Thursday November 21, 2024

Session 1: 11:30- 13:30

Dr. Babu Rajendra Prasad International Convention Centre

Hall	Theme	Astract ID	Speaker	Title	Organization
Auditorium	Ironmaking and Steelmaking (ISM-BF Ironmaking)	**Invited Talk**	**Dr. Ajay Shukla**	**Quantification of Large Scale Industrial Reactors in Iron and Steelmaking Processes: Case studies employing coupled thermodynamic and kinetics approach**	**IIT Madras**
		ISM_011	Biswajit Seal	Brucite as an Alternative Flux in Blast Furnace to Improve Productivity, Fuel Rate and CO_2 Emission	Tata Steel Ltd. Kalinganagar
		ISM_057	A. Sharma	Productivity Improvement at Blast Furnace-02 in JSW Dolvi	JSW Steel Ltd.
		ISM_107	Yubaraj Samal	Blast Furnace Coke Consumption reduction through hot metal Si Reduction from 0.72% to 0.60%	Tata Steel Ltd. Meramandali
		ISM_165	Bhagyaraj D	Blast Furnace process optimization for sustainable Iron making	JSW Steel Ltd. Salem Works
		ISM_188	Rahul Sarkar	Development of a DeS Simulator for external desulphurisation of blast furnace hot metal by powder injection	IIT-Kanpur
		ISM_153	Anirudh Roy	High productivity operation of blast furnace – Technology to increase productivity and reduce carbon emissions.	Tata Steel Ltd. Kalinganagar
		ESU_149	Mohanraj Nagarajan	Carbon reduction initiative in JSW Blast Furnaces	JSW Steel Ltd., Vijayanagar Works
		ISM_055	Raj Kumar Yadav	Enhancing Efficiency of Hot Metal Desulphurisation through Advanced Kinetic Modelling	JAMIPOL Ltd.
G1	Metal Forming (MFR-Hot Forming)	**Invited Talk**	**Douglas Glen Stalheim**	**Improved API X70 Heavy Gauge Wide Plate by Pushing the Metallurgical Limits to Achieve DWTT, Stability, and Cost Performance in Challenging Conditions**	**CBMM**
		MFR_086	Dr. Carlo P. Piemonte	eHRC: a “game changer” product in steel flat products	Primetals Technologies Austria
		MFR_100	Nachiketa Yadav	Hot deformation behavior and influence of Inclusions in mischmetal-treated low carbon aluminum-killed Steel	IIT - Kharagpur
		MFR_105	Akeshwar Singh Yadav	Development of API X65MS Grade Steel Plate for Sour Service Application in Oil and Gas Industry	Jindal Steel and Power Ltd., Odisha
		MFR_119	Pravendra Pratap Singha	Texture evolution during hot rolling of 0.3 CrMoV steel: Role of strain path	IIT-Roorkee
		MFR_130	Jayanthi A a	Hot Deformation Behavior of Fe-16Co-7.5Ni-3.5Cr-1.75Mo-0.1C Carburizing Steel	Hindustan Aeronautics Limited, Bangalore
		MFR_137	D. Ajay Kumar	Hot deformation characteristics and microstructural evolution of Ti-900 alloy	IIT-Tirupati, India
		MFR_104	Akeshwar Singh Yadav	Development of Heavy Guage S355MLO Steel Plates for Off-Shore Wind-Tower Application	JSPL Angul
		MFR_107	Smeeta Kujur	Optimized Hot Rolling Process for Thinner Gauge Rolling of Steel Strips and Coils for Tubular Structures	SAIL, Ranchi
G2	Archaeometallurgy (AME)	**Invited Talk**	**Dr. S. Jaikishan**	**Iron and Wootz Steel Industry in the prehistoric and historical periods in the region of Telangana in Deccan plateau of Indian sub continent**	**Bhavan's New Science College**
		MPR_468	Omkar Nath Mohanty	Iron Beams of Konarka Temple: some uniqueness	CSIR-NML Jamshedpur,
		AME_011	Ruchi Ghosh	Application of Cost-effective 50Hz AC Cold Plasma for Cleaning & Restoration of Metallic Object Surfaces	CSIR IMMT, Bhubaneswar
		AME_012	Prachi Sharma	Archaeometallurgy: Analysis of Iron Slag and Tuyere Sample from Timana and Limodara Sites of Gujarat, India	IIT-Gandhinagar
		AME_013	Gautam Anand	Microarchitectured and Nanoscale Hierarchical Structures of Carbon in Ancient Archaeological Crucible Slags	IIEST Shibpur, Howrah
		AME_017	Nishkarsh Srivastava	Comparative microstructural and elemental analysis of iron artefacts from Kaveri valley archaeological sites	IIT-Gandhinagar
		AME_018	Dr. Avala Lava Kumar	Archeometallurgical Investigation of Ancient Sword: Microstructure and Manufacturing	IIT-Ropar
		AME_014	Koushik Das	Surface Engineered Multi-layered Corrosion Resistant 2300-year-old Iron-Based Sample	IIEST Shibpur, Howrah
		AME_016	Ahmad Qureshi	Ancient Iron Technology in Medieval Kerala: Archaeometallurgical Studies on Iron Artefacts from Triprangode	IIT-Gandhinagar
G3	Structure Property Correlation (SPC- AHSS)	**Invited Talk**	**Prof M J N V Prasad**	**Microstructural Evolution and Mechanical Performance of Manganese-based Third-Generation Advanced High-Strength Steels**	**IIT-Bombay**
		SPC_015	Biraj Kumar Sahoo	Processing, Microstructure and Deformation behaviour of third generation medium-Mn advanced high strength steels	CSIR-NML Jamshedpur
		SPC_026	Shrikanth Pai	Processing, Microstructures and Mechanical Properties of Hot dip Galvannealed DP780 & DP980 Ultra-high Strength Steel with high ductility	JSW Steel Ltd., Vijayanagar Works
		SPC_017	Bhagyaraj Jayabalan	The role of processing and microstructural parameters on the development of precipitates in micro-alloyed high strength steel	Tata Steel Ltd., Jamshedpur
		SPC_069	Subhas Bhunia	Growth mode and kinetics of austenite reversion transformation in 3rd generation AHSS: A in-situ synchrotron and ex-situ TEM study	IIT-Bombay
		MSD_013	Aparna Singh	Development of high strength and toughness steels	IIT-Bombay
		SPC_022	Garima Verma	Influence of Annealing Parameters on Mechanical Properties of High Strength Dual Phase Steel	JSW Steel Ltd., Vijayanagar Works
		SPC_046	Rohan Asbe	Influence of cooling strategies on the microstructural development of 600-780 MPa dual-phase steels	JSW Steel Ltd., Dolvi Works
		SPC_123	Subodh Dasa	Structure-property correlation in a Ni-modified advanced high strength steel: Effect of hot rolling and subsequent annealing	IIT- Kharagpur
G4	Digitalization and Industry 4.0 (DIN-1)	**Invited Talk**	**Prof. Asim Tiwari**	**Smart Metallurgy: Engineering-Driven AI in Industry 4.0**	**IIT Bombay**
		DIN_057	Sobha Rama Devi	Prediction of Blaine Number of the Output of Ball Mill D&G Circuit	Tata Steel Ltd., Jamshedpur
		DIN_068	S. Sharma	Prediction of reduction degradation index in Sinter Plant using hybrid approach	JSW Steel Ltd., Dolvi
		DIN_013	Mohit Upadhyaya	Digitalization of Coke Dry Quenching (CDQ) plant: Real-Time Optimization through Advanced Automation and Soft Sensing of Solution Loss Carbon	Tata Steel Ltd., Meramandali
		DIN_054	Rahul Bajaj	Prediction of hot metal temperature in Blast Furnace using hybrid approach	JSW Steel Ltd., Dolvi
		DIN_084	Kiran Hegde,	Vision-Based and Thermal Vision-Based Inspection and Analytics for Blast Furnaces and Steelmaking Shops in Steel Plants	Deevia Software India Pvt. Ltd.
		DIN_021	Ravi Shanker Pandey	Real-Time Data Integration and Predictive Modeling in BF-5 of ISP through Process Digital Twin	SAIL-ISP
		DIN_075	Sushma Jyothirmai K	Blast Furnace hot metal temperature prediction using machine learning techniques	JSW Steel Ltd, Vijayanagar works
		DIN_100	Navin Kumar Srivastava	A computational soft sensor for prediction of realtime media wear rate of grinding mill	Tata Steel Ltd., Jamshedpur
G5	Computational Materials Science (CMS - Modeling and Simulation - 1)	**Invited Talk**	**Prof. Manabu Enoki**	**Microstructure Based Prediction and Design of Mechanical Properties**	**University of Tokyo**
		CMS132	Joy Mittra	Generation of virtual tensile behaviour for any isothermal aging condition from two references	BARC Mumbai
		CMS_010	Rahul Basu	Analysis of Coarsening and the Moving Boundary Problem for nucleation and growth	JNTU, Bangalore
		CMS_015	Sweta Kumari	Revisiting the statistics of incipient plasticity	IIT- Delhi
		CMS_053	Soumya Mishra	Coarsening of Core-Shell Precipitates: Role of Interfacial Energies	IISC, Bengaluru

		CMS_031	Akash Gupta	Microstructure and texture-based micromagnetic simulation framework for the design of magnetic materials	TCS Research, Pune
		CMS_079	Gangarapu Akhila	Real microstructure based finite element modeling for machining of Aluminium alloy	IIT BHU, Varanasi
		CMS_104	Sai Gautam Gopalakrishnan	Optimal transfer learning strategies for property predictions in materials science	IISC Bengaluru
		CMS_105	Soma Maji	Simulation of thermal profiles and microstructure evolution of as-build Inconel 625 alloy in laser powder bed fusion additive manufacturing	IIT Madras
F1	**Solidification and Casting (SCA - Continuous Casting)**	**Invited Talk**	**Dr. Rajeev Singh**	**Role of Solidification on Control of Defects during Continuous Casting of Steel**	**SAIL, Ranchi**
		SCA_033	Rahul Kumar	Designing Exothermic Mould Powder for Prevention of Steel Caster Defects	Calderys Steelcasting India Private Limited
		SCA_019	Prathamesh Pawar	Effect of Mold Powder Properties on Mold Heat Transfer and Lubrication in CSP Caster: 2D Heat Transfer Mathematical Model	IIT Bombay
		SCA_048	Amit Nautiyal	Use of Low Fluorine Based Mould Powder to Reduce the Corrosion of Caster Machinery without Affecting the Casting Speed	Tata Steel Ltd., India
		SCA_059	Aman Nigam	Crystallization Behaviour and Thermophysical Properties of CaO-Al_2O_3 Based Alternative Mold Fluxes for Continuous Casting of 3rd Generation AHSS	IIT Kanpur
		SCA_007	Prashant Kumar Verma	Effect of Continuous Casting Parameters on Billet Oscillation mark depth and pitch in alloy steel	JSW Steel Ltd., Vijayanagar Works
		SCA_034	Rahul Kumar	Impact of MgO content on Crystallographic phases and properties of Mould Fluxes in Steel Continuous Casting Process	Calderys Steelcasting India Private Limited
		SCA_041	Milind Thoke	Study on electromagnetic and flow control mold parameters for development of clean steel slab for continuous casting process	Tata Steel ltd. Kalinganagar
		SCA_049	Rahul Kumar	MITIGATING OF SEGREGATION IN BILLET CASTING: A TRIAL ON THE SYNERGISTIC EFFECTS OF FINAL ELECTROMAGNETIC STIRRING (FEMS) AND SOFT REDUCTION	JSWBPSL, Sambalpur
		SCA_067	Pratik Bhaskar Bhoyar	Study of the effect of casting parameters on macro-structure and segregation in continuously cast round billets	RINL, Visakhapatnam Steel Plant
F2	**Structure Property Correlation (SPC- Titanium & Superalloys)**	**Invited Talk**	**Dr. Gopi Kishore Mondal**	**Perspectives on the design and development of Ni-Fe-Cr-based medium entropy alloys as potential high-temperature materials**	**CSIR-NML**
		SPC_064	Sadananda Behera	Microstructure, flow and work hardening behaviour of Ni-based superalloy BZL12Y	IIT Kharagpur
		SPC_082	Malvika Karri	Effect of borosilicate glass on high temperature deformation behaviour of Alloy 690	HBNI, Anushakti Nagar, Mumbai
		SPC_090	Abhinay Rajput	Studies on laser surface alloying of Ti6Al4V alloy with FeCoCrMnTi multicomponent system	IIT Kharagpur
		SPC_128	Sonika Chahar	SASH modeling of superni 625 alloy: correlating microstructure, deformation micromechanism and tensile characteristics	IIT Roorkee
		SPC_134	P. V. S. Chaithanya	Microstructural evolution during long term thermal aging of Ni-based superalloy IN740H	AcSIR Ghaziabad
		SPC_142	Usha J Ma	Optimization of Heat treatment in α-β Titanium alloy during development of Ring forging to improve low mechanical properties through Structure-Property correlation.	HAL-Bangalore
		SPC_146	Arjun Mahato	Estimation of β-transus temperature of Ti-6Al-2V-1Fe-1Cr alloy	IIT-Kharagpur
		SPC_173	Karthick N K	Study on microstructure evolution and its effect on ultrasonic response of CP70 Titanium alloy for spacecraft application	VSSC-Thiruvananthapuram
F3	**Environment and Sustainability (ESU - Waste Utilisation)**	**Invited Talk**	**Dr. Animesh Jha**	**Chemical Beneficiation of Complex Minerals and Industrial Waste Using Alkali-based Reduction Reaction Engineering for Reclamation of Mineral Values**	**University of Leeds**
		MPR_211	N. Sai Anuraag	Sustainable recovery of Nickel oxide from spent magnet coatings by Hydrometallurgical route	C-MET, Hyderabad
		ESU_024	Dhirendra Prasad	Innovation in Solid Wastes Recycling at Pellet Plant	Tata Steel Ltd., Jamshedpur
		ESU_026	Ranjan Kumar Pathak	Recycling of co-products generated in the Iron and Steel Industry	, Engineers India Limited, Gurugram
		MPR_338	Y. Rama Murthya	Advancements in the Agglomeration of Mining and Metallurgical Waste	Tata Steel Ltd., Jamshedpur
		RCC_012	Paparao Mondi	Sustainable Ceramic Material from Leached Residue after Recovery of Potash from Manganese Mining Overburden Waste	JNARDDC, Nagpur
		DM13	N S Anas	Perspectives of Solid-State and Semi-Solid-State Recycling to Produce Pilot Scale Extrusion Billets from AA2024 Milling Chips	JNARDDC, Nagpur
		ESU_033	Manisha Kar	Enrichment of valuable metallic contents from wastes of stainless steel production and its efficient recovery through carbothermic process	JSL, Jajpur
		DM12	A.K. Prasada Rao	Extending iron tolerances in recycled aluminium alloys obtained from automotive scrap	GITAM University, Visakhapatnam

