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	Session A (Lecture Theatre)	Session B (Seminar Hall)
02:00pm - 02:20pm	O1A5: Bandla Divya Sri	O1B5: Subhasish Maiti
02:20pm - 02:40pm	O1A6: Gyan Shankar	O1B6: Anupam Mishra
02:40pm - 03:00pm	O1A7: Soumita Mondal	O1B7: Sushmita
03:00pm - 03:20pm	O1A8: Abhinav Arya	O1B8: Anbukkarasi Rajendran
03:20pm - 03:40pm	O1A9: Aashranth B	O1B9: Shrutee L
03:40pm - 04:00pm	O1A1: Ashutosh Jangde	O1B1: Padmavathy Nagarajan
04:00pm - 04:20pm	O1A2: Ananya Tripathi	O1B2: Shweta Shekar
04:20pm - 04:40pm	O1A3: Shanmukha Kiran Aramanda	O1B3: Sagar Nilawar
04:40pm - 05:00pm	O1A4: Saurabh Mohan Das	O1B4: Fiyanshu Kaka

10th January 2020

Timing / Session	Session A (Lecture Theatre)	Session B (Seminar Hall)
10:00am - 10:20am	O2A1: Shobhit Pratap Singh	O2B1: Manisha Behera
10:20am - 10:40am	O2A2: Priya Goel	O2B2: Bikramjit Karmakar
10:40am - 11:00am	O2A3: Anuj Dash	O2B3: Deepak Kumar
11:00am - 11:20am	O2A4: Vivek Kumar C	O2B4: Vijayendra Shastri
02:30pm - 02:50pm	O2A5: Radhika Wazalwar	O2B5: Nidhish Sagar
02:50pm - 03:10pm	O2A6: Sarvesh Kumar	O2B6: Aman Gupta
03:10pm - 03:30pm	O2A7: Arnab De	O2B7: Bhalchandra Bhadak
03:30pm - 03:50pm	O2A8: Ajay Rijal	O2B8: Sri Saravana
03:50pm - 04:10pm	O2A9: Shailendra Verma	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: Fiyanshu 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 Na0.5Bi0.5TiO3 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 γ + γ′ 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 spheoridization of 22MnB5 grade steel**