

Theme: Raw Materials

Session 1 (Hall 1) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Dr Asim Kumar Mukherjee	Tata Steel
14:30 - 15:00	Keynote-1	Technological advances in meeting the Challenges of provisioning metals for sustaining societal development	Prof. Khanindra Pathak	IIT Kharagpur
15:00 - 15:30	Keynote-2	Advanced modelling and simulation of comminution using the Discrete Element Method	Prof. Luís Marcelo Tavares	Federal University of Rio de Janeiro
15:30 - 15:45	Speaker-1	Improving Ball mill performance by optimising the Sizing cyclone for reducing the recirculation loads	Ratnakar Bonda	JSW Steel Limited
15:45 - 16:00	Speaker-2	Characterization of Suitable Backfill Material and Filling Technique for Pumped Slurry Blind Backfilling in Underground Coal Mines	Rohot Roy	IIT Kharagpur
16:00 - 16:15	Speaker-3	Blending, Processing and Pelletization of Low Grade Iron Ore: The JSW Context	Shyam Sundar Yadav	JSW Steel Limited
16:15 - 16:30	Speaker-4	New opportunities for recycling LD sludge in an integrated steel plant	Amit Kumar	Tata Steel
16:30 - 16:45	BREAKOUT ROOM			

Session 2 (Hall 1) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Surendra Biswal	Tirupati Graphene and MRC, Bhubaneswar
16:45 - 17:15	Keynote-1	Process intensification in the separation of fine minerals	Prof. Kevin Galvin	University of Newcastle
17:15 - 17:30	Speaker-1	To enhance the operational efficiency of blast furnaces through standardization of fine coal characterization	Vijay Tiwari	Tata Steel
17:30 - 17:45	Speaker-2	CFD modelling of flow of slurry through Pipelines	Sachin D Raj	Tata Steel
17:45 - 18:00	Speaker-3	Characterisation studies on iron ore pellet concentrate fines for feasibility of pressure filtration test	Ratnakar Bonda	JSW Steel Limited
18:00 - 18:15	Speaker-4	Wollastonite (CaO.SiO ₂) as a CaO source in Iron Ore Pellet Making	Shaik Mahaboob Basha	Tata Steel
18:15 - 18:30	Speaker-5	Enhancement in Fe(%) in Iron Ore Pellets & Reduction of Bentonite addition by using Organic Binder	Pyarilal S	JSPL, Barbil, Odisha

18:30 - 18:45	Speaker-6	Study on effect of coal blend dilatation on coke quality and oven safety	Deepak Kumar	Coke Plant, Tata Steel
18:45 - 19:00	BREAKOUT ROOM			

Session 3 (Hall 1) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. S Bhattacharya	ISM Dhanbad
8:30 - 9:00	Keynote-1	Bulk Solids in Iron and Steel Making Industry: Storage, Flow and Handling	Prof. Bin Chen	University of Newcastle
9:00 - 9:30	Keynote-2	New Horizons for CO ₂ Utilization	Prof. S. Komar Kawatra	Michigan Tech
9:30 - 9:45	Speaker-1	Feasibility study on installation of 350 TPH coal handling plant in Kathautia Opencast Coal Mine: An overview on moisture reduction	Arunabha Duari	Hindalco Industries
9:45 - 10:00	Speaker-2	Optimisation of Coke making Operations to reduce Coke spillages	Abhi Anant Kinlekar	JSW Steel Limited
10:00 - 10:15	Speaker-3	Implementation of Coal Quality Management System (CQMS) in Kathautia Opencast Coal Mine (KOCCM)	Rahul Mitra	Hindalco Industries
10:15 - 10:30	Speaker-4	Rheological Properties of individual coals: A real time data used for blend formulation, case study of Rourkela Steel Plant	S Mishra	RDCIS, SAIL
10:30 - 10:45	BREAKOUT ROOM			