Agri-Business Management Building

Hall	Theme	Astract ID	Speaker	Title	
Prof. Chengappa Conference Hall (M1)	**Materials for Strategic Sector (MSD-Space)**	**Invited Talk**	**Prof. Yoshihito Kawamura**	**Kink-Strengthened Magnesium Alloys**	**MRC of Kumanoto University Japan**
		MSD_030	Selvaraj Alphonse	Advanced Investment Casting Technology for Production of Aero engine single crystal blades	Hindustan Aeronautics Ltd
		MSD_032	P. Mahesh	Bulk superplasticity in a Medium alloyed Nickel base Superalloy using a Combination of Multi-axial Forging and Heterogenization.	DMRL, Hyderabad
		MSD_035	S Ravi Varma	Indigenous Development of Superalloy 41 for Aerospace Application	Mishra Dhatu Nigam Limited, Hyderabad
		MSD_063	M. Agilan	Effect of post-processing on tensile properties and microstructure of additively manufactured Gamma-prime strengthened Nickel-based superalloy used in rocket engines	VSSC, Trivandrum
		MSD_027	Sandipan Dasa	Challenges in realization of Titanium closed-die forgings for application in liquid engines for Indian Space Programme	LPSC-ISRO
		MSD_093	P. S. M. Jena	Strengthening by primary, secondary and tertiary gamma prime in 720Li alloy	AcSIR Ghaziabad
		MSD_056	Manju Bala	Advancing Waste-Derived Composite Material for Stealth Applications	CSIR Chandigarh
		MSD_080	Lagudu Yerrinaidu	Microstrucutral Characterization of Fe-Cr-Ni-Mn-C based Cast Lean-Duplex Stainless Steel with different Heat treatment conditions.	VSSC Thiruvananthapuram

MBA Class Room-1 (M2)	**Bio-Materials, Smart Materials and Functional Materials (BSF-SmartMaterials)**	**Invited Talk**	**Dr. S. Gollapudi**	**Novel Zinc Composites for Biomedical Applications**	**IIT Bhubaneswar**
		BSF_074	Kaushik Dutta	Deposition characteristics of Zr-Ti-V based Non-Evaporable Getter for Ultra-high vacuum applications: Composition, structure and activation temperature of sputter coated thin film	BARC Mumbai
		BSF_009	Anyesha Chakraborty	Two-dimensional Cobalt Telluride: An Effective Platform of Sub-picomolar level Dopamine Sensing	IIT-Kharagpur
		BSF_014	Prof. Ajit Behera	Equiatomic NiTi deposition on structural steel to induce surface smart property	NIT-Rourkela
		BSF_034	Aarti Jaiswal	Pectin functionalized silver nanoparticles for the detection of heavy metal ions via surface-enhanced Raman spectroscopy	University of Allahabad
		BSF_036	K N S Pavan Kumar	Design of Ni-Ti-Hf based Shape Memory Alloy by Machine Learning	DRDO Hyderabad
		BSF_062	Malini Abraham	Strategically developed strong red-emitting oxyfluoride nanophosphors for next-generation lighting applications	CSIR Thiruvananthapuram
		MSD_029	Selvaraj Alphonse	SMAART MATREALS-SHAPE MEMORY ALLOYS	Hindustan Aeronautics Ltd
		RCC_034	Narendra Nasani	Synthesis and characterization of Hafnium Pyrophosphate for Luminescence applications	RGUKT, Basar Telangana
MBA Class Room-2 (M3)	**Corrosion, Electrochemistry, Batteries and Fuel Cells (CEB-1)**	**Invited Talk**	**Dr. Tata Narsing Rao**	**Indigenous technologies in the Development of Lithium Ion Batteries**	**IIT Hydreabad**
		CEB_025	Sourabh Shyamal	A novel route to fabricate Bilayer Electrolyte for Solid-State Sodium-ion Battery	IIT-Kanpur
		CEB_030	Basitti Hitesh	Effect of sintering technique and microstructure on the ionic conductivity of Co-doped $Na_3Zr_2Si_2PO_{12}$ solid electrolyte for all solid-state sodium ion batteries	IIT Ropar
		CEB_032	Ankit Dev Singh	Electrodeposited Sb-Sn-Cu ternary alloy negative electrode for lithium-ion batteries: effect of composition on lithiation behavior and structural integrity	IIT-Jodhpur
		CEB_038	Truptimayee Acharya	Effect of rGO on LTO anode electrochemistry for Li-ion batteries	IIT Bhubaneswar,
		CEB_049	Priyabrata Nayak	Quasi-Solid State Electrolyte For High Energy Density Aluminium-Air Batteries	AcSIR Ghaziabad
		CEB_069	Akash Sadhukhan	Investigation of Cobalt-Free Cathode in Lithium-Ion Batteries (LIB)	IIT Bhubaneswar
		CEB_091	Arindam Sen	Preparation of Lithium Cobalt Oxide Cathode Material from spent Li-Ion Batteries	CSIR-NML, Jamshedpur
		CEB_095	Mukesh Kumar	Enabling Advanced Material Research for Fuel Cells, Electrolyzes, and Metal-Air Batteries through Innovative Reactor Systems	METNMAT INNOVATIONS Pvt Ltd
MBA Training Hall (M4)	**Powder Metallurgy and Additive Manufacturing (PMA-1)**	**Invited Talk**	**Dr. V Anil Kumar**	**Opportunities and Challenges in Metal Additive Manufacturing for Space Applications**	**VSSC Thiruvananthapuram**
		PMA_017	B. Sai Charan	Process parameter optimization of aluminum alloy Al2139 using laser bed powder fusion (LPBF) technique	CSIR, Karaikudi-
		PMA_024	Athira K S	Effect of High-Temperature Substrate Plate During Powder Bed Fusion Laser Beam Melting of Titanium (Ti-6Al-4V) Alloy	ARCI Hyderabad
		PMA_026	Gururaj Telasang	Powder Bed Fusion Laser Beam Melting (PBF-LB/M) of High Speed (AISI M2) Tool Steel	ARCI Hyderabad
		PMA_028	Mahima Rajaka	Additive manufacturing of NiTi shape memory alloy through laser powder bed fusion technique: Influence of powder characteristics and process parameters	IIT-Delhi
		PMA_088	B K Barik	Analytical estimation of melt pool profile and temperature field in part scale laser powder bed fusion	IIT-Bombay
		PMA_058	Swapnil Bhure	Single-Crystalline CMSX-4 Superalloy builds with Laser-Directed Energy Deposition (L-DED) using Multi-Scale Models and Experiments	IISc Bengaluru
		PMA_066	Divya Nalajala	Single-crystalline CMSX-4 superalloy builds manufactured through directional solidification and laser-directed energy deposition (L-DED) routes	IISc Bengaluru
		PMA_085	Jag Parvesh Dahiya	Influence of Nitrogen on the printability & microstructure of CoCrMoFe alloy produced by Laser-Powder bed fusion(L-PBF)	IIT-Madras

Thursday November 21, 2024					
Session 2: 14:15 - 16:15					
Dr. Babu Rajendra Prasad International Convention Centre					
Hall	**Theme**	**Astract ID**	**Speaker**	**Title**	**Organization**
Auditorium	**Iron and Steel Making (ISM - BF/DRI)**	ESU_129	Bhoopendra Pandey	Co-firing of agro-residue with coal in DRI production to reduce carbon footprints	IISc Bangalore
		MPR_325	Varun Mishra	Utilizing Bio Char as an alternate & sustainable fuel source in DRI Production for lowering Carbon emission	Tata Steel Ltd., Meramandali
		ISM_151	Swarnab Das	Maximising and sustaining high PCI rates in blast furnace	Tata Steel Ltd. Jamshedpur
		ISM_084	S. Patil	Improving MIDREX Furnace Performance with Low Total Fe Pellets: Real-Time Monitoring and Optimization Strategies	JSW Steel Ltd. Dolvi Works
		ISM_077	M. Kade	Optimizing Direct Reduced Iron Metallization Using Predictive Modeling: A Case Study of JSW Steel Dolvi Ltd	JSW Steel Ltd. Dolvi Works
		ISM_156	Roshan Lal Singh	Enhancing Blast Furnace trough campaign life	Tata Steel Ltd. Jamshedpur
		ISM_212	Kratika Jain	H-DRI Vertical Shaft Reactor – the thermodynamic and kinetic analysis	IIT Bombay
		MPR_261	Gaurav Jha	Development of cold bonded briquettes from chromite overburden and its smelt profile assessment for submerged arc furnace and mini blast furnace applications	Tata Steel Ltd., Jamshedpur
G1	**Metal Forming (MFR-Cold Rolling)**	**Invited Lecture**	**Prof. Narshiman**	**A Novel Micro Tool Setup for Measuring Forming Limits Under Hot Stamping Conditions**	**IIT Bombay**
		DM7	Atul Kulkarni,	Silicon Steel Production Lines for Grain Oriented (GO) and Non-Grain Oriented (NGO) Electrical Steels	Tenova Technologies Pvt Ltd
		MFR_029	Anji Reddy	Development of Cold Rolled Complex Phase Steels sheet with 590Mpa Tensile strength for Automotive Seat components	JSW Steel Ltd., Vijayanagar Works
		MFR_055	Deepshree Awale	Cold Rolling and Its Impact on Mechanical Behavior in Maraging Steel-250 Grade	IIT-Bombay
		MFR_108	Ajeet Kumar	Effect of Wet Skin Pass Mill Roll Cleaning Parameters on Surface Quality of Cold Rolled Annealed Strip for Automotive Application.	Tata Steel Ltd. Sahibabad
		MFR_111	Gautam Wagle	Analysis of Cold Mill Gauge Variation in High Speed Rolling Passes	Hindalco Innovation Centre
		MFR_118	Harsh Kotadiya	Optimisation of Cold Reduction for Controlling the Recrystallisation Kinetics for HSLA 550 Galvanised Steel	AM&NS India Ltd
		MPR_002	Navneet Singh	Discreet Techniques of Cold Rolling Ultra-Thin Strip	Yogiji Digi Private Limited, Faridabad
		SPC_019	Ummadi Raviteja	Impact of Two-Stage Cold Rolling Reduction and Intermediate Annealing Temperature on Final Texture and Magnetic Properties of Thin Gauge Non-Oriented Electrical Steel	JSW Steel Limited, Vijayanagar Works
G2	**Mineral Processing (MPR - Non-ferrous)**	**Invited Lecture**	**Prof. KA Natarajan**	**Environmentally sustainable Biomining and Microbially induced beneficiation of Indian iron ores**	**IISc Bangalore**
		MPR_089	Prashant Dalwadi	Vanadium Recovery from Secondary Sources through Hydrometallurgy	Hydromet Technology Solutions Private Limited Vadodara, Gujarat
		MPR_206	Suchismita Senapati	Recovery of lithium from a low-grade Indian Spodumene Sample	AcSIR Ghaziabad
		MPR_310	Jitendra Kumar Sadangi	An Economical Process to maximise the recovery of Vanadium, Titanium and Magnetite values from Low-grade Vanadium-Titanomagnetite Ore	International PranaGraf Mintech Research Centre, Bhubaneswar
		MPR_345	Sugandha Aachhera	Redox-controlled fed-batch bioleaching of Zn from ZnS concentrate by Leptospirillum ferriphilum dominated iron-oxidizing microbial culture	Central University of Rajasthan, Ajmer
		MPR_369	Vardhaman Patil	Effect of bauxite quality and operating conditions on chemical extraction in double digestion plants.	Hindalco Innovation Centre Belagavi.
		MPR_356	Mahek Gujral Goel	Recovery of Rare Earth Elements from Lean Grade Uranium Ore Effluents	BARC Hyderabad
		MPR_363	Dr.P G Bhukte	Enhancing alumina concentration in Lateritic Bauxite through silica reduction technique: A case study of Chhattisgarh and Gujarat deposits	JNARDDC Nagpur
		MSD_078	Anuj Kumar Singh	Uranium mineralogy and its impact on the leachability of U from the Geratiyon-ki-Dhani ore sample of Rajasthan	BARC Hyderabad
G3	**Structure Property Correlation (SPC -Martensite/ Bainite Steel)**	**Invited Lecture**	**Dr. Partha Ghoshal**	**Structure Property Correlation for a new high temp CCA alloy, using advanced microscopic techniques.**	**DRDO Hyderabad**
		MSD_051	Dhivahar C	Ductile-Brittle Transition Temperature determination of India-specific Reduced Activation Ferritic-Martensitic (IN-RAFM) steel by Small Punch tests	IGCAR, Kalpakkam
		SPC_031	S Chatterjee	Dislocation Strengthening of Low-carbon Martensitic Steel by Accelerated Cooling	Tata Steel Ltd., Jamshedpur
		SPC_066	Abhinesh Verma	Industrial Viability of Nanostructured Bainitic Steels	IIT Ropar
		SPC_101	Deepak Kumar	Understanding the TRIP effect in hot- and cold-rolled Al-added medium-Mn steels: insights into austenite stability and martensitic transformation kinetics	IIT -Kharagpur
		SPC_115	Kishore Sakthivel	Effects of tempering on tensile behaviour of Fe-C-Mn-Si carbide free bainitic steel	IIT Roorkee

