self-Healing Polymers with “Flower-like” Magnetic MoS₂ as Efficient Electromagnetic Wave Absorbers
P11: Rahul Shah	Synthesis and characterisation of FeSe₂ nanosheets for magneto-photothermal therapy
P12: Jagadeshvaran P L	Nano-infiltration as a Strategy to Enhance Microwave Attenuation in Polymer Nanocomposites
P13: Poulami Banerjee	Role of Graphene oxide in improving mechanical properties of CFRP laminates, analysis of self healing application
P14: Bazil Muhammed S	Fabrication and Characterization of PCL Fibers
P15: Shavi	Microstructural Evolution in AA2099 Al alloy deformed by High Pressure Torsion (HPT)
P16: Raj Jung Mahat	Measurement of Uni-Axial Creep Parameters from Instrumented Indentation



33rd Annual Students' Symposium
Department of Materials Engineering
Poster Presentation Titles

9th January 2020 (04:30pm – 06:00pm)

- P17: Nikhil Cherukupally** **Mechanical reliability of low temperature processed, high performance inorganic/ organic hybrid semiconductor channel FETs printed on polyimide substrates**
- P18: N. Esakkiraja** **Pseudo-Binary and Pseudo-Ternary Diffusion Couple Methods in Multicomponent Diffusion: (Bond coat – Superalloy system)**
- P19: S. I. A. Jalali** **High Throughput Creep Testing in Bending using Digital Image Correlation**
- P20: Saurabh Kumar Gupta** **Microstructural modifications in SLM printed Ti-6Al-4V for high ductility and toughness**
- P21: Anooj Sathyan** **Applications of Shape Memory alloys in Robotics**
- P22: Vivek Kumar Singh** **Optimization of process parameters (draft and annealing time) to obtain maximum spheroidization of 22MnB5 grade steel**