Theme: Industry 4.0

Session 1 (Hall 2) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Mr. Manish Kumar Singh	Tata Steel
14:30 - 15:00	Keynote-1	'Whither AI: Artificial or Augmented Intelligence? Can we do more'	Prof. Ravi Gudi	IIT Bombay
15:00 - 15:30	Keynote-2	Application of AI lifts quality control to the next level	Mr. Lucas Corts	Smart Steel Technology, Germany
15:30 - 15:45	Speaker-1	Dynamic online estimation of chaos control parameters from process data of a high temperature chemical reaction system	Prof. B Deo	IIT, Bhubaneswar
15:45 - 16:00	Speaker-2	Winning customer trust through end to end optimization modelling by leveraging Data science	Avijit Halder	Tata Steel
16:00 - 16:15	Speaker-3	Digital Transformation of Sinter Plant-III, Bhilai Steel Plant	Akhil U K	SAIL
16:15 - 16:30	Speaker-4	To estimate the energy consumption of CONARC® taking into account feed mix properties using Statistical Modelling	Parul K	JSW
16:30 - 16:45	BREAKOUT ROOM			

Session 2 (Hall 2) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Mr. Praveen V Thampi	Tata Steel
16:45 - 17:00	Speaker-1	A proven technology to measure path of burden trajectory falling from rotary chute of bell less top system in Blast Furnace	Ujjwal Chaudhari	Tata Steel
17:00 - 17:15	Speaker-2	Coal Blend Optimization and Simulation using Machine Learning to Predict Coke Quality	Satish Agarwal	Affine Analytics
17:15 - 17:30	Speaker-3	Computer Vision Based Machine Learning (CVML) Technology to enhance Production in Steel Melting Shop	Gedela Praveen	JSW
17:30 - 17:45	Speaker-4	Steel ladle life prediction model building by optimising operating parameters	Goutam Ghosh	Tata Steel

17:45 - 18:15	Keynote-1	Digitalization for Advanced Steel Manufacturing through Simulation, Visualization and Machine Learning	Prof. Chenn Q. Zhou	Director, Steel Manufacturing Simulation and Visualization Consortium
18:15 - 18:45	Keynote-2	A new data/AI platform for accelerated materials innovation	Prof. Surya R Kalidindi	Georgia Institute of Technology, Atlanta, GA 30332
18:45 - 19:00	BREAKOUT ROOM			

Session 3 (Hall 2) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. B. Deo	IIT Bhubaneswar
8:30 - 9:00	Keynote-1	Hybrid Digital Twins – The role of physics informed machine learning	Dr. Srinivas Mohan	Ansys
9:00 - 9:30	Keynote-2	Implementing Industry 4.0 & Beyond	Raghudeep Madineni	Ather Energy
9:30 - 9:45	Speaker-1	Innovative Wireless Technology in SAIL Plants: Recent Efforts & Future Applications	Anup Prasad	SAIL
9:45 - 10:00	Speaker-2	Dynamix Model to optimize Hot metal in Steel Melting Shop	Rohit Singh	JSW
10:00 - 10:15	Speaker-3	Machine Learning Techniques for Fractographic Analysis	Vartika Pathak	IIT Indore
10:15 - 10:30	Speaker-4	Prevention of Rank-A Customer complaints through use of digital signature of mill process parameters	Ramesh Shankar	Tata Steel
10:30 - 10:45	BREAKOUT ROOM			

Session 4 (Hall 2) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Mr. Avtar Singh Saini	Tata Steel
10:45 - 11:15	Keynote-1	Importance of Data and AI in Manufacturing Ecosystem	Manas Agarwal	Ansys
11:15 - 11:45	Keynote-2	Digitalization and Industry 4.0	Kishan Sreenath	Volvo Group
11:45 - 12:00	Speaker-1	Defect Detection in Production Line using AI Computer Vision Model	Ravi Teja	Affine Analytics
12:00 - 12:15	Speaker-2	Identification of short rebars on sorting table using novel image processing technique	Pankaj Kumar	Tata Steel
12:15 - 12:30	Speaker-3	Galvanies: Unique model to improve surface quality in continuously galvanised product	Dinesh Kumar	Tata Steel
12:30 - 12:45	Speaker-4	Fully automatic light up of Twin Shaft lime kiln	Abhishek Choudhary	Tata Steel
12:45 - 13:00	BREAKOUT ROOM			