		ESU_135	Mohsin Hasan	An Innovative and Sustainable Approach to Enhance the Mechanical Properties of High-Strength Martensitic Spring Steels	University of Hyderabad, Hyderabad
		SPC_018	Rajavarapu Pavan Kumar	Microstructural Refinement and Strength Improvement in Medium Carbon Bainitic Steel via Electropulsing	IIT BHU Varanasi
		SPC_122	B Mohan Rao	Alloy design of low carbon low alloy carbide free bainitic steel	IIT-Kharagpur
G4	**Digitalization and Industry 4.0 (DIN - 2)**	**Invited Lecture**	**Prof A K. Singh**	**Digital Twins for Steelmaking Operations: Challenges and Opportunities**	**IIT Kanpur**
		ISM_208	Reinhard Ehrengruber	Overcoming industrial challenges with regard to robotised handling and digital support of flow control systems in the steel industry	RHI Magnesita Switzerland AG
		MPR_156	Dibyendu Ghosh	Digital Twin Solution in Green Anode Manufacturing	Hindalco Industries Ltd., Madhya Pradesh
		DIN_103	Tanisha Senapati	Leveraging AI for Operational Excellence: A Real Time Defect Prediction & Prescription at Continuous Galvanizing Line	Tata Steel BSL Limited Sahibabad
		DIN_071	Anish Das	Digital transformation in Aditya Smelter: Enhancing productivity and sustainability in Aluminium smelting	Aditya Birla Group
		DIN_066	Sohini Mondal	The Journey of Digitalization in Stainless Steel Industry for Transforming Traditional Manufacturing Processes into Smart Factories	JSL, Jajpur
		DIN_093	Mr Moumon Mallick	Reliability Improvement of Ball Mill Through Digitalization	Aditya Birla Group
		DIN_045	Deepak Kumar	Digitalisation of Tandem mill stand motors for reducing stand tripping	SAIL Ranchi
		DIN_082	Chiradip Roy	Development of a Hybrid Simulation and Machine Learning Model for Predicting Last Wash Soda and Operational Anomalies in an Alumina Refinery	Hindalco Belagavi
G5	**Computational Materials Science (CMS-ICME)**	**Invited Lecture**	**Prof Phani Kumar**	**MicroSim - an open source phase-field HPC software stack**	**IIT -Madras**
		CMS_017	Ranesh Kumar Saha	Atomistic Simulation of Grain Boundary Segregation and Migration in Aluminium-Magnesium alloy	IIT-Kharagpur
		CMS_022	M.P. Gururajan	Effect of segregation on phase transformations and deformation behaviour: continuum and atomistic modelling	IIT-Bombay
		CMS_044	Savya Sachi	Expediting additive manufacturing with ICME	QuesTek Europe AB, Råsundavägen 18A, 169 67 Solna, Sweden
		CMS_061	S.Sanmugavel	Phase Field Study on Morphological Evolution of Hexagonal Anisotropic Inclusions	IIT-Bombay
		CMS_057	K.Krishna kumar	Phase Field Modelling of Chromium Nitride Precipitation in FeCrMnN steels	PSG College of Technology, Coimbatore
		CMS_130	M Agilan	ICME-based approach to establish a processing map for the IN718 welding	VSSC ISRO, Trivandrum, India
		CMS_109	Ajay S. Panwar	A Multi-scale Computational Framework for Simulating Internal Friction in Steel: Decoupling Different Microstructural Loss Mechanisms	IIT-Bombay
		CMS_055	Puja Bordoloi	Phase Transformation via dislocation-interaction in Refractory High Entropy Alloys (HfNbTaTiZr) at different strain rates – A Molecular Dynamics simulation study	Sikkim University Gangtok
F1	**Solidification and Casting (SCA-CC Modelling)**	MPR_391	Anderson Lima	Casting and Forging Technology innovation	Gerdau Summit
		SCA_058	Mayank Rawat	Computational analysis of continuous casting system for casting U-6%wtZr slug	IGCAR Kalpakkam
		SCA_022	Sudipto Chakraborty	CFD analysis of submerged entry nozzle in the mold of continuous caster of steel	IIT-Kharagpur
		SCA_023	Albin Rozario Samiraj	CFD study on SEN design to reduce mold level fluctuations	JSW Steel Ltd., Dolvi Works
		SCA_030	Ravi Golani	Modelling and Simulation of a High throughput Submerged Entry Nozzle for Thin Slab Casting Process	Tata Steel Ltd., India
		SCA_050	Soorya Prakash J	CFD modelling on Ladle teeming operation to reduce slag entrainment and metal retention	JSW Steel Limited, Salem works
		SCA_053	Ravi Sahay	Unique AI approach to enhance slab surface quality at TSC	Tata Steel Ltd., Jamshedpur
		SCA_047	Ravikiran Anapagaddi	Numerical Modeling and Optimization of Continuous Casting Secondary Cooling for Efficient Heat Removal and Quality Improvement	Siemens Technology and Service Pvt. Ltd., Bangalore
		SCA_024	Ratul Chakraborty	To Evaluate the 70 T Caster Tundish Performance with Focus on the Steel Grade Intermixing Behavior through a CFD Study	JSW Steel Ltd., Dolvi Works
F2	**Structure Property Correlation (SPC- (Al alloys))**	SPC_052	Sandhya Verma	Effect of solute segregation in Cu-Al alloys: Coupling Molecular Dynamics and Monte-Carlo simulations	IIT-Bombay
		SPC_067	Tamanna H. Panigrahi	Diffusion-induced phase growth kinetics in CoNi/Al and CoCrNi/Al diffusion couples	IIT-Hyderabad
		SPC_126	Gaurav Rajan	Role of nanosized SiC particles on the microstructural evolution and mechanical behavior of FSPed AA5083 alloy	IIT-Roorkee
		SPC_135	Nellutla Sahithyu	Effect of Zr addition on microstructure and mechanical strength of Al-Ce based alloys	NIT-Warangal
		SPC_144	A. K. Mondal	Microstructure and creep behaviour of SiC nanoparticles reinforced Mg-.Al-.Ca-.Mn alloy	IIT-BHU,
		SPC_147	Samarendra Roya	Influence of Zr content on the precipitation behaviour of cast Al-Cu alloy	IIT-Kharagpur
		DM85	ArjunDalavi	Effect of micro-structure on mechanical behaviour	Ametek India
		MSD_022	Dr Venkata Appala Narasayya Ch	Effect of face sheet material on flexural deformation behaviour of aluminium hybrid composite closed-cell foam core sandwich panels	AcSIR Ghaziabad
		ESU_048	Manish Madhav	Sustainable use of Solid Wastes generated in Mines & Integrated Steel Plants	SAIL, Ranchi
		ESU_109	Atharva Vadalkar	Utilization of waste PET Bottles in the Preparation of fly ash-based Geo-Polymeric Bricks	VNIT Nagpur

F3	**Environment and Sustainability (ESU - Waste Utilisation)**	ESU_118	Navnieet Singh Randhaawa	Recycling of rare earth of wind turbine magnets by chloridizing roasting – water leaching-precipitation process	CSIR-NML
		ESU_130	Dileep Makhija	BOF Slag : A sustainable material for cement making	JSW Cement Ltd, Karnataka.
		ESU_134	Sujit Anand	Hindalco Muri -Zero Waste to Landfill	Hindalco Industries Limited, Muri
		MPR_191	Dr.Ramesh Kumar	Exploring an eco-friendly approach for the efficient utilization of coke flue dust: A preliminary assessment for the production of composite pellets	IIT Hyderabad
		ISM_069	S.S. Yadav	A Novel Approach for using DRI bag filter dust at JSW Raigarh Pellet Plant	JSWBPSL, Sambalpur
		NFM_016	Shweta Ram	Development of Sample Preparation and Analysis Procedures for different types of E- Wastes like Printed Circuit Board (PCB)	Aditya Birla Group
Agri-Business Management Building					
Hall	**Theme**	**Astract ID**	**Speaker**	**Title**	**Organization**
Prof. Chengappa Conference Hall (M1)	**Materials for Strategic Sector (MSD-Nuclear)**	**Invited Lecture**	**Dr. R Tiwari**	**Requirements of Critical Metasl/Minerals in India for Sustain Growth of the Country**	**BARC Mumbai**
		MSD_034	N. S. Dubey	Characterisation of weld joint of T91 and Zircaloy-4 for fabrication of double clad tube	BARC Mumbai
		MSD_040	Yogesh Singh	Directional dependent plastic flow characteristics and work hardening behavior of refractory alloy Nb-10Hf-1Ti	NIT Rourkela
		MSD_061	Argha Dutta	Microstructural characterization of heavy ion irradiated Nb-1Zr-0.1C alloy	Variable Energy Cyclotron Centre, Kolkata-700064
		MSD_064	Satish Chandr Mishra	Development of Thick Pore-free Cr Coating on Zircaloy-4 by Magnetron Sputtering for Accident Tolerant Fuel Clad Applications	BARC Mumbai
		MSD_067	Dr.Santu Dey	Micro-structural characterization on proton irradiated W-3.5Ni-1.5Fe heavy alloy using X-ray and Electron diffraction and first principle DFT calculation	Variable Energy Cyclotron Centre Kolkata
		MSD_081	Prabhat Kumar Shukla	Behavior of refractory magnesia against high temperature melt impingement in sodium environment	Homi Bhabha National Institute, Mumbai
		MSD_082	Soumita Chakraborty	Microstructural analysis using Electron Backscattered Diffraction of Proton Irradiated Incoloy – 800H	Variable Energy Cyclotron Centre Kolkata
		MSD_076	P Mathiyazhagan	Quality Control through Destructive testing during manufacture of Complex & Critical Nuclear forgings	L&T Hazira.
MBA Class Room-1 (M2)	**Bio-Materials, Smart Materials and Functional Materials (BSF-BioMaterials/Smart Materials)**	BSF_060	Jithu Jayaraj	Lanthanum Phosphate Coated AZ31 Mg Alloy For Anticorrosion and Biomaterial Application	SCT College of Engineering, Trivandrum
		BSF_035	Sreya P V	Effects of Calcium and Zinc on Bio-functionalized 3D Ti Cancellous Bone Scaffold with Enhanced Osseointegration Capacity in Rabbit Model	CSIR Karaikudi
		BSF_045	Satyabrata Nigamananda Sahoo	Effect of microstructure and texture evolution on bio-corrosion properties and its implication on in vitro -in vivo cytocompatibility, and antibacterial properties of Mg-Zr-Sr-Ce alloy	IIT-Kharagpur
		BSF_073	Dr.A.Thirugnanam	Development of synergistic bioactive hydrogel for wound healing applications	NIT-Rourkela
		BSF_015	Karthik R	Giant Stark effect assisted Radio frequency energy harvesting using atomically thin earth-abundant iron sulphide (FeS2)	IIT-Kharagpur
		BSF_016	Saurabh Srivastava	Suppressing Intermediate Phases in Wide-Bandgap Perovskite Solar Cells via Additive Engineering Strategies	IIT-Kanpur
		BSF_056	Rajak Syed	Structural Properties of Gd3BWO9 and Effect of Mo Doping on Structural, Luminescence Properties of Gd3BWO9:Eu3+	BARC Mumbai
		BSF_071	Surendra B.Anatharaman	Optical Engineering of Light Absorption in Two-dimensional Halide Perovskites for Photovoltaic Applications	IIT-Madras
MBA Class Room-2 (M3)	**Corrosion, Electrochemistry, Batteries and Fuel Cells (CEB-2)**	**Invited Talk**	**M S Santosh**	**Next-Generation Electrocatalysts: Bridging Nanotechnology and Sustainability for Hydrogen Energy**	**CIMFR**
		CEB_026	Sandipan Bhattacharyya	Cold sintering assisted densification for NASICON-type solid electrolyte for sodium ion battery	IIT Kanpur
		CEB_028	Somen Sagar Jena	High energy density and Fast Charging Lithium-ion battery for EV application	IIT Bhubaneswar
		CEB_031	Sougat Purohit	High-throughput screening of Li-ion and beyond Li-ion battery cathodes for electrochemical ion-capture and desalination from aqueous medium	IISc Bengaluru
		CEB_065	Sachindra Kumar	Design and fabrication of redox flow batteries for enhanced energy and power performance	CSIR-IMMT, Bhubaneswar
		CEB_080	Saurav Keshri	Synthesis of High-Performance Composite Materials via Upcycling of Lead-Acid Battery: Electrochemical Characterization	IIT-Patna
		CMS_037	Dereje Bekele Tekliye	Exploring Fluoride Frameworks as Potential Calcium-ion Battery Cathodes	IISc Bengaluru
		CEB_013	Rajen Kundu	Lithium-Ion Battery Resource Management: An Effort to Synthesized Electrode Material from Waste	CSIR- NML, Jamshedpur

		DM59	Umesh Tiwari	In-situ in-operando XRD to understand battery cell performance under non-ambient conditions	Malvern Panalytical, Singapor
MBA Training Hall (M4)	**Powder Metallurgy and Additive Manufacturing (PMA-Powder Metallurgy)**	PMA_094	S. Narayanaswamy	Additive Manufacturing of SS316L - IN718 Bi-Metallic Structure: Interfacial Microstructure, and Mechanical Properties Insights	IIT-BHU Varanasi
		PMA_008	Manish Kumar Tiwari	Numerical investigation on the role of powder particle geometry on the bead formation in the LASER-based Powder Bed Fusion process	IIT Bhilai
		PMA_037	Apoorva Vashishtha1	Effect of Thermal Processing on the Flow Characteristics of Equi-Atomic AlCoCrFeNi High-	MNIT Jaipur
		PMA_089	Steaphen Sigatapu	Development of Additive Manufactured Nitinol alloy using Pre-Alloyed Powder	VSSC Thiruvananthapuram
		PMA_092	Dr.Anand S Tadas	Analytical Journey of Particle from Powder to Part	Malvern Panalytical
		PMA_096	Malobika Karanjai	Study of Magnetic Properties of Core-shell based Fe-Fe_3O_4 PM processed Soft Magnetic Composites	ARCI Hyderabad
		PMA_100	Tafzeelul Kamal	Microstructure and mechanical properties of hetero-structured Cu-Ni-Sn alloy processed using powder metallurgy	IIT-Kanpur
		PMA_012	Dr.S. Sahoo	A study of dry sliding wear performance of 304 stainless steel reinforced with TiB2 particles	CSIR-IMMT, Bhubaneswar
		PMA_020	Ritik Roshan Tripathy	Evolution of amorphous phase in multicomponent γ brass during prolonged mechanical alloying	IIT-BHU Varanasi
		RCC_024	M. John Silvister Raju	Single-step synthesis of antimony doped tin oxide nanocrystalline powders using flame spray pyrolysis	Christ University, Bengaluru

Thursday November 21, 2024					
Session 3: 16:30 - 18:15					
Dr. Babu Rajendra Prasad International Convention Centre					
Hall	**Theme**	**Astract ID**	**Speaker**	**Title**	**Organization**
Auditorium	**Iron and Steel Making (ISM -Pellet)**	MPR_187	Dr.mont. Florian M. Penz	Hydrogen in Pelletizing –Testing in world most modern Pellet-Pot grate facility	Primetals Technologies Austria
		ESU_133	SivaKrishna Golagani	Double Deck Roller Feeder System: A Sustainable Solution to Iron Ore Pelletization	AM & NS India
		ISM_191	Deepak Kumar Sahu	Assessment of Alternative Reductants on Composite Pelletization for Direct Reduced Iron Production	CSIR-IMMT Bhubaneswar
		MPR_014	Shaik Mahaboob Basha	Effect of Caustic Compound (NaOH) on Green and Fired Pellet Properties	Tata Steel Ltd, Jamshedpur
		MPR_138	Dr Golap Mohammed Chowdhary	Characterization of physical strength and metallurgical properties of Iron Ore pellet based on pore distribution in it	SAIL, Ranchi
		ISM_060	Shaik Mahaboob Basha	Microstructure and Slag Phase Evolution during Firing of High Alumina Iron Ore Pellets	Tata Steel Ltd, Jamshedpur
		ESU_055	Maitreya Goswami	Reducing fuel rate by Utilization of Solid Secondary Waste material in Pellet Plant	JSW Steel Ltd.
		ISM_224	Priyanka Kumari, Surajit Sinhaa	Pellet Reducibility Index and it's relation with Carbon Deportation	Tata Steel Ltd. Jamshedpur
		ESU_112	Gaddameedi Vandana	CO_2-Free Flux for Sustainable Iron Ore Pelletizing	Tata Steel Ltd. Jamshedpur
G1	**Metal Forming (MFR-Long Product)**	DM58	Bharat Bamrah	Technology Advancement in Rolling & Drawing using Hard & Super Hard Materials	Hyperion Materials & Technologies
		MFR_037	Varun M , Manjunatha Bhat	Development of 1X7, 15.70mm, 1960 grade Low Relaxation Prestressed Concrete (LRPC) Strands for Metro Girders	JSW Steel Ltd., Vijayanagar Works
		MFR_043	Anita Dunga	Development of HC82A Pearlitic steel for Tyre cord application	JSW Steel Ltd., Vijayanagar Works
		MFR_052	Dr. P Anil Kumar	Development of LRPC grade wire rod at Vizag Steel : One more step towards leadership in long products	RINL Visakhapatnam Steel Plant
		MFR_087	Tuhin Subhadra Bain	Elimination of Free Ferrite in rolling of SAE 9254 at Wire rod mill of TSG	Tata Steel Ltd, Jamshedpur
		MPR_332	Shashi Bhusan Prasad	Optimization of manufacturing process for making High tensile crimping wire	Tata Steel Ltd, Jamshedpur
		MPR_376	Rachit Sarina	Effect of process parameters on the performance of rod during wire drawing	Aditya Birla Mumbai
		SPC_104	Indrajit Dey	Control of UTS and Microstructural Inhomogeneity in 10B35 Grade Wire Rods for Cold Heading Applications	JSPL India
G2	**Mineral Processing - (MPR-Non-ferrous/Ferrous)**	MPR_188	Raj Kumar Jaiswala	Enhancing Chromite Pellet Quality: Value-Added Utilization of SMS Dust for Improved Moisture Control and Strength	JSL Jajpur
		MPR_347	Asutosh Acharya	Inorganic Carbon in Bauxite and its impact on Bayer Process	Hindalco Innovation Centre Alumina
		MPR_349	Dr. Harish Revankar	Chemical Tailoring of the Surface of Aluminum Trihydrate for the Application in Smart Polymers	Hindalco Industries Limited, Belagavi
		NFM_076	Nagarajan Kadappan	REFLUX™ Flotation Cell full-scale trial in a copper concentrator scavenger and cleaning applications	FLSmidth Inc, USA
		NFM_021	Binapani Behera	Chromium (VI) Removal through Hollow Fiber Membrane	CSIR-IMMT, Bhubaneswar
		MPR_395	Amol Mankar	FILTERATION AND DEWATERING OF NALCO RED MUD	JNARDDC Nagpur
		MPR_143	Akhil Singh	Studies on Characterization of High Phosphorous Iron Ore	Tata Steel ltd, Jamshedpur
		MPR_262	Thupakula Ghana Visarada	Development of a techno-economic flowsheet for lean grade chrome resource utilization through beneficiation perspective	Tata Steel ltd, Jamshedpur
		NFM_005	Saurabh Shekhar	A clean approach for the production of metallurgical grade chromic oxide from low grade chromite ore tailings	CSIR-NML, Jamshedpur
G3	**Structure Property Correlation (SPC - Electrical Steel)**	MFR_026	Mr. Daniel Brunelli	Cutting-Edge Technologies to Produce Electrical Steel	Fives India, Fives Group
		SPC_020	Anand Prasad	Development of High-Strength Thin Gauge Non-Oriented Electrical Steel for Electric Vehicles (EVs) and Hybrid Electric Vehicles (HEVs)	JSW Steel Ltd., Vijayanagar Works
		SPC_140	Srinivas Dudala	Effect of cold rolling and heat treatment on structure and properties of Titanium alloyed lightweight Fe-7Al-0.35C ferritic steel	IIT Hyderabad
		SPC_021	Yogendra Reddy	Influence of Antimony Addition on Microstructure, Texture, and Magnetic Properties of 2.6% Silicon Non-Oriented Electrical Steels	JSW Steel Ltd., Vijayanagar Works
		ISM_184	V. Pownsamy	Optimization of Annealing Parameters for High Silicon Non-Oriented Electrical Steels	JSW Steel Ltd., Vijayanagar Works
		MPR_358	M Manna	Effect of Cr addition in molten Zn to improve galvanised coating quality	Tata Steel, Jamshedpur
		SPC_099	Sujata Panda	Unique Characterization Techniques for Zn-Al-Mg Coated Steel	JSW Steel Ltd., Vijayanagar Works
		MFR_046	Srimon Narayanasamy P	Reduction of streak shaped scale defects by improving the grain boundary strengthening in Ti-Nb stabilized ULC steel of Galvannealed product	JSW Steel Ltd., Vijayanagar Works
G4	**Digitalization and Industry 4.0 (DIN - Machine Learning)**	CMS_119	K N S Pavan Kumar	Integrated Tool for Accelerated Materials Design & Development using AI and ML	DRDO Hyderabad, Telangana
		CMS_096	R. Chandana	Hardness prediction for Refractory Complex Concentrated Alloys (RCCAs) using Machine Learning	DMRL Hyderabad
		DIN_028	Jagadish C.A.	Production parameter development and optimization in Additive manufacturing using Machine Learning & Artificial Intelligence	Maxim LLP
		DIN_060	Vishnu Swaroopji Masampally	Optimization of a grinding circuit using physics-based and machine learning models	TCS Research, Pune
		DIN_062	Anurag Bajpai	Scrap motivated development of TRIP steels using interpretable machine learning	Max Planck Dusseldorf, Germany
		DIN_090	Pranav Kumar Tripathi	Development of CCS prediction model for iron ore pelletization process through Machine Learning	JSW Steel Ltd., Vijayanagar Works
		DIN_092	B Sai Prakash	Detection and analysis of clogging in a submerged entry nozzle using Deep Learning	Tata Steel, Jamshedpur
		DIN_094	P.N.Shivangi	Machine Learning approaches for Efficient Tunnel Furnace Operation in TSCR	Tata Steel, Jamshedpur
		CMS_021	Paresh Rajodiya	Development of a Heat Transfer and Solidification Model for Continuous Casting using OpenFOAM®: A CFD Approach	AM&NS Hazira

G5	**Computational Materials Science (CMS-CFD)**	MPR_034	Dr.Prakash Bansi Abhale	Proactive Detection and Mitigation of Channeling Events in Blast Furnaces using Advanced Analytics	Tata Steel Ltd, Jamshedpur
		CMS_075	D. Kamla Nathan	FLUID FLOW AND HEAT TRANSFER DURING INJECTION MOLDING OF PET	NIT Surathkal
		CMS_097	Prosanjit Das	Solidification Transport phenomena and Microstructure Evolution in Al-7%Si-MWCNT composite: An Eulerian Multiphase flow CFD model	IISc Bengaluru
		MFR_077	Amit Mishra	Modelling effect of microstructure on hole expansion ratio of dual phase (DP) steel by RVE approach	IIEST Shibpur
		CMS_085	Rajeev Kumar Yadav	CFD Modeling of Twin-Strand Slab Caster Tundish	JSW Steel Ltd., Vijayanagar Works
		CMS_028	Trilochan Bagarti	Heat transfer model for Stelmor cooling of wire-rod and prediction of properties	Tata Steel Ltd., Jamshedpur
		ISM_097	Ayush Badaya	Three-dimensional Modelling of Gas-Solid-Fines Flow in an Ironmaking Blast Furnace	IISc Bengaluru
F1	**Solidification and Casting (SCA-Solidification)**	SCA_043	Andreas Jungbauer	The game changer for plate production: Ultra-thick slab bow-type casting	Primetals
		SCA_029	Prabhakar Kumar	Thermal Parameter Optimization for Enhanced Graphite Nodular Properties in Ductile Cast Iron through experiment and simulation	IIT Delhi
		SCA_046	V.M.Sreekumar	Development of near-net shaped cast nanocomposite parts using high shear mixing technique	MNIT Jaipur
		SCA_065	Siddhartha Jaddivada	A novel approach for simulating the solidification process in a Bridgman setup	IISc Bengaluru
		SCA_068	Neeraj Srivastava	Effect of La rare element on the cooling curves of binary aluminum alloys (Al-Cu, Al-Zn and Al-Ni)	SVNIT Surat
		SCA_011	Bubu Pradhan	Impact of Cooling Rate On Dendritic Arm Spacing of 55%Al-Zn-Si Hot-Dipped Alloy-Coated Steel	JSW Steel Limited, Vijayanagar Works
		SCA_040	Subburayalu. S	Investigating Cooling Rate Dependencies of Hot Tearing in Aluminium 7075 Using Non-Mechanical Hot Tearing Models	IIT-Jodhpur
		SCA_055	Bhagyadhar Das	Minimization of cracking in 204Cu Grade Stainless Steel	JSL Jajpur
F2	**Structure Property Correlation (SPC-Non-Ferrous)**	SPC_109	Keerti Pandey	Self-similar grain growth in nanocrystalline Ni-W alloys	IISc Bengaluru
		SPC_156	Haripria T. Padmaganesana	Microcompression behaviour of compositionally modulated multilayer Ni-W coatings produced by electrodeposition	IIT-Bombay
		SPC_162	Alka Jangid	Improved Thermal Stability of Nanocrystalline Ni-0.8%Sn	IIT Kanpur
		NFM_068	Dr. Mainak Sen	Effect of alloying element and extrusion parameters on the formation of Peripheral coarse grain (PCG) in Aluminium 6061 alloy	Vedanta Limited, Jharsuguda.
		MPR_451	Somnath Bhowmick	Electronic indicator of mechanical properties in metals and alloys	IIT Kanpur
		MSD_018	Rajesh Kumar	Hot deformation behaviour of pure Molybdenum	DMRL Hyderabad
		SPC_152	D. Panda	Correlation between Microstructure, Texture, and Mechanical Properties of Pure Mg and its Alloys	MNIT Jaipur
		MFR_066	Prasanth M	Study on the modification of the mechanical properties of magnesium-2 at% aluminium alloy using the cyclic extrusion compression process	NIT Tiruchirappalli
F3	**Environment and Sustainability (ESU - Sustainable Technology)**	**Invited Talk**	**Satish Pandey**	**Steel Slag rod: Valorization of steel slag for sustainable green infrastructure**	**CRRI, NewDelhi**
		DM76	Purushottam Bedare	Vesuvius Energy-saver Concept in Induration Furnace	Vesuvius
		DM14	Fabio D'Aiuto	Enhancing sustainability with Niobium: improving alloy carbon footprints and reducing material intensity in their end applications	CBMM
		ISM_240	SK Basumallick	Transition to Plasma Heating and urgent need for the Steelmakers for rapid decarbonisation: the Indian scenario	Tata Steel India
		MPR_366	Atul V	Decarbonization & Green Steel Technologies to handle industrial growth and rising decarbonization targets	SMS Group
		ESU_037	Koona Prasanth	Towards the path of sustainable iron making (Tata Steel India's drive to mitigate CO2 emission)	Tata Steel Ltd., Jamshedpur
		DM68	Payal Dharmjit Kak	Green Steel	SKF
		DM77	Soumya Bhattacharjee	Achieving Sustainability through state of Art Technologies in Tundish.	Vesuvius

Agri-Business Management Building

Hall	Theme	Astract Id	Speaker	Title	Organization
Prof. Chengappa Conference Hall (M1)	**Materials for Strategic Sector (MSD-3)**	MSD_010	K. Murugan	Development of Slurry / Paste Based Coating for High-Temperature Thermal Protection	ARCI Hyderabad
		MSD_012	Swathi Mallika Dikonda	Oxidation behavior of Cr-Ta alloys at 900°C	IIT Hyderabad
		MSD_050	Ajay Kumar	Characterization of U-Ti Alloys for Wear Application	BARC Mumbai
		MSD_062	Sumita Santra	Double Clad: Effect of a Liner in Improving Iodine-SCC performance	DAE Hyderabad
		MSD_091	R. Karmakar	Laser Cladding of CoNiCrAlY bond coat on Inconel718 for improved mechanical properties and high temperature oxidation resistance	IIT Kharagpur
		MSD_024	Malar Vadani	Investigation on effects of long-term heat treatment on coating properties in cold sprayed Ni-base superalloys	IIT Delhi
		SPC_161	Santhoshkumar R	Development of heat treatment on 12Cr21 duplex stainless steel used in liquid rocket engine	ISRO, Trivandrum
MBA Class Room-1 (M2)	**Bio-Materials, Smart Materials and Functional Materials (BSF**	BSF_027	Revathy Sreekumar	Development of Multifunctional Biomimetic Nickel-Graphene Composite coating by Electrodeposition	CSIR Trivandrum, India
		BSF_038	Samvidha Das	Nano-Metal-Organic Frameworks for Cancer Therapeutics	IISc Bengaluru
		BSF_042	Dr.A.K. Chaubey	Biodegradable magnesium based alloy for orthopedic applications	CSIR-IMMT Bhubaneswar
		BSF_053	R. Jayasreea	Exploring the feasibility of fabricating functionally graded metal-ceramic components by spark plasma sintering for dental implants	ARCI Hyderabad
		BSF_063	Jatin Bhatt	Biocompatibility investigation on Zr based metallic glass	VNIT Nagpur

(M2)	**Materials (BSF-BioMaterials 1)**	BSF_011	Animesh Jha	Applications of Pulsed and CW Lasers Micro-to-Nanoscale Inorganic-Organic Materials Coatings s for Medical Device Engineering	University of Leeds
		BSF_023	Ann Mary Mathew	Surface Functionalization of Additively Manufactured Titanium Scaffolds with Cerium Ions: Promoting Biocompatibility, and Bone Integration in Rat Models	CSIR Karaikudi
		BSF_043	Pakanati Siva Prasad	Biosurfactant Assisted Cu-Doped Brushite Coatings: Structural, Electrochemical, Cytocompatibility and Antibacterial Properties	IIT-Kharagpur
MBA Class Room-2 (M3)	**Corrosion, Electrochemistry, Batteries and Fuel Cells (CEB-Coating)**	CEB_012	Tapan Kumar Rout	MXene- A potential anti-corrosion coating material for Mild Steel	Tata Steel Ltd, Jamshedpur
		CEB_037	Basavaraj P Kalinganavar	Optimizing Passivation Layer Chromium Content for Enhanced Corrosion Resistance in Galvanized Steel Coils	AM&NS India
		CEB_051	Harikrishna Kancharla	Effect of prior copper-coating on the microstructural development and corrosion behavior of hot-dip galvanized Mn containing high strength steel sheet	IIT-Jammu
		CEB_073	Dr.Suryakanta Nayak	High corrosion resistant and spot-weldable polyimide/polyetherimide composite coating for mild steel	Tata Steel Ltd., Jamshedpur
		CEB_077	Anoop S	Effect of particle size of graphene on the corrosion resistance of graphene incorporated zinc rich epoxy coating system	VSSC ISRO, Trivandrum
		CEB_098	Vijendra Kumar	Reduction and Nucleation Growth Analysis of Bimetallic Cu-Sn Electrodeposited in a Non-electroactive Pyrophosphate-based Bath	IIT-Kharagpur
		DM16	Gayathri J S	Development of Iridium Coated Inert Anode Material for Production of Oxygen from Lunar Soil	CSIR-Thiruvananthapuram
		CEB_085	Rohit Arora	Development of Colour Changing Coating using PVDF/MMA blend with Enhanced Performance Characteristics	Tata Steel Lts., Jamshedpur
MBA Training Hall (M4)	**Powder Metallurgy and Additive Manufacturing (PMA-Additive2)**	PMA_013	Ayyappan Murugesana	Microstructural evolution and phase analysis of SS410-Al2O3-SiC multilayered functionally graded composite fabricated through laser cladding	IIT-Kharagpur
		PMA_038	Koustav Ghosh	Effect of strain rate on the mechanical properties of addiitvely manufactured titanium alloys	IIT Bhubaneswar
		PMA_040	Raghavendra Pai K	The effect of WAAM process parameters on heat transfer, crystallographic texture, mechanical properties and surface texture of Al4043 alloy	NITK, Surathkal
		PMA_049	Bidipta Dam	Structure Property Process Parameter Correlation of Laser Surface Cladding of Rockit® 401 Powder on Al 1100 Substrate with Layering	IIT-Kharagpur
		PMA_060	Ipsita Mohanty	Effect of Novel β-eutectoid Alloying for Improved Mechanical and Tribological Properties of Titanium via Laser Material Deposition.	IIT-Kharagpur
		PMA_063	Sita Choudhary	Structure – property correlation in additively manufactured near-alpha Titanium alloy	IISc Bengaluru
		PMA_073	Bhuvaneswaran R	Microstructure and Mechanical Properties of Laser Directed Energy Deposited Inconel 718/Boron Carbide Metal Matrix Composite	NIT Surathkal
		PMA_023	Meet Gor	Microstructure evolution and Mechanical Properties of Ti6Al4V Processed Below β-Transus Temperature using Additive Friction Stir Deposition	Deakin University, Victoria