Theme: Products**Session 1 (Hall 3) <Date: 14.11.2021>**

Timing		Name	Organization
	Session Chair	Prof. S Sankaran	IIT Chennai
14:30 - 15:00	Keynote-1	Phase transformations in high strength steels	Prof. Shiv Brat Singh IIT Kharagpur
15:00 - 15:15	Speaker-1	Optimization of mechanical properties of SAE 9254 through heat treatments	Mohsin Hasan University of Hyderabad
15:15 - 15:30	Speaker-2	Development of fire-resistant steel structurals at Durgapur Steel Plant	P. Saravanan SAIL
15:30 - 15:45	Speaker-3	Synergistic Effect of Alloy design and Hot Rolling Parameters on Enhancing DWTT properties of X70 line pipe steel	Karthik Vasan Badrinarayan AMNS
15:45 - 16:00	Speaker-4	Next Generation Ultra High Strength Hot forming Steel	Nemai Gorain Tata Steel
16:00 - 16:15	Speaker-5	Effect of Composition and Microstructure on Fracture Toughness of Hot Rolled High Strength Steels	Prabhat Kumar Rai JSW
16:15 - 16:30	Speaker-6	Development of SAE9254 Wire Rods for Suspension Spring Processing Through Induction Heating and Water Quenching Process	T Bhaskar TSLP
16:30 - 16:45	BREAKOUT ROOM		

Session 2 (Hall 3) <Date: 14.11.2021>

Timing		Name	Organization
	Session Chair	Dr. R.N. Singh	BARC
16:45 - 17:15	Keynote-1	Additive manufacturing of metallic materials: Processing-microstructure-property relationship	Prof. Satyam Suwas IISc, Bangalore
17:15 - 17:30	Speaker-1	Establishing processing-microstructure-texture-mechanical behaviour paradigm in DP600 steel	Deepak Paliwal IIT Kanpur
17:30 - 17:45	Speaker-2	Bridging microstructure and crystallography with the micromechanics of cleavage fracture in a lamellar pearlitic steel	Rakesh Kumar Barik IIT Kharagpur
17:45 - 18:00	Speaker-3	Study on cold formability of beta titanium alloy	Karthick Surya VSSC
18:00 - 18:15	Speaker-4	Development of Dump Mesh Component for Missile Applications using PBF based 3D Printing Technology	Srinivas DRDO

18:15 – 18:30	Speaker-5	Development of high strength weather-resistant cold rolled coils for solar photovoltaic panel application	Bhawna Khalkho	SAIL
18:30 – 18:45	Speaker-6	Hot deformation studies of non-oriented electrical steel through gleeble	Arbind	JSW
18:45 - 19:00	BREAKOUT ROOM			

Session 3 (Hall 3) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Vinod Kumar	RDCIS, Ranchi
8:30 - 9:00	Keynote-1	On production, processing, properties and applications of hot rolled HSLA steels	Dr. Sujoy S. Hazra	JSW
9:00 - 9:15	Speaker-1	Effects of multiscale porosity and pore interconnectivity on in vitro and in vivo degradation and biocompatibility of Fe-Mn-Cu scaffold	Santanu Mandal	IIT Kharagpur
9:15 - 9:30	Speaker-2	Effect of aging temperatures on pitting corrosion behaviour of hot rolled high nitrogen high manganese austenitic stainless steels in natural seawater condition	Krishna Kumar Kanagarajan	PSG Coimbatore
9:30 - 9:45	Speaker-3	Deformation Behaviour of EN25B Forged Steels: Effect of Non-metallic Inclusions	Vasundhara Singh	IIT Kharagpur
9:45 - 10:00	Speaker-4	COLORS of SCALE: A fundamental study of Black and Red scale defect in hot rolled products	Sachin Pawar	Tata Steel
10:00 – 10:15	Speaker-5	Approach to Develop end to end Solution in API X70 Grade Line Pipe Steel	Pradeep Agarwal	JSW
10:15 – 10:30	Speaker-6	Cost effective Process Route for development of 430 Ferritic Stainless Steel	Riya Kumari	JSL
10:30 - 10:45	BREAKOUT ROOM			