Friday November 22, 2024					
Session 4: 09:00 - 11:15					
Dr. Babu Rajendra Prasad International Convention Centre					
Hall	**Theme**	**Abstract ID**	**Speaker**	**Title**	**Organization**
Auditorium	**Iron and Steel Making (ISM- Steel Making)**	**Invited Lecture**	**Prof. Deepoo Kumar**	**An ASPEN plus – FactSage coupled model for BOF steelmaking process optimization**	**IIT Bombay**
		ISM_110	Devendra Prasad Singh	Development of a hybrid lime prediction model for Basic Oxygen Furnace (BOF) to optimize the lime addition in BOF steel making process.	Tata Steel Kalinganagar
		ISM_108	Anoop Kumar Pandey	Study and development of Ultra-low Nitrogen Interstitial Free Steel through RH Degassing Process	TATA Steel Ltd., Kalinganagar
		DM15	Frank Herwig	Deoxidation of Steel by Using Calcium Carbide as Alternative in Secondary Metallurgy	Almamet Industrial Solutions
		ISM_063	Rakesh Poddar	Affival Sustainable Steel Strategy by combination of Ca HDX LS™ cored wire and Affival Edge technology	Opta Affival, Asia
		ISM_136	Raveendranath	Usage of advanced Tundish furniture to improve surface quality in Low C & IF steel grades at SMS2 Slab Caster	JSW Steel Ltd. Vijayanagar works
		ISM_166	Ananth Kumar	Reduction in Prime Aluminium Consumption by using Improved Deoxidizer and Slag Former	JSW Steel Limited, Vijayanagar works
		ISM_176	Rakesh Kumar	Use of Sludge bricks as replacement of scrap in steel making	SAIL Bokaro
		ISM_031	Veereshkumar Jyoti	Impact of Silicon in base metal on the galvannealed coating in high hole expansion grade steel having a minimum tensile strength of 590MPa	JSW Steel Ltd
		ISM_024	Akasmita Biswal	Production of Low Nitrogen Steel Using Coal-Based DRI in CONARC Process	Tata Steel Jamshedpur, India, 831001,
G1	**Metal Forming (MFR-Non-Ferrous)**	**Invited Lecture**	**Prof. Subodh Kumar**	**Asymmetric rolling to improve sheet formability of AM30 Mg alloy**	**IISc Bangalore**
		MFR_132	Rajesh Panasa	Development of high strength aluminium alloy forgings for fifth generation fighter aircraft	HAL
		MFR_045	Chandramohan G	Evaluation of material formability of magnesium alloy AZ31 in friction stir incremental forming	PSG College of Technology, Coimbatore
		MFR_070	Vijayaragavan R	Influence of step depth on the formability, surface roughness and thickness distribution of commercial pure titanium sheets during the incremental forming process for cranium applications	NIT Tiruchirappalli
		MFR_116	B. Venkatesh	Micro-manufacturing of engineered Magnesium alloys: Technology development, experimentation and analysis.	IIT-Madras
		MFR_117	Talaviya Manish	Development of thick titanium forgings at L&T for submersible – Deep Ocean Mission	L&T Hazira
		MFR_126	Vishwanath Landea	Effect of insoluble elements on the microstructural and mechanical properties of light Al-Cu alloy produced by powder forging for high temperature applications	REVA University, Bangalore
		MPR_065	Monis Raza	High Tensile Strength Light Gauge Foil Development	Aditya Birla Group
		DM84	Vamsi krishna	Effect of reduction per pass on texture, mechanical and corrosion properties of hot -rolled Mg-1wt%Gd alloy	IISc Bangalore
		MFR_074	Aman Kumar	Analysing upsetting in ultrasonically fabricated as-cast Al-7.3Zn-2.2Mg-2Cu alloys: FEM insights with Deform-3D	IIT-Kanpur
G2	**Mineral Processing (MPR-Ferrous)**	**Invited Lecture**	**Mr. Umashankar Attel**	**Emerging Trends in Iron Ore Beneficiation for Sustainable Steel Production**	**JSW Steel**
		MPR_127	Ganesh Chalavadi	Enhancing Iron Ore Quality Through Multi-Stage Dry Separation Techniques	AcSIR Ghaziabad
		MPR_265	D.V.Mitra	Impact of Flocculent Addition in Thickener on Tailings Concentration Process: A Study on Efficiency and Mechanism of Wettability Properties	JSW Steel Ltd. Vijayanagar works
		DM04	Andreas Freund	Improvement of an Iron ore circuit by HPGR	Köppern Germany
		MPR_271	Venugopal M R	Utilization & beneficiation of low grade - high siliceous iron ore at ore beneficiation plant-2 for pelletisation at JSW Steel Limited	JSW Steel Ltd. Vijayanagar works
		MPR_115	Priyank Gaba	improvements in iron ore processing and slurry pipeline transportation through better classification in grinding circuits	Derrick
		MPR_478	S K Chaurasiya	Advanced Iron ore beneficiation techniques	NMDC Ltd
		CEB_062	Vijay Kumar	Iron extraction from lean iron ores through a hydrometallurgical process followed by electro-winning	JSW Steel Limited, Vijayanagar Works
		MPR_106	Prateek Singh	Improvement in High-Rate Thickener underflow pulp density (g/cc) through optimization of its process parameters	Tata Steel Ltd.
	Structure Property	**Invited Lecture**	**Mr. Prasanta Saha**	**Influences of Heat Treatment on the Quality of Heavy Plates**	**Tenova**
		ESU_028	Sai Ramudu Meka	Recent fundamental scientific insights into nitriding of steels	IIT Roorkee
		FAN_009	Durga Prasad	Hydrogen resistant steel: Can an engineered microstructure mitigate the hydrogen attack?	Tata Steel Ltd., Jamshedpur
		SPC_011	G.K. Bansal	Energy-efficient Q&P Technology for Improved Mechanical Performance of Lean Alloy Steels	CSIR-NML, Jamshedpur
		SPC_030	Pari Ranganathan	Improving Fatigue performance in Hot Rolled & Pickled (SPFH590FB-P) Grade for Automotive applications	JSW Steel Limited, Vijayanagar Works

G3	**Correlation (SPC-Steel1)**	SPC_036	Vinit Kumar Singh	Study of Strain Rate Dependent Tensile Properties, Strain Hardening behaviour and Fracture Properties in Aluminium Containing Ferritic Low-Density Steels	IIT-Kharagpur
		MFR_129	Srimanta Sam	Study of process parameters affecting niobium precipitation in hot rolled HSLA Steel	JSW Steel Ltd, Vijayanagar Works
		SPC_098	G Sahoo	Effect of Reduction Ratio and Coiling Temperature on Mechanical Properties of Low Alloy Steel	Bokaro Steel Plant ,Bokaro
		PMA_033	Souradip Mukherjee	X-ray diffraction line profile analysis of ball milled nanocrystalline iron: Application of Warren-Averbach and modified Warren-Averbach methods	NIT-Durgapur
		SPC_009	Madhawan Chandrawanshi	Development of Hot Rolled Steel for Hot-formed Axel Housing Automotive Application	Tata Steel Ltd, Jamshedpur
G4	**Digitalization and Industry 4.0 (DIN - Industry 4.0)**	**Invited Lecture**	**Dr. Harald Schmid**	**Efficiency in Metal Material Testing – Improving Quality by Future Data Management**	**Zwick Roll**
		DIN_031	Bhavdeep Kumar	Industry 4.0 in EPCM Sector – Minerals, Metals & Process Industry	Meinhardt EPCM India Private Limited, Bengaluru
		DIN_069	Mr Harish Pathak	The Future of Metal Manufacturing: Embracing Industry 4.0 and Digital Technologies	Janyutech Pvt Ltd
		DIN_070	Pranali Borkar	DRiSHyAM: DRones at SHopfloor (AI & Manless work)	Tata Steel Kalinganagar
		DIN_023	Gurunath Kulkarni	Development of a Novel Analytical Database and Interactive Dashboard for Electrical Steel Defect Analysis	JSW Steel Limited, Vijayanagar Works
		DIN_059	Mr Ashish Sonkusare	DIGITIZATION AND INDUSTRY 4.0	JSW Steel Ltd, Dolvi Works
		DIN_083	Suman Tewary	Temperature monitoring in refractory-lined industrial structures of the steel industry towards Industry 4.0	CSIR-NML Jamshedpur
		DIN_106	Pradyumna Mishra	System Driven Logistics Forecast Module to Generate Cost-Optimal Vessel Scheduling and Multi Modal (Rail/Road/Conveyor) Port Plant Linkages with AI Intervention	Atulya Abinav Tech Private Limited
		DIN_079	Ramaswamy A.S	Development of Industry 4.0 projects at Pellet Plant-3	JSW Steel ltd., Vijayanagar works
G5	**Iron Making and Steel making (ISM- Coal/Coke)**	ISM_012	Biswajit Seal	Coke Drying System- An Engineering Solution for Reduction of Coke Moisture at G Blast Furnace	Tata Steel Ltd
		MPR_266	Abhi Anant Kinlekar	Control of Coke moisture in wet quenching process	JSW Steel Ltd. Vijayanagar works
		ISM_042	Dr.B Ghosh	Analyzing microstructure to predict Coke's hot strength Characteristics	SAIL
		ISM_044	Dr.B Ghosh	Enhancing Coke Quality through Streamlined Coal Preparation Techniques	SAIL
		ISM_074	Utkarsh Srivastava	Dosing of inferior grade coke waste material in Metallurgical Coke Making	Tata Steel Ltd., Jamshedpur
		ISM_082	P.K. Pankaj	Influence of heating rate on Coke Quality	SAIL
		ISM_083	Pradeep Kumar Pankaj	Coke Moisture Reduction: A case study on Techniques and its effect	SAIL
		ISM_105	Vibhor Sharma	Enhancing Coke Reactivity through Innovative Polymer Coating: HG-200	Sreechem Resins Limited
F1	**Metal Joining (MJN-1)**	**Invited Lecture**	**Dr. Vijay Petle**	**Material Joining – Aero Engine Perspective**	**DRDO**
		MJN_011	Jibi K.K	Welding of Laser Powder Bed Fusion Manufactured Haynes 282 alloy: Microstructure and Mechanical Properties	IIT-Madras
		MJN_005	Pradeep Kumar	Optimization and Standardization of FSW/FSP Techniques for Repairing High-Temperature Material Sub-Assemblies in Mining Sector Heavy Equipment	IIT Patna
		MJN_006	Dr. Jose Immanuel R	A novel Self-reacting Tool Design to weld thick Aluminium Plates using Friction Stir Welding - Weld Characteristics and Performance Analysis	IISST, Trivandrum
		MJN_010	Parth Patel	Investigation of the Microstructure and Mechanical Properties of Cold Metal Transfer Welded SS304L	NIT Rourkela
		MJN_016	M Arunkumar	Mechanical behaviour and microstructural evolution during the laser welding of Haynes 282 by integrating FEM and Phase field modelling	IIT-Madras
		MJN_023	Cresent Ajai K	Study the effects of post-weld austempering on microstructure of a carbide free bainitic steel	PSG College of Technology, Coimbatore
		DM21	Subhashkumar KS	Study on explosive welded Aluminium to stainless steel joints in cylindrical configuration	VSSC Thiruvananthapuram
		MJN_047	Sucheta Juneja	Enhancing Mechanical Properties of Submerged Arc Longitudinal Welded (SAWL) Pipe Grade for CCUS Applications through Varied Welding Consumables	Jindal SAW Ltd., Mundra
F2	**Non-ferrous Metal Processing (NFM- Other Alloy)**	**Invited Lecture**	**Dr. Anil Chaube**	**High strength Aluminium alloys for structural applications**	**CSIR**
		NFM_073	Anirban Giri	Development of a novel low-cost Al alloy from primary route with better functionality than ADC12	Vedanta Ltd. Jharsuguda
		MSD_079	Aditya Anand	Development and characterization of Stir Cast A356 Aluminium Alloy Matrix Composites Reinforced with multi walled carbon nanotubes	IISc Bangalore
		NFM_010	Mr. Sachin Nirgudkar	Aluminium Hot forming: - Opportunities and Challenges in Automotive light weighting	Industrial Interface India
		NFM_036	Anish Das	Development of $AlSi_3$ Sow ingot for Steel Industries	Hindalco Industries Ltd, Odisha
		NFM_012	P. Y. Deshmukh	Effect of Borides of AlB master alloy in the reduction of tramp elements to make conductor grade aluminum alloy	MINEX Metallurgical Co. Ltd.
		NFM_063	Animesh Mandal	Designing new aluminium alloys for high temperature applications	IIT Bhubaneswar
		NFM_067	Santhoshkumar R	Development of heat treatment cycle for defect free crimping of C63200 aluminium bronze	ISRO Trivandrum

		MPR_382	Auroprasad Mohantya, Nitin Pachareb, Sudarsan Duttaa, Nilesh Rajeb, Prabhat Pandaa	Development & Stabilization of AA5052 Aluminium alloy Closure Stock for Industrial Use	HIL
F3	**Environment and Sustainability (ESU-CO_2 reduction)**	**Invited Lecture**	**Mr. Praveen Chaturvedi**	**Tenova's Approach Towards Green Pig Iron Production Through Direct Reduction Technology :– Tenova iBlue®**	**Tenova**
		ISM_220	Subharthi Das	Reducing carbon footprint and waste water in metal industries with dry gas cleaning technology in combination with waste heat recovery system	Primetals Technologies India
		ESU_036	Suman	CO2 Sequestration and its Kinetics on Feed and Mechanically-Activated Red Mud	AcSIR Ghaziabad
		ESU_088	Dipitiranjan Baral	A new concept for Environment-Friendly Sustainable Green Steelmaking by DRI in the BOF	Tata Steel Ltd., Jamshedpur
		ESU_073	Dhiraj M kadhe	Novel Superflux Coating to improve Iron Ore Sintering Performance and Reduce CO_2 Emission	Tata Steel Ltd., Jamshedpur
		ESU_099	Gautam Behera	Transforming Ladle Furnace Slag: Efficient Alumina Recovery with CO_2 Utilization for Sustainable Steelmaking	IIT-Kharagpur
		ESU_100	Dhanraj Patil	Biofuel Utilization in Iron Ore Sintering: A Path to Sustainability..?	JSW Steel Ltd., Vijayanagar Works
		ESU_121	Richa Sharma	Machine Learning Approach for Improving Evaporation Steam Economy and thereby reducing Carbon Footprint	Hindalco Industries Limited, Muri
		ESU_140	Venkatesan J	Evaluation of Ceramic Sorbents for CO_2 Capture from Iron Making Process under Simulated Industrial Conditions	CSIR Thiruvananthapuram, Kerala