Session 4 (Hall 3) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. Debalay Chakrabarty	IIT Kharagpur
10:45 - 11:00	Speaker-1	Microstructure and Mechanical Properties of Additively Manufactured Al2O ₃ with Different Heat Treatments	Saurabh Kumar	IISC Bangalore
11:00 - 11:15	Speaker-2	Effect of Purging Gas on Ambient and Cryogenic Properties of AISI 321 weldments	Neethu N	IPRC
11:15 - 11:30	Speaker-3	Influence of processing parameters on formability characteristics of Cold Rolled and Annealed Extra Deep Drawing steel sheet	Deepa M	SAIL
11:30 - 12:45	Speaker-4	Yield Improvement of Investment casting through Optimization of Gating and Riser system for aerospace applications	Elamurugu S	VSSC
11:45 - 12:00	Speaker-5	Metallurgical, Technological and Heat Treatment requirement for Wheel Rolling to produce forged Rolled Rail Wheels - A step towards Atmanirbhar Bharat	Neeraj Kumar	MECON
12:00 - 12:15	Speaker-6	Effect of scanning speed on eddy current inspection of 304L tubes	Arun Dwivedi	VSSC
12:15 - 12:30	Speaker-7	Fatigue and Pitting Failure of Blast Furnace Skip Winch Gear	Naveen Kumar	JSW
12:30 – 12:45	Speaker-8	Development of Wire Rods for Higher Torsion & Reverse Bend Properties in Motor Tyre Bead Wires	Sandeep Kumar	JSPL
12:45 - 13:00	BREAKOUT ROOM			

Theme: Non-Ferrous Metals

Session 1 (Hall 4) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Prof. Arghya Majumder	Kazi Nazrul University, Asansol
14:30 - 15:00	Keynote-1	Developments in Extractive Metallurgy of Titanium and Magnesium	Dr. Nagesh CHRV Changati	DMRL, Hyderabad
15:00 - 15:15	Speaker-1	Non-conventional reductive acid leaching of manganese from low grade ore using corn husk	Barsha Dash	CSIR-IMMT, Bhubaneswar
15:15 - 15:30	Speaker-2	Development of Bioleaching in Nickel Recovery from Laterite Ores	Prof. L.B. Sukla	Biofuels and Bioprocessing Research Center, ITER-Bhubaneswar
15:30 - 15:45	Speaker-3	Achieving benchmark current efficiency in Zinc Hydro smelter cell house	Subrata Mondal/Vijay Rana	Hindustan Zinc Limited
15:45 - 16:00	Speaker-4	Production of Chemical Manganese Dioxide from Low Grade Manganese Ore	Saurabh Shekhar	CSIR-NML, Jamshedpur
16:00 - 16:15	Speaker-5	Modelling of Heap Leaching	G.V.A. Chaitanya	IISC, Bangalore
16:15 - 16:30	Speaker-6	Extraction of copper from chalcopyrite concentrates via surfactant assisted chlorination process	R. Choudhari	CSIR-NML, Jamshedpur
16:30 - 16:45	BREAKOUT ROOM			

Session 2 (Hall 4) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Prof. Ashok Kumar	NIT Jamshedpur
16:45 - 17:15	Keynote-1	Translational Materials Research in Energy Storage Technologies	Dr. Tata Narasinga Rao	ARCI, Hyderabad
17:15 - 17:30	Speaker-1	Effect of diffusion Pt-Aluminide and overlay NiCoCrAlY bond coats on tensile properties of DS Ni-base superalloy CM247LC	Chandrakant Parlikar	DMRL, Hyderabad
17:30 - 17:45	Speaker-2	Modelling microstructural evolution during homogenization of AA3003 aluminum alloys	Anurag	TCS, Pune
17:45 - 18:00	Speaker-3	Multiscale simulations of deformation behaviour of Ni based alloy 690 considering grain boundary effect	S. Chandra	BARC

18:00 – 18:15	Speaker-4	Influence of microstructure and texture on the in-vitro bio-corrosion behavior of hard-plate hot forged Mg-4Zn-0.5Ca-0.16Mn (wt. %) alloy	Partha Duley	IIT Kharagpur
18:15 – 18:30	Speaker-5	Study on oxidation kinetics of Uranium & U-10Mo alloy in air	R. Rakesh	BARC
18:30 – 18:45	Speaker-6	Direct energy deposition of a low modulus TNZT alloy for biomedical applications	Saurabh Kumar Gupta	IISC, Bangalore
18:45 – 19:00	Speaker-7	Effect of ageing on coarsening kinetics, solute partitioning, misfit and low cycle fatigue properties in Haynes 282	Shreya Mukherjee	IIT Kharagpur
19:00 – 19:15	Speaker-8	Mechanical behavior of Ti-Ni-Fe & Ti-Fe-Co based B2 Pseudo Binary intermetallic at different length scales	Subha Sanket Panda	IIT Kanpur
19:15 – 19:30	Speaker-9	Effect of ODS on the Transverse Rupture Strength and Compressive Strength of W-Ni-Cu Heavy Alloys	Navindra Shekhar Shakunt	IIT Kanpur
19:30 – 19:45	Speaker-10	Processing of FCC Titanium through Hot Rolling	Vaibhav Gaur	CSIR-NML, Jamshedpur
19:45 – 20:00	Speaker-11	Preparation of Neodymium Iron Boron Alloy (Nd ₂ Fe ₁₄ B) by Molten Salt Aided Metallothermic Reduction Diffusion Technique	R.S. Prasannakumar	CSIR-Central Electrochemical Research Institute
20:00 - 20:15	BREAKOUT ROOM			

Session 3 (Hall 4) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair			
8:30 - 9:00	Keynote-1	Additive Manufacturing of non-ferrous alloys – Prospects and Challenges	Dr. Govind	VSSC
9:00 - 9:15	Speaker-1	Effect of pre weld heat treatment conditions on mechanical properties of inconel x 750 alloy weldments	K. Ganeshpandiyam	ISRO
9:15 - 9:30	Speaker-2	Study on role of RE elements addition in Deformation Behaviour of Magnesium alloy	Gaurav Gupta	IIT Kanpur
9:30 - 9:45	Speaker-3	Effect of welding process on microstructure, mechanical properties and corrosion behaviour of AA2519 Al-alloy	G Siva Prasad	Andhra University
9:45 - 10:00	Speaker-4	A Study on Strength and Microstructure Properties of Welded Russian Equivalents of Rene 41 and 12-10PH steel	Vishwajit Kumar	ISRO
10:00 – 10:15	Speaker-5	Effects of in situ Al ₃ Ti Composite Particles on Aluminium Foams	M. Rakesh	IIT Bombay
10:15 – 10:30	Speaker-6	Development of High Entropy Nano Slag Particulates reinforced AA7075 Nano Composites	J. Manasi Esther	Andhra University
10:30 - 10:45	BREAKOUT ROOM			

Session 4 (Hall 4) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. L.B. Sukla	Biofuels and Bioprocessing Research Center (BBRC)
10:45 - 11:00	Speaker-1	Studies on production of ferro-moly alloy from spent catalyst residues	Sanjay Agarwal	CSIR-NML, Jamshedpur
11:00 - 11:15	Speaker-2	Reclamation of lithium, cobalt and manganese from spent toys batteries	Pankaj Kumar Choubey	CSIR-NML, Jamshedpur
11:15 - 11:30	Speaker-3	Removal of Barium Sulphate Mould Wash from Copper Anode to Improve Electrorefining Operations	Lakshmikanth Reddy	Hindalco Industries Ltd
11:30 - 12:45	Speaker-4	Development of feasible process for the recovery of precious metals from e-waste	Rekha Panda	CSIR-NML, Jamshedpur
11:45 - 12:00	Speaker-5	Possibility of Recovery and Reuse of Filter Aid in Bayer Plant	Amol U. Mankar	Hindalco Industries Ltd
12:00 - 12:15	Speaker-6	Chemical pre-treatment of integrated circuits (ICs) of discarded mobile phone to get high grade PMs concentrate	Om Shankar Dinkar	CSIR-NML, Jamshedpur
12:15 - 12:30	Speaker-7	Electrometallurgical route of extraction of precious metals from e-waste	Dipali	NIT Jamshedpur
12:30 – 12:45	Speaker-8	Recycling of scrap Nd-Fe-B permanent magnets to reclaim REMs Salt	Nityanand Singh	CSIR-NML, Jamshedpur
12:45 - 13:00	BREAKOUT ROOM			

Theme: Energy, Environment and Waste Utilization

Session 1 (Hall 5) <Date: 14.11.2021>

Timing		Name	Organization
	Session Chair	Dr. Supriya Sarkar	Tata Steel
14:30 - 15:00	Keynote-1	Membrane S&T in Energy, Environment & water utilization	Dr. Ulhas Kharul CSIR-National Chemical Laboratory, Pune
15:00 - 15:30	Keynote-2	Advanced Technology for Wastewater Sludge Treatment: Thermal Hydrolysis Process (THP)	Dr. Indra N Mitra Cambi (Europe)
15:30 - 16:00	Keynote-3	Graphene composite based approaches for water remediation and sensing	Dr. Shobha Shukla IIT Bombay
16:00 - 16:15	Speaker-1	Introduction of Improved Bottom Quenching Facility for Combined Coke Quenching in Quenching Wagon	Ujjal Kumar Mondal R&D, Sail
16:15 - 16:30	Speaker-2	Efficient Reutilization of Solid Waste at JSPL, Raigarh	Rupak Ranjan Jindal Steel & Power Limited, Raigarh, Chhattisgarh
16:30 - 16:45	BREAKOUT ROOM		