Agri-Business Management Building

Hall	Theme	Abstract Id	Speaker	Title	Organization
Prof. Chengappa Conference Hall (M1)	**Refractories, Ceramics and Composites (RCC-1)**	**Invited Lecture**	**Mr. Gerald Gutschier**	**Go Green – Circular raw material mixes and metallurgical additives with respect to CO2 footprint reduction**	**RHI Magnesita Refractories**
		RCC_009	P.K.Thakur	Impact of advanced refractory material on performance of reheating furnace	SAIL
		RCC_019	Asis Kumar Sarkar	Iron Making by Direct Reduction Process Route &Challenges to Refractory	Rungta Mines, Jharkhand
		RCC_028	Prakash Patil	Enhancing Relining Efficiency and Durability in Reheating Furnace Skid and Post Beams: A Novel Plastic Refractory Solution	JSW Steel Ltd. Vijayanagar works
		RCC_036	Dr.Santanu Mukhopadhyay	Lime Enriched Mag-Dolo-Carb Refractories…… An approach to address the Low Basicity Slag in Si-killed Steel	Sarvesh Refractories Pvt. Ltd.
		RCC_037	Nimananda Sahoo	Coke Oven Heating Wall Repairing with Fused Silica Gunning Technology	JSW Steel, Dolvi works
		RCC_038	Nabarun Konwar	Next Generation Snorkel Gunning Solution	IFGL Refractories, Visakhapatnam
		RCC_041	Mahasin Hossain	Case Study on Life Improvement Journey of 350 Tons Capacity Steel Ladle at JSW Steel Ltd, Dolvi	JSW Steel Ltd, Dolvi works
		SCA_026	Diti	Evolution of tundish refractory erosion and slag engineering in continuous casting	Tata Steel Ltd., Jamshedpur
MBA Class Room-1 (M2)	**Bio-Materials, Smart Materials and Functional Materials (BSF-Functional Materials)**	**Invited Lecture**	**Dr. P. Saravanan**	**Exchange Coupled Nanocomposite Permanent Magnets for Prospective Applications**	**DRDO**
		MSD_071	Amarendhar Rao B	Tool-life Studies in Laser-assisted Turning of IN625 alloy with Uncoated and CrAlSiN Nanocomposite Coated Tungsten Carbide Inserts.	ARCI Hyderabad
		BSF_017	G Sri Sai Samhitha	Exploring Innovative Thermoelectric Materials for Mid-Temperature Waste Heat Recover	IIT-Madras
		BSF_022	G. Vijayaragavan	Coercivity enhancement on Sm-Fe-N using novel low melting Zn based eutectic alloy	ARCI Chennai
		BSF_030	Dr.Premkumar Murugaiyan	Microstructure and Grain refinement mechanism in Fe-rich FeSiB(P)NbCu Nanocrystalline Soft-magnetic Alloys	CSIR-NML, Jamshedpur
		BSF_033	Chinmaya Mohapatra	Synthesis, characterization, and comparative analysis of Monophasic SrFe12O19	IIT BHU, Varanasi
		BSF_051	Nishant Tiwari	Mn-Ni-Cu based ternary system for Magnetocaloric application using a combination of thermodynamic calculations and experiments	IIT Kharagpur
		BSF_052	Dr.P. Vivekanandhan	Grain Boundary Engineering and Enhancement in Coercivity in Ce containing Nd-Fe-B magnets using Dy-Cu / Dy-Al-Cu alloys	ARCI Chennai
		RCC_047	Manoj Kumar	Rare-earth doped yttria stabilized zirconia as thermal barrier coating material for improved performance	IIT- Kharagpur
MBA Class Room-2 (M3)	**Failure Analysis (FAN-1)**	**Invited Lecture**	**M. Mohan Kumar**	**Importance of Fatigue Testing in Aircraft Development and Life Extension Program**	**CSIR**
		FAN_010	Aditya Prakash	Understanding the mechanism of fatigue failure in electroplated compression spring	Tata Steel Ltd., Jamshedpur
		FAN_013	Vikram Sharma	Correlating microstructure with fatigue failure in a wire rod	NIT, Durgapur
		FAN_027	G. Damodhar Naidu	Effect of high-temperature exposure on the low cycle fatigue behaviour of Haynes 282 alloy	NIT Warangal
		FAN_030	Neelkant	Fatigue Cracks in MIG Welded Automotive Steel Wheels	JSW Steel Ltd., Dolvi Works
		FAN_033	Sarath Nair	Improvement of Cornering Fatigue Test (CFT) Life cycle by chemistry design modification in HSLA 590 grade Hot rolled coil for Automotive Wheels application	JSW Steel Limited, Dolvi
		FAN_036	P. Subba Reddy	Investigate the tension-tension mode of high cycle fatigue behavior of continuously cooled carbide-free bainitic steels	IIT Roorkee

		FAN_057	Arpit Gupta	High Cycle Fatigue Behaviour of Ni-base superalloy at 650 °C	IIT BHU Varanasi
		FAN_068	Dr.R.K. Rai	Effect of microstructure on the low cycle fatigue deformation behaviour of IN 713 C alloy	MNIT Jaipur
MBA Training Hall (M4)	**Powder Metallurgy and Additive Manufacturing (PMA-Additive 3)**	**Invited Lecture**	**Dr. Gopinath Muvvala**	**Navigating the Complexities: Challenges and Control Strategies in Large-Scale Additive Manufacturing**	**IIT Hydreabad**
		PMA_052	Divya K	Influence of SLM Process Parameters on Meltpool Morphology and the Density of NdFeB Permanent Magnet	ARCI Chennai
		PMA_075	Shakti Swaroop Choudhury	Developing and Analyzing Functionally Graded Materials in LPBF Using DEM and Partitioned Dispenser Chambers	IIT Madras
		PMA_084	Shambhu Kumar Manjhi	Printability Studies on AZ31 Mg Alloy using Wire Arc Additive Manufacturing Process	NIT-Surathkal
		PMA_018	Shivraj Gahir	Development of novel high-strength high-conductivity Cu-Ni alloy through wire arc additive manufacturing and vacuum arc melting – Performance comparison on Mechanical and electrical properties analysis	IIT- Bhilai
		PMA_078	K. Praveenkumar	Surface Mechanical Attrition Treatment of Spark Plasma Sintered Titanium Aluminide: Microstructural and Mechanical Behaviour Analysis	IISc Bangalore
		PMA_083	Dr. J. Chakraborty	Mechanical alloying in Cu-Ru immiscible binary system: X-ray diffraction investigation	CSIR-NML Jamshedpur
		MSD_021	Saumya Gupta	A Study on static spheroidization of direct energy deposited Ti-6Al-4V alloy	IIT- Kharagpur

Friday November 22, 2024					
Session 5: 11:30- 13:15					
Dr. Babu Rajendra Prasad International Convention Centre					
Hall	**Theme**	**Astract ID**	**Speaker**	**Title**	**Organization**
Auditorium	**Iron and Steel Making (ISM-Stainless Steel)**	ISM_185	Bhukya Saishanmuk	Effect of Strain Rate on TRIP effect in SS 301LN Stainless Steel for safe body structure of Transport Application.	JSL, Hisar
		ISM_048	R L Praharsha	A Case Study on Desulphurisation of Steel in AOD	JAMIPOL Ltd., Jamshedpur
		ISM_179	Shikhar Saini	Mitigating Surface Defects in 304 Stainless Steel: A Study on Annealing Temperature Effects and Scale Formation	JSL, Hisar
		ISM_140	R Natarajan	The Role of MGO Briquettes on argon oxygen decarburization (AOD) converter life	SAIL
		ISM_200	Sachin Kumar	Minimization of Surface Roughness generated in the Titanium stabilized austenitic steel - 321/EN 1.4541 grade in the 2B Finish	JSL, Hisar
		ISM_149	A R Pradhan	Innovative Measures to Minimize Silicon Content in High Carbon Ferrochrome Production	Tata Steel Ltd, Jamshedpur
		ISM_180	P.Sravani	Effect of Copper content in the austenitic stainless steel 304 grade on the Deep Drawability	JSL, Hisar
		ISM_183	Devenvdra Kumar Singh	Minimization of Edge Slivers in 410DB Grade Stainless Steel	JSL Jajpur
G1	**Metal Forming (MFR-Steel)**	MFR_069	Suddhasatta Das Biswas	Split Edge Defects in HR Coils	JSW Steel Ltd. Dolvi Works
		MFR_113	Sibani Misra	Improving efficiency in Galvanizing Lines Operations with Automation and Real-time Data Integration at Tata Steel Sahibabad	Tata Steel Sahibabad
		MFR_020	Ch Raju	Mitigating Wire Breakage in Low Carbon, High Mn-Si Alloy Steel MIG Wires through Micro Alloying	JSW Steel Limited, Vijayanagar Works
		MFR_031	Veereshkumar Jyoti	Impact of Phosphorous segregation on sheet metal forming of IFHS galvannealed steel and its prevention method	JSW Steel Limited, Vijayanagar Works
		MFR_054	Abhishek Mitra	Experimental study of the warpage of plates in Special Plate Plant (SPP), RSP	SAIL, Ranchi
		MFR_056	Vamshi krishna	Optimizing composition and process parameters for achieving High Ductility and formability in cold heading quality steel in SBM of RINL	RINL
		MFR_091	Prashant Kumar Singh	Optimization of micro-alloying and composition on the strength and toughness of 0.2%C-1.5Mn steel	IIT-BHU, Varanasi
		MFR_125	Sakthivel A	Reducing Material Loss due to Clink Defect Formation in High Carbon 100Cr3 Grade Steel Bars	JSW steel Ltd, Salem works
		MFR_103	P. Mallikarjuna Rao	Effect of hot strip mill run out table cooling water quality on pitting corrosion of hot rolled low carbon steel	JSW Steel Ltd, Vijayanagar Works
G2	**Mineral Processing (MPR-Ferrous)**	MPR_098	Ammasi A	HYDROGEN-BASED REDUCTION ROASTING FOR ENHANCEMENT OF LOW-GRADE IRON ORE AND PREPARATION OF DRI-GRADE PELLETS	CSIR-NML, Jamshedpur
		MPR_254	Rahul K. Soni	CFD-DEM modelling for the controlled reduction of Hematite iron-ore to Magnetite	CSIR Bhubaneswar
		MPR_296	Vibhuti Roshan	Challenges in Producing Iron Ore Pellets from Goethite-Rich Concentrates	NMDC Limited
		MPR_331	Ravindra Kumar	Process optimization for utilization of high-Alumina iron ore in pellet making	JSW Steel Limited, Vijayanagar Works
		MPR_278	Subhashree Nayak	Unlocking the Potential of Utilizing Biomass for Magnetizing Roasting of Low-Grade Iron Ores	AcSIR
		MPR_446	Sibangi Rath	Iron values recovery from red mud by reduction roasting using different reductants	CSIR Bhubaneswar
		MPR_284	Prashant P Patil	Enhancing Fresh Feed Mill Capacity through Process Optimization: A Study on Feed Size Reduction and External Screening.	NMDC Karnataka
		MPR_483	Rajanikant Choudhari	Process optimization study for the reduction of pre-mixed lean-grade manganese/iron ore using hydrogen gas	CSIR-NML, Jamshedpur
G3	**Structure Property Correlation (SPC-Steel2)**	DM83	Ludger Walhers	Development of a Transmission-Illumination-Based Crack Detection Method Using Translucent Tools for Testing of Thin-Walled Metal Sheets and Foils	ABS INSTRUMENTS PVT. LTD.
		SPC_014	Sankalp Biswal	Effect of ageing on precipitation and strengthening behaviour in a W-containing maraging steel	IIT Kharagpur
		SPC_035	Md Akif Faridi	Tribological mechanism in Fe-based metallic glass coating under different sliding wear conditions	IIT Kharagpur
		SPC_038	Isha Apurwa	Microstructure and mechanical properties of intercrtitically annealed 3.5 wt.% medium-Mn Steel	NIT Jamshedpur
		SPC_059	Kapil Dev Sharma	A Deep Dive into Dry Sliding Wear Behaviour of Low Carbon Steels Across Varied Microstructures and Normal Loads	IIT Roorkee
		MPR_341	Dr.Tarang Shinde	INFLUENCE OF MICROSTRUCTURE ON FATIGUE LIFE OF CRYOGENICALLY TREATED AISI H13 STEEL	Yashoda Technical Campus, Satara-India.
		SPC_050	Ajit Shinde	Development of Nb-Mo Microalloyed “Fire Resistance” Construction Steels	JSW Steel Ltd., Dolvi
		SPC_053	Gautam Mishra	Cryogenic toughness and strength optimization in 7% Ni Steel for LNG tankers	IIT BHU Varanasi,