Session 2 (Hall 5) <Date: 14.11.2021>

Timing		Name	Organization
	Session Chair	Prof. Kamalakannan Kailasam	Institute of Nano Science and Technology
16:45 - 17:15	Keynote-1	Recovery of value-added materials from industrial and domestic waste	Dr. Menaka Jha Institute of Nano Science and Technology
17:15 - 17:30	Speaker-1	Effect of Extrusion on the Physical and Mechanical Properties of Briquette made with Composite Fines of Blast furnace Flue dust and Iron ore Fines	Susanta Pramanik NIT Durgapur
17:30 - 17:45	Speaker-2	Utilization of EAF slag in concrete in place of natural aggregate	Prerana Kotagi Arcelor mittal Nippon steel India

17:45 - 18:00	Speaker-3	Enhancing solid waste utilization through sintering operation	M.K. Singh	SAIL
18:00 – 18:15	Speaker-4	Use of LD slag in BOF Converters of Rourkela Steel Plant to increase Heat Weight and Reduce Total Metallic Input	Bibhudatta Mishra	SAIL
18:15 - 18:30	BREAKOUT ROOM			

Session 3 (Hall 5) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Shobha Shukla	IIT Bombay
8:30 - 9:00	Keynote-1	Metals for Solar Energy Harvesting and Carbon dioxide Utilization	Dr. Vivek Polshettiwar	Tata Institute of Fundamental Research
9:00 - 9:30	Keynote-2	To what extent can biocarbon replace coke in the blast furnace?	Dr. Colin Snape	EPSRC Centre of Doctoral Training in CCS and Cleaner Fossil Energy
9:30 - 10:00	Keynote-3	Enhanced Atomic Ordering and Nanostructuring Boost the Thermoelectric Performance to an Ultra-high Value	Dr. Kanishka Biswas	JNCASR, Bangalore
10:00 - 10:15	Speaker-1	Bauxite residue management by leveraging technical advancement for optimal land usage towards Sustainable, Environmental friendly operations	Vasudev Ghanta	Utkal Alumina International Ltd.
10:15 - 10:30	Speaker-2	Production of bio-coal by the hydrothermal carbonization of biomass	Piyali Dhar	Tata Steel
10:30 - 10:45	BREAKOUT ROOM			

Session 4 (Hall 5) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Vivek Polshettiwar	Tata Institute of Fundamental Research
10:45 - 11:15	Keynote-1	Low Emission Iron and Steel Making	Dr. Sharif Jahanshahi	Meta-Logical Solutions
11:15 - 11:45	Keynote-2	Carbon Capture and Utilization in Metal Industry – Outlook and Implications	Dr Malti Goel	Climate Change Research Institute (CCRI)
11:45 - 12:15	Keynote-3		Mr. Aniruddha Sharma	Carbon Clean Solutions
12:15 - 12:30	Speaker-1	Improved Burner Efficiency of Soaking Pits at Alloy Steel Plant, Durgapur	I.N.P. Gupta	SAIL
12:30 - 12:45	Speaker-2	Energy Efficient Composite Lining for BF Tuyere stock System	Aman Kumar	Tata Steel
12:45 - 13:00	BREAKOUT ROOM			

Session 5 (Hall 5) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Menaka Jha	Institute of Nano Science and Technology
13:30 - 14:00	Keynote-1	Nanoporous Heptazine based Polymeric Materials for Renewable Energy Applications: Our Technological Efforts	Prof. Kamalakannan Kailasam	Institute of Nano Science and Technology
14:00 - 14:30	Keynote-2	Covalent Organic Frameworks and Supramolecular Nano-Synthesis	Prof. Rahul Banerjee	Indian Institute of Science Education and Research (IISER) Kolkata
14:30 - 14:45	Speaker-1	Cold briquetting of CRM oily sludge for in house utilisation	Sivalingaraju Barisetty	JSW
14:45 - 15:00	Speaker-2	Studies on replacement of Sodium Hypochlorite with other chemicals for Cyanide reduction in Coke Oven effluent	S.N. Singh	R&D, SAIL
15:00 – 15:15	Speaker-3	Dissolution of Rare Earths Coal Fly Ash using Deep Eutectic Solvents	Ram Karan	BARC