		SPC_095	D.Rathiram Naik	Non-Metallic Inclusion Rating of Different Alloys by metallographic methods	Midhani
		SPC_100	Dr.Pranabananda Modak	Development of S960QL Grade Plate for Ultra High Strength Structural Applications and Rockhard 500 Grade Plate for Abrasion Resistance Applications	JSPL Angul
G4	**Digitalization and Industry 4.0 (DIN - Modeling)**	DIN_049	Gaurav Bhange	SMART STEEL MELT SHOP LADLE TRACKING SYSTEM	JSW Steel Limited, Dolvi Works
		DIN_050	Ashish Mukherjee	Smart Online Quality Monitoring a Key Role Player in Advanced Sinter Making Process for Steel Industry	Tata Steel Ltd. Jamshedpur
		DIN_088	Gautam Wagle	Sensor Based Mill Vibration Monitoring to Control Chatter Marks in ACP Rolling	Hindalco Innovation Centre
		DIN_091	Amrit Biswas	Title: Enhanced Commodity Price Prediction System	Tata Steel Ltd. Jamshedpur
		DIN_026	Anji Reddy CH	Prediction of Mechanical Properties of Cold Rolled Close Annealed Steel Using Data Science Techniques	JSW Steel Limited, Vijayanagar Works
		DIN_089	Nikhil Chaurasia	A Novel Synthetic Method for Microstructure Segmentation and Phase Quantification	IIT-Kanpur
		DIN_036	Shree Prakash	Enhancing Efficiency and Safety in Bulk Material Handling using Industrial Wireless Communication	SAIL Ranchi
G5	**Iron Making and Steel making (ISM-Coal/Coke)**	DIN_078	Pooja Manohar Sabnani	Improvement in Coke Mean Size with data driven diagnostics and predictive modelling	Tata Steel Ltd. Jamshedpur
		ISM_177	Dr.H. P. Tiwari,	Prospect for Cokemaking for Sustainable Iron and Steel Production	AM&NS India
		ISM_168	Sovan Kumar Patra	Biocoke as a sustainable alternate carbon reductant for ferroalloy production.	Tata Steel Ltd. Jamshedpur
		ISM_198	Vinay Thool	Impact of parameters derived from crude gas temperature measured at gooseneck level on coke quality and oven push force.	Tata Steel Ltd. Jamshedpur
		MPR_092	Shree Prakash	Improvised system for real time coke surface temperature measurement at COB	SAIL Ranchi
		MPR_114	Akshay Bhandare	Optimisation of Coal Blend in JSW Dolvi Coke Ovens	JSW Steel Ltd, Dolvi
		MPR_146	Dr.P.Gopinath	Impact of Coal Blending and Charging Techniques on Coke Microtexture and Quality	CSIR Dhanbad
		ISM_209	Deepak Kumara	Process optimization and operational control measures for reduction in charging emission in Coke ovens	Tata Steel Ltd. Jamshedpur
F1	**Metal Joining (MJN-2)**	MJN_007	Bala Parandhma Raju M	Effect of welding speed on Microstructure of Laser beam welded Modified 9Cr-1Mo steel clad tube to end plug	IGCAR Kalpakkam
		MJN_012	Chintapatla Tirumala Surya Prakash	Optimizing Multi-Interlayered Joints in SS304HCu and Inconel 617 for Advance-Ultra-Super-Critical Power Plant Application	MNIT Madhya Pradesh
		MJN_013	Ravi Ranjan Kumar	Development of dissimilar metal SS321/Ti-5Al-2.5Sn alloy diffusion bonded joints from lab scale to industrial scale: interfacial microstructural evolution and its tensile response in temperature range of -196 oC to 500 oC	LPSC ISRO Thiruvananthapuram
		MJN_022	Bodhisattwa Banik	An Experimental Study: Friction Stir Processing of Laser-Clad Copper on Commercially Pure Titanium	BARC Mumbai
		MJN_024	Ravi Rajan Tiwari	Diffusion bonding of ZrB2-SiC-based ultra-high temperature ceramics with Ti-6Al-4V structural alloy	IIT Kanpur
		MJN_028	Amarjeet Kumar Singh	Effect of Welding Parameters on Laser Welded DP 980 steel	JSW Steel Ltd. Vijayanagar works
		MJN_033	Md Jawed Quamar	Development of novel Carbon modified filler for the gas tungsten arc welding of CP-Titanium	NIT Warangal
		MJN_037	Dr. Jyotirmaya Kar	Electron Beam Welding of IN-718 to AISI-316l sheets: Mechanical properties and Microstructure analysis	MNIT Jaipur
F2	**Non-ferrous Metal Processing (NFM- Other Alloy)**	NFM_075	Dipen Kumar Rajak	Insights into Magnesium Alloys Significance	CSIR Bhopal
		NFM_054	Dr. K. K. Ajith Kumar	The Future Scope of Magnesium-Rare Earth based Alloys for light Structural sectors	Materials Research and Innovation Centric Solutions, Tamil Nadu
		BSF_044	Bharat C.G. Marupalli	Magnetron sputtered Ti-Zr-Mo alloy thin film Coatings for Surface modification of Ti-6Al-4V	IIT-Kharagpur
		NFM_059	R Anil Kumar	Optimizing Electrical and Mechanical Properties of A356 Alloy with High Fe and Cr, Mo & V Addition	JNARDDC Nagpur
		NFM_027	Yogesh R Patel	A Comparative Analysis of Copper Smelting Technologies: Flash Smelting vs. Bath Smelting	Hindalco Birla Copper, Dahej
		NFM_055	Anurag Patro	Development of High-Magnesium AA5182 Aluminium	HIL Hirakud F
		NFM_065	V. R.Talmale	Challenges in Development of Alloy 740H Grade Boiler Tubes for AUSC application	Nuclear Fuel Complex
		NFM_077	Vikash Kumar	Investigation of the hot deformation behaviour and processing map of AM50 Magnesium Alloy	IIT-Bhubaneswar
F3	**Environment and Sustainability (ESU-CO_2 reduction)**	ESU_127	Pragya Dixit	Thermoelectric composite demonstrating high power output for clean energy generation	IIT-Kanpur
		NFM_042	Bhanu Shankar	Energy reduction solutions through design modifications at Aditya Aluminium	HIL Odisha
		ESU_023	Khushubo Devi	Combinatorial In-situ and Ex-situ TEM: Morphological Evolution and Hydrogen-Driven Redox Interplay in Green Steel Production	IIT-Indore
		NFM_023	Jitendra Tur	Decarbonization using Dilute Oxygen Combustion Burner in Copper Smelters	Hindalco Industries Limited, Birla Copper, Dahej
		ISM_099	Anupama Kashyap	Millscale to sintered iron-alloy compact by using hydrogen as reductant	IIT- Roorkee

		ISM_132	Galla Ashwini	Increasing Scrap Potential in BOF: A key Decarbonization Initiative	JSW Steel Ltd. Vijayanagar works
		MPR_337	Santunu Pathy	Exhaust to Energy in Alumina Digesters	HINDALCO Doraguda, India
		MPR_400	Basavaraj Bomman	CO_2 Reduction in Steel - SEED Emission Manager	JSW Steel
Agri-Business Management Building					
Hall	**Theme**	**Astract ID**	**Speaker**	**Title**	**Organization**
Prof. Chengappa Conference Hall (M1)	**Refractories, Ceramics and Composites (RCC-2)**	RCC_010	Vikash Kumar	Investigation of Interaction Mechanisms Between Cerium Oxide-Containing Slag and MgO-C Bricks Using X-ray Diffraction and Computed Tomography	SAIL Ranchi
		RCC_045	M. Sathiyakumar	DEVELOPMET OF HIGH ABRASION AND HIGH ALKALI RESISTANCE LC BASED CASTABLES FOR CFBC BOILER AND CEMENT APPLICATIONS	Totale Global Private Limited
		RCC_032	Palash Dey	Characterisation of different carbon sources in Blast Furnace Trough castables	Calderys India Refractories Limited Nagpur
		RCC_030	Harsh Joshi	Innovative approaches in Steel Making refractories while making Value added steel production	JSW Steel Ltd. Vijayanagar works
		RCC_018	DK Singh	Low Cement Castable Installation by Gunning with loss <5%	Hindalco
		RCC_020	Y. Kumar	Structural aspects of radiation damage in Indian-origin natural zircon	BARC Mumbai
		SPC_131	Aditya Ranjan Sharma	Effect of Hf and Al on the Microstructure of a Refractory Complex Concentrated Alloy	DMRL Hyderabad
MBA Class Room-1 (M2)	**High Entropy Alloys 1**	CMS_065	P.S. Ghosh	Efficient Screening of Single-Phase Low-Activation High-Entropy Alloys	BARC Mumbai
		PMA_015	Manashi Sabat	Optimizing oxide dispersoid content towards enhancing mechanical properties of ODS Ni-based high entropy alloy	IIT Kharagpur
		SPC_130	Chaitanyaa Govande	Ultrahigh strength and ductile Lightweight High Entropy Alloy for Aerospace Applications	Defence Institute of Advanced Technology
		SPC_079	Avanish Kumar Chandan	Microstructural engineering for achieving an outstanding strength-ductility balance in a novel high-entropy alloy	CSIR-NML Jamshedpur
		SPC_086	S. Paul	Effect of novel hybrid-rolling on the microstructure development and mechanical properties of an extremely low-stacking fault energy FCC high-entropy alloy (HEA)	IIT Hyderabad
		SPC_085	Murugan D	Development of high strength and ductile $Fe_{49}Mn_{30}Co_{10}Cr_{10}C_1$ medium entropy alloy by cryo-rolling	DIAT Pune
		CMS_036	Vikas Jindal	Short-range order in multicomponent alloys: Cluster Expansion - Cluster Variation Method formulation and application to High Entropy Alloys	IIT-BHU, Varanasi
		BSF_020	Harsh Jain	Design and Development of Ti-Zr-Nb-based Refractory High Entropy Alloys for Biomaterial Applications	IIT-BHU Varanasi
MBA Class Room-2 (M3)	**Failure Analysis (FAN-2)**	FAN_003	Uday S. Goel	Eliminating Hot Mill ICDP Work Roll Failures at Tata Steel India	Tata Steel
		FAN_014	Vipin Kumar Sharma	Mitigation Strategies for Mechanical Seal Failure in Autoclave Agitators Operating at High Temperature and Pressure: A Case Study	Uranium Corporation of India, Andhra Pradesh
		FAN_018	Vamsikrishna Bagadi	Reduction of Inclusion Crack Defects in Thin-Gauge of Low Carbon Steel Grade	JSW Steel Limited, Vijayanagar Works
		FAN_058	Vansh Raj Saxena	Significance of width ratio in positioning the weld line of tailor welded blanks to avoid cracks while stamping of automotive door inner panels in IF grade steel	JSW Steel Ltd.
		FAN_061	Anbukkarasi R	Role of Material flow in Friction Stir Welding of Al-Cu joint on Fracture behavior	IIT-Dharwad
		FAN_066	Ramesh P	Failure Resolution of Copper Radiator for Harvester Application	Ashok Leyland Technical Center
		MPR_384	Prasanta Kumar Padhi	Effect of testing parameters on the Fracture appearance behaviour of HSLA steel plates used for underwater applications	SAIL
		FAN_082	Dr Benudhar Sahoo	Design Optimisation through Failure Analysis of Aero-Engine	CEMILAC, DRDO, Bangalore
		FAN_086	Thillairajan Arumugam	Failure Investigation & Analyses of Die Plate Used in Twin Screw Extruder for Processing Engineering Plastics	STEER Engineering Pvt. Ltd, Bangalore
MBA Training Hall (M4)	**Corrosion, Electrochemistry, Batteries and Fuel Cells (CEB-Corrsoion & Electrochemistry)**	CEB_055	A Sreelakshmi	Study regarding the effect of Copper doping in Cobalt sites of PrNi0.5Co0.5O3-d oxygen electrode.	CSIR Bengaluru
		CEB_060	Pramod Kumar	The Impact of the Current Collectors on the Electrochemical Performance of the Pseudocapacitive Material: Sr2FeCoO6	IIT-BHU, Varanasi
		CEB_089	A. Sarkar	Hierarchial phase transformation affecting the corrosion performance in super duplex stainless steel	IIT Bombay
		CEB_022	Sanjay Manda	Internal Friction and Hydrogen Embrittlement of Steel	IIT-Bombay
		CEB_054	Jakkampudi Chandrika	Studies on electrocatalytic behavior of La0.5M0.5FeO3 (M = Ca, Sr, Ba) Perovskite	NIT-Rourkela Odisha
		MJN_031	Varsha Florist	Development of passive nickel coating on ICSS1218-321 austenitic stainless steel to overcome liquid metal embrittlement	Liquid Propulsion Systems Centre, ISRO, Trivandrum

Friday November 22, 2024					
Session 6: 14:00 - 16:15					
Dr. Babu Rajendra Prasad International Convention Centre					
Hall	**Theme**	**Abstract ID**	**Speaker**	**Title**	**Organization**
Auditorium	**Iron and Steel Making (ISM-Clean Steel)**	**Invited Lecture**	**Dr. Ashok Kamaraj**	**Science behind the drain vortices during BOF/LD steelmaking**	**IIT Hyderabad**
		ISM_045	Neha Jha	An efficient process for producing low phosphorous steel in induction furnace using a novel compound	JAMIPOL Limited
		ISM_051	Prakash Gupta	Strategy for production of low phosphorus steel in BOF from low silicon high phosphorous hot metal	Tata Steel Ltd., Jamshedpur
		ISM_073	Vikash Kumar	The Synergistic Role of Calcium and Barium in Non-Metallic Inclusion Modification for Enhancing Steel Cleanliness	SAIL Ranchi
		ISM_145	Vidhyasagar Malaiyappan	Evolution of inclusions during the ladle refining of tyre cord steel	JSW Steel Limited, Salem works
		ISM_167	Prasenjit Chanda	Enhancing Steel Cleanliness in SBQ Grades: A Comprehensive Approach to Inclusion Control through Slag Engineering and Deoxidation Optimization	Tata Steel Ltd., Jamshedpur
		MPR_080	Sujata Devi	Operational and Metallurgical Strategies for Inclusion control in Electro Slag Remelting	Steel Authority of India Limited
		ISM_170	Sanghmitra Bharati	Quality enhancement of high carbon billet grade for tyre cord application through process re-engineering at SMS	JSW Steel Limited, Vijayanagar works
		ISM_023	Mani Ranjan	Evolution of oxide inclusions in Interstitial free (IF Grade) Steels during RH process	Tata Steel Ltd., Jamshedpur
		MPR_308	S Monalisa Nayak	Inclusion Modification and Separation During Steel Making Process in a Si-Mn Killed Tyre Cord Grade Steel	JSPL Raigarh
G1	**Metal Forming (MFR-SS & Super Alloy)**	MFR_078	Jitendra K. Sahoo	Nitriding on AISI H-12 die towards improvement in product quality and tool life during hot extrusion of Incolloy 800 tube	Nuclear Fuel Complex,, DAE, Hyderabad
		MFR_115	Amol Dange	Technology Development of Ultra high thick pelton runner disc used in turbines of hydroelectric power plant	L&T, Hazira
		MFR_015	GV Ramana	Process capability improvement of Cold Rolled 590 Dual phase Steel for Automotive applications	JSW Steel Limited, Vijayanagar Works
		MFR_093	Sangram Keshari Aich	Improvement in impact energy at cryogenic temperatures of Grade - 304 in plate form product	JSL, Jajpur
		MFR_096	Sanjay Saraswat	Development of 55%Al Zn alloy coated steel of YS 550 grade using leaner chemistry	Tata Steel Ltd., Khopoli
		MFR_134	M. Karthikeyan	Manufacturing of WASPALOY rings using rolled ring forging process	HAL
		MPR_192	Kumar Vaibhaw	Development of hot extrusion process of Advance Ni-based Superalloys for Indigenous Seamless Tube Manufacturing	Nuclear Fuel Complex, Hyderabad
		ISM_201	Mohnish Kumar Bhnadari	Minimization of Alligatoring Defect in Cr-Mn-N-Cu Austenitic Stainless Steels during Hot Rolling	JSL, Hisar
		NFM_035	Vishal Jaiswal	Improvement in mechanical properties in ferritic stainless steel Grade - 430 coils in hot rolled thickness of 6-10 mm	JSL Jajpur
G2	**Iron Making and Steel making (ISM- Sinter)**	**Invited Lecture**	**Dr. Srinivas Dwarapudi**	**Recent Advances in Agglomeration Research at R&D Tata Steel India**	**Tata Steel Ltd., Jamshedpur**
		MPR_087	Mr Alok Mishra	Low Grade Iron ore in Pelletizing –Consistent Productivity and Chemical Physical Quality of Pellets	Primetals Technologies Austria
		ISM_040	Jay Prakash Behura	Oxygen Enrichment in Sintering for Superior Quality Sinter and Reducing Return Fines Generation	Tata Steel Ltd., Bistupur
		ISM_046	Dharmendar Kumar Rajak	Reduction In Sinter Return Fine from Top Layer of Sinter Bed by Solid Fuel Redistribution	Tata Steel Ltd., Jamshedpur
		ISM_062	Debarshi Roy	Effect of Adjustable Segregation Plate on sinter quality and productivity	SAIL-ISP Burnpur, Asansol
		ISM_101	Susanta Pramanik	Production of Green Sinter – Iron ore sintering using Biomass	N.I.T Durgapur
		ISM_114	Aditya Sarda	Novel sensor application to increase Sinter Productivity at Tata Steel	Tata Steel Ltd., Jamshedpur
		ISM_126	K Akshay	First Ever Electromagnetic Segregation Process in Iron Ore Sintering	Tata Steel Ltd., Jamshedpur
G3	**Structure Property Correlation (SPC-Stainless Steel)**	MFR_051	Kumar Gaurav	Development of high formability 430 (430HF) ferritic stainless steel grade suitable for deep drawn application	JSL, Jajpur
		MPR_120	R.Dhanasekar	A Study on effect of strain rate, aging time and temperature on stress strain behavior of high nitrogen austenitic stainless steel	PSG College of technology, Coimbatore
		SPC_129	Konala Aneela	Microstructure Improvement in Titanium Stabilized Ferritic Stainless Steel Grade-409L through Continuous Annealing Route for Deep Draw Applications	JSL, Jajpur
		SPC_054	P. Saravanan	Properties Enhancement in Duplex Stainless Steel through Strain-induced Martensite Transformation (SIMTR) and its reversion	SAIL, Ranchi
		SPC_062	Rajneesh Yadav	Effect of Grain Boundary Engineering (GBE) on the room temperature and high temperature tensile properties of 316L Stainless Steel	IIT-Jodhpur
		SPC_145	Riya Kumari	Characterization of Titanium Stabilized Grade 439 of Thickness>2 to 3 mm for suitability in Deep Draw Applications	JSL, Jajpur
		SPC_159	Bhavana Unikelaa	Microstructural Influences on Impression Creep in 304HCu SS Welds: A Comprehensive Experimental and Computational Investigation	IGCAR, Kalpakkam
		FAN_064	Amiya Kumar Prusty	Mitigation of Luders band or Stretcher Strains in formed components of Ferritic Stainless Steel Grade 430	JSL Jajpur