15:15 - 15:30

BREAKOUT ROOM

Theme: Advances in Materials Science and Technology

Session 1 (Hall – 6) <Date:14.11.2021>

Timing			Name	Organization
	Session Chair		Prof. N.K. Mukhopadhyaya	IIT Varanasi
14:30- 15:00	Keynote-1	Excitements and Challenges in High Entropy Alloy Research	Prof. B. S. Murthy	IIT Hyderabad
15:00 - 15:15	Speaker-1	Constitutive modelling of grain boundary strengthening characteristics in Complex Concentrated Alloys	Saumya R Jha	IIT Kanpur
15:15 - 15:30	Speaker-2	Polarization Light Microscopy for Characterizing Micro-Texture in Unidirectionally Rolled Ti64 Plate – Structure Property Correlations	Barna Roy	Pratt-Whitney
15:30 - 15:45	Speaker-3	Sorption studies of cerium as surrogate material for plutonium using nitrogen doped graphene nanowalls	Sri Datta Chaitanya	BARC
15:45 - 16:00	Speaker-4	Effect of Microstructural Constituents on Yield Strength in Ultrafine-grained Ni-Fe alloy	Shavi Agarwal	IISC Banglore
16:00 - 16:15	Speaker-5	Effect of process parameters on evolution of CSL boundaries in 316LN SS for enhancing high temperature mechanical properties	D P Rao Palaparti	IGCAR
16:15 - 16:30	Speaker-6	Simulation guided grain refinement studies on as-cast multicomponent alloy	Rahul Kumar	IITISM Dhanbad
16:30 – 16:45	BREAKOUT ROOM			

Session 2 (Hall – 6) <Date:14.11.2021>

Timing			Name	Organization
	Session Chair		Dr. S. Tarafder	
16:45 - 17:00	Speaker-1	Microstructural Characterization to understand the high temperature mechanical response of Additively manufactured IN718	Dheepa Srinivasan	Pratt-Whitney
17:00 - 17:15	Speaker-2	Elucidating Laser Additive Manufacturing of compositionally graded Stainless Steel-Copper bulk Structures	S Yadav	RRCTA Indore
17:15 - 17:30	Speaker-3	Design Optimization of PLA (Polylactic Acid) Lattice in 3d printing (FDM)	Rahul Jain	NIT Raipur
17:30 - 17:45	Speaker-4	Heat treatment studies on Inconel 718 alloy processed by selective laser melting (SLM) technique	S. Anurag	IIT Madras
17:45 - 18:00	Speaker-5	Post processing effects on Additively Manufactured Inconel 718 Superalloy	Subhendu Naskar	IIT Hyderabad
18:00 - 18:15	Speaker-6	Comparison of corrosion behavior of Additively manufactured Ti-6Al-4V alloys having different meso structure	Tulika Dixit	IIT Hyderabad

18:15 – 18:45	Keynote-1	An introduction to the vast virtual world of additive manufacturing	Prof. T. Debroy	Penn State
18:45 – 19:00	BREAKOUT ROOM			

Session 3 (Hall – 2) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. Amredra Kumar Singh	IIT Kanpur
13:30 - 13:45	Speaker-1	Computation of elastic constants and generalized stacking fault energy of pure metals and alloys using first principal calculations	Mukesh Kumar Das	IIT Kanpur
13:45 - 14:00	Speaker-2	A novel mean field dislocation density reliant physical model to predict the creep behavior of 304HCu austenitic stainless steel	Surya D. Yadav	IITBHU
14:00 - 14:15	Speaker-3	Development of New Ni-Ti based Shape Memory Alloys using Machine Learning Approach	KNS Pavan Kumar	DRDO
14:15 - 14:30	Speaker-4	Modelling Hole Expansion Ratio of Dual-Phase Steels	Rohit K Yadav	IIT Bombay
14:30 - 14:45	Speaker-5	Traction separation curve for Ni base hardfacing alloy-substrate interface grain boundary by ab initio calculations	Prince Joseph	IGCAR
14:45 - 15:00	Speaker-6	Modelling Microstructure Evolution during Recrystallization using Cellular Automata	S. G. Nagarajan	IIT Bombay
15:00 – 15:30	Keynote-1	ICME workflows and the role of microstructure simulations	Prof. Gandham Phanikumar	IIT Madras
15:30 – 15:45	BREAKOUT ROOM			