G4	**Computational Materials Science (CMS - Modeling and Simulation-2)**	NFM_049	Munmun Agrawal	Dynamic simulation-based approach to develop process model to predict metal recovery in industrial operation	SMS group GmbH, Germany
		CMS_014	Aditya Narayan Shiv Shankar	3D Continuous caster model using reduced order modelling	Tata steel Ltd., Jamshedpur
		ISM_160	Mukund Manish	Improvement in steel cleanliness in central strand of a billet caster using water modelling	JSW Steel Ltd. Vijayanagar works
		CMS_023	Sagar Dave	Development of Packed-bed Solver using OpenFOAM®: Application to Straight-Grate Iron Oxide Pellet Induration Furnace Simulation	IIT-Bombay
		CMS_033	K L Anantha Krishna	Thermodynamic Assessment of ZnO-Nb2O5 Quasi-Binary System	University of Hyderabad.
		CMS_056	Subham Ranjan	GAS ASPIRATION IN LADLE SHROUD AND ITS IMPACT ON TUNDISH PROCESS PERFPORMANCE: A PHYSICAL AND MATHEMATICAL MODELING STUDY	IIT-Kanpur
		MPR_378	Manas Pandey	To Study the Effect of Shell and Solid Elements used in Stretch Forming Simulations of Thick Austenitic Stainless Steel Sheets.	United Institute of Technology, Prayagraj.
		CMS_077	Chandan Choudhary	Optimization of heat treatment parameters through CALPHAD based simulation to achieve high performance Al6061 alloy	The Automotive Research Association of India, Pune
		CMS_095	Auropratik Mohanty	Improvement of Zinc utility for Ductile iron pipe surface coating using Arc spray simulation	Tata steel Ltd., Jamshedpur
G5	**Mineral Processing (MPR-Coal)**	MPR_157	Prasad Kopparthi	Multi-Response Optimization of Coal Spiral Concentrator using Desirability Approach	Tata steel Ltd., Jamshedpur
		MPR_220	Raj Kumar Dishwar	Novel Dual Beneficiation Method to Enrich the Carbon Content and End-Value of Coal Washery Tailings	ISM- Dhanbad
		MPR_259	Sourav Agarwal	Lab scale study and Pilot scale process to remove soluble Tar material from Coal Water	Tata Steel Ltd., Jamshedpur
		MPR_340	Diwakar Raj	Automatic control of oil water emulsion system for improving coal flowability at Coal handling Plant, DSP	SAIL, Durgapur
		MPR_344	Surya Kanta Das	Advanced Flotation Methods for Carbonaceous Particles in Blast Furnace Dust: A Study on Collector Dosage and Classification Effects	JSW Steel Ltd., Dolvi Works
		MPR_350	Sachinraj D	Statistical Optimization of Lab Scale Flotation Cell Parameters for Coal Beneficiation	Tata Steel Ltd., Jamshedpur
		MPR_388	Aditi K Ajegaonkar	Enhancing Flaky Graphite Recovery from Low-Grade Ore through Ultrasonic-Assisted Flotation	CSIR-IMMT, Bhubaneswar
		MPR_466	Abhishek Kumara	Dry Beneficiation of Indian coal for ash reduction using a pneumatic separator	CSIR-NML, Jamshedpur
		MPR_402	Anurag Shakyaa	Oily Bubble Flotation of Coal	Tata Steel Ltd., Jamshedpur
F1	**Environment and Sustainability (ESU - Electronic Waste)**	ESU_089	Anoop S Kumar	Synthesis of NMC Active Cathode Material from Secondary Raw Materials Recovered from Discarded Li-Ion Batteries	C-MET Hyderabad
		ESU_058	Arundhati Jena	Recycling of Lithium-ion Battery Cathode Material by Carbothermic Reduction	IIT-Kharagpur
		ESU_083	Ganesh Shanker Bhandari	Hydrogen reduction of spent Lithium-ion batteries to recover metallic values	IIT-Roorkee
		ESU_060	Venkata Lakshmi Borra	Synergetic recycling of NdFeB magnet and Li−ion battery cathode material for critical metals recovery	IIT-Kharagpur
		ESU_105	Shaik Saleem	Recovery of Cobalt metal from LCO based cathode material of spent Li-ion Batteries	C-MET Hyderabad
		ESU_062	Sukanta Kumar Mahanta	Recovery and Utilization of High Purity Graphite from Spent Port Lining Waste in Lithium-ion Batteries	AcSIR, Ghaziabad
		ESU_082	Rohit Gehlot	Investigation of processing routes for recovery of rare earth oxides from spent NdFeB magnets	IIT-Roorkee
		ESU_131	Anjana E I	Environmental Sustainable Process for the Extraction of Precious Metals from Waste Printed Circuit Boards	CSIR Trivandrum
F2	**Non-ferrous Metal Processing (NFM - Extraction)**	MPR_060	Soumyadip Mondal	Selective recovery of rare earth elements from coal fly ash in the light of diagnostic leaching	BARC Mumbai
		NFM_008	Brij Kumar Dhindaw	A sustainable technology for melt processing of Aluminium alloys	IIT Kharagpur
		NFM_009	Suvam Mukherjee	Mineralogic and thermodynamic explanation behind ferrite formation during industrial zinc sulfide roasting	Hindustan Zinc Ltd., Vedanta Group, Debari
		NFM_066	Pooja Sahu	Processing of Polymetallic Nodules through Gaseous reduction-smelting for extracting Cu, Ni, Co, and Mn	CSIR-IMMT Bhubaneswar
		NFM_041	Barsha Dash	Production of silica powder from silt and purification of silica sand	CSIR-IMMT, Bhubaneswar
		NFM_040	Sudhakar Yadav	Development of a Flowsheet for the Recovery of High-Purity Manganese Compound from Manganese Residues Generated in Zinc Hydro Smelter	Hindustan Zinc Limited
		NFM_062	Shivendra Sinha	Extraction of Rare earths from Magnets as high purity oxides and Metals: Selective recovery and scale up studies	AcSIR, Ghaziabad
		DM66	Dr. Maneesh C	Operating aluminium smelter with power interruptions: Some experience / challenges	Vedanta Ltd. Jharsuguda
F3	**Environment and Sustainability (ESU - Environment)**	ESU_022	Vipin Kumar Sharma	Development of a Secured Landfill for Near Surface Disposal of Uranium Tailings: A Pilot Scale Study	Uranium Corporation of India Limited, Tummalapalle, Kadapa
		ESU_050	Erik Vlot	TERRAFLOWINGTM DEWATERING SOLUTIONS: ALTERNATIVE TAILINGS MANAGEMENT STRATEGIES IN THE IRON ORE INDUSTRY	Weir Group
		ESU_114	K Srisuman	Reduction of Specific Energy Consumption of Heat Recovery Coke Oven Process	JSW Steel Limited, Salem Works
		ESU_043	Alok Kumar Ray	Radiant Heat to Power in Iron and Steel Industry: Potential of Thermophotovoltaic Technology	Tata Steel Ltd., Jamshedpur
		ESU_101	Sunil Bakliwal	Energy conservation in WRM-2 by merging of WRM-2 & BRM-2 compressed air line header	JSW Steel Ltd. Vijayanagar works
		ESU_054	Subham Miah	ALUMINIUM FLUORIDE REMOVAL FROM THE WASTE SILICA GEL	IIT-Hyderabad,

		ESU_094	K Akshay	Reduction of Stack Emission at Sinter Plants, Tata Steel Jamshedpur	Tata Steel Ltd., Jamshedpur
		DM10	Debasis De	Boosting Photoelectrochemical Water Splitting of 2 dimensional ?-SnWO4 photoanode by surface engineering	Energy Institute Bengaluru, Karnataka, India
		ESU_092	Santanu Dey	Sustainability Lifestyle - For a Greener Tomorrow	Hindalco Industries Limited, Belagavi
Agri-Business Management Building					
Hall	**Theme**	**Astract ID**	**Speaker**	**Title**	**Organization**
Prof. Chengappa Conference Hall (M1)	**Refractories, Ceramics and Composites (RCC-Ceramic/Composite)**	**Invited Lecture**	**Prof. B V Manoj Kumar**	**TiB_2/ZrN Reinforced Novel SiC Ceramics for Complex Shaped Wear Resistant Components**	**IIT Rorkee**
		RCC_015	Gandi Rohith	Property Assessment and Characterization of Chemically Reclaimed Glass Fibers for Refurbishment of Railway Coaches	NIT-Roukela
		RCC_033	Rajat Gupta	Development of Functionally graded Al metal matrix hybrid composite reinforced with CNT, Y2O3 & SiC	IIT-BHU Varanasi
		RCC_049	Visakh Manoj	Influence of SiC particles on thermo-mechanical properties liquid metal squeeze infiltrated A356-SiC composite	CSIR Trivandrum
		RCC_022	V. Tiwari	An Investigation of High Temperature Wear Properties of Additively Manufactured TiC Reinforced Stellite 6 Metal Matrix Composite Coatings	IIT Kanpur
		RCC_035	Rohit Aroraa	Investigative Analysis on Using Calcium Formate as an Additive to Reduce the Setting Time of Cement Mortar Lining in Ductile Iron Pipe	Tata Steel Ltd., Jamshedpur
		RCC_046	Y. Shadangi	Light-weight Al matrix composites reinforced with Al-Cu-Fe quasicrystals fabricated by mechanical milling and high-pressure spark plasma sintering	IIT-Bhilai
		MSD_017	Ilyas Hussain	A Novel AA6061 Composite Reinforced with Mechanically Alloyed Titanium Aluminide via Friction Stir Processing: Development and Characterization	IIT-Bhilai
		RCC_050	Alka Gupta	Ceria (CeO2) and Gadolinium Doped Ceria (GDC) Reinforced 8YSZ Composite Material, Synthesized via Spark Plasma Sintering (SPS) Method for Advanced Thermal Barrier Coatings	C.S.J.M. University Kanpur
MBA Class Room-1 (M2)	**High Entropy Alloys 2**	MSD_046	Sandeep Kumar Yadav	Development of a Lightweight High Temperature High Entropy Alloy with Unmatched Strength, Ductility, Wear and Oxidation Resistance	DIAT Pune
		SPC_012	Shubhada Kar	Exploring FCC+L12 based medium entropy alloys for potential high temperature applications	CSIR-NML, Jamshedpur
		PMA_009	Sudhansu Maharana	Effect of Ti addition on strengthening and deformation mechanism of Ni-rich high entropy alloy synthesized via spark plasma sintering: An experimental and atomistic approach	IIT-Kharagpur
		BSF_067	D. Spandana	Designing High entropy Shape Memory Alloys: Leveraging High-Entropy Alloy Principles	DRDO Hyderabad
		CEB_041	Sugavaneshwar M P	Study of electrocatalytic behaviour of FeCoNiAlTi based high entropy alloys for water splitting	DIAT Pune
MBA Class Room-2 (M3)	**Failure Analysis (FAN-3)**	**Invited Lecture**	**Prof. K. Padmanabhan**	**Novel Interfacial Characterization Methods and Failure Analysis In Fibre Reinforced Composites**	**VIT Vellore**
		FAN_016	Deepak Khandelwal	Eliminating Cracking Issues during Forming in DP780 grade of Cold Rolled Steel	JSW Steel Limited, Vijayanagar Works
		FAN_024	K Padma Sri	Failure Analysis of CBC Coupler Shank at RMHS Plant	Tata Steel Ltd., Kalinganagar
		FAN_035	Anmol Bakshi	Study on damage initiation during deformation in metallic alloys	IIT-Kharagpur
		FAN_040	R.C.Prasad	Fracture Mechanics based Studies of Hydrogen Embrittlement : Some Case Studies of Failures	College of Engineering & Technology, Mumbai
		FAN_047	Shantanu Jana	Creep crack growth behaviour of 316L austenitic stainless steel at 873 and 923 K	Jadavpur University Kolkata
		FAN_060	Y Narender	Failure Analysis Of Inter Shaft Bearing Of Aero Engine	DRDO Hyderabad
		FAN_074	V. Venkatesh	Analysis of failure in compressor blades of a helicopter engine	CSIR, Bangalore
		FAN_079	Santhoshkumar R	Metallurgical analysis of failure observed on 15-5PH stainless steel fixture during hydro pressure test	Liquid Propulsion Systems Centre, ISRO, Trivandrum
		FAN_075	Vaisakhi Nandi,	Failure Analysis of Weldment crack in Exhaust Duct Assembly of Jet Fuel Starter Unit	HAL Bangalore
MBA Training Hall (M4)	**Corrosion, Electrochemistry, Batteries and Fuel Cells (CEB-Corrosion)**	**Invited Lecture**	**Dr. G S Mahobia**	**Metal dusting – a form of corrosion in high carbon activity environment**	**IIT-BHU**
		CEB_020	Ch. Jagadeeswara Rao	Corrosion Evaluation of Sanicro-25 in EuCl3-LiCl-KCl Molten Salt by Electrochemical Techniques for Pyrochemical reprocessing applications	IGCAR Kalpakkam
		CEB_061	R Bheekya Naik	Effect of microstructure morphology on corrosion behavior of high carbon wire rods used as reinforcement in concreate structure.	NIT-Raipur
		CEB_096	Nemai Chandra Gorain	Development of Ultra-High Strength Corrosion Resistant Uncoated Non-Stainless Steel	Tata Steel Ltd.
		CEB_056	Sandeep Kushwaha	Corrosion Resistance and Cut Edge Protection Performance of Coated Steel	JSW Steel Limited, Vijayanagar Works
		CEB_033	N.P. Mohanraj	Effect of alloying on corrosion and toxicological properties of austenitic stainless steels	Salem Steel Plant
		CEB_084	Praveen Guruprasanna	Effect of Surface Finish on the Corrosion Resistance of Stainless Steels	JSL, Hisar

		MSD_058	V. M. Nimbalkar	Laser Surface Alloying Assisted Fe-Based Bulk Amorphous Powder Coating: Wear, and Corrosion Study	Naval Materials Research Laboratory, DRDO
		CEB_086	Kapil Agrawal	Corrosion Analysis and Mitigation plan for Sour Gas Pipelines	JSW Steel Limited, Vijayanagar Works