Session 4 (Hall – 2) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. G.G. Roy	IIT Kharagpur
15:45 - 16:00	Speaker-1	Study on metallurgical and mechanical properties of EB welded heat treated super martensitic stainless steel (CA6NM) for cryogenic applications	E. Murugan	NIT Trichy
16:00 - 16:15	Speaker-2	A Study on Electron Beam Welding of Hermetic Feed Through Connectors with Pressure Vessels	Ujjain Vaidya	ISRO
16:15 - 16:30	Speaker-3	Integrated experimental and simulation study to modify the weld thermal cycle in Inconel 718 GTA welds	Shambhu Kushwaha	IITISM Dhanbad

16:30 - 16:45	Speaker-4	Predicting cracking susceptibility in welded components using computational modeling	Harris Daniel	Paanduv Applications Private Limited
16:45 - 17:00	Speaker-5	Influence of Welding Processes on Microstructure and Tensile properties of Weld joints of Beta (Titan-44) alloy	J. Jhansi	MGIT Hyderabad
17:00 - 17:15	Speaker-6	Microstructure characterization and bonding evaluation of zirconium-titanium- stainless steel trimetallic clad joints using explosive welding	Kannan Ramaswamy	NIT AP
17:15 - 17:45	Keynote-1	Joining of advanced materials for defence applications-techniques and challenges	Dr. G. M. Reddy	DMRL
17:45 - 18:00	BREAKOUT ROOM			

Session 5 (Hall – 4) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. P. P. Bhattacharya	IIT Hyderabad
13:30 - 13:45	Speaker-1	Experimental Determination of Quaternary Isotherm of Fe-Ni-Co-Cu by Diffusion Couple Technique	B. Samantaray	IIT Kanpur
13:45 - 14:00	Speaker-2	Low temperature densification of ZrB ₂ through spark plasma sintering using milled Zr+B as sintering aid	Revathi Gorle	IIT Nagpur
14:00 - 14:15	Speaker-3	Phase stability of a novel HCP high entropy alloy	Sushil Yebaji	IIT Hyderabad
14:15 - 14:30	Speaker-4	Effect of Si addition on phase evolution and microstructure in Y ₂ O ₃ dispersed Tungsten (W) and W-based alloys synthesized via mechanical alloying and consecutive conventional sintering	Vadla Suman	NIT Rourkela
14:30 - 14:45	Speaker-5	Impact of extrinsic and intrinsic factors on the indentation behavior of a dual phase steel-a finite element modeling study	Soudip Basu	IIT Bombay
14:45 - 15:00	Speaker-6	Microstructure and properties of cost-effective AlCrFe ₂ Ni ₂ high entropy alloy processed by severe cold-rolling and annealing	B. Tripathy	IIT Hyderabad
15:00 - 15:15	Speaker-7	Statistical analysis on single versus successive pop-ins in nanoindentation tests of Zr-based bulk metallic glass	Priyanka Saini	IIT Delhi
15:15 - 15:30	Speaker-8	Phase Evolution of AlCoCrFeNi High Entropy Alloy	Sahil Rohilla	IIT Hyderabad
15:30 - 15:45	BEAKOUT ROOM			

Session 6 (Hall – 4) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Bikash Maji	BARC
15:45 - 16:00	Speaker-1	A novel method to create a gradient microstructure in OFHC copper	Deepak Paliwal	IIT Kanpur
16:00 - 16:15	Speaker-2	Freestanding High Entropy Alloy Thin Film	R. K. Dehury	IIT Gandhinagar
16:15 - 16:30	Speaker-3	Application of Body-diagonal diffusion couple technique and Square root diffusivity approach to investigate interdiffusion behaviour in quaternary and quinary systems	Vivek Verma	IIT Kanpur
16:30 - 16:45	Speaker-4	On effect of electron concentration, energy level, and atomic mismatch on quantitative phase prediction in high entropy alloys (HEAs)	Ayush Sourav	DIAT Pune
16:45 - 17:00	Speaker-5	Phase stability and magnetic properties of Co ₂ FeAlMnSi HEA	D. L. Shashank	IIT Hyderabad
17:00 - 17:15	Speaker-6	Segregation of alloying elements at prior austenite grain boundaries in boron added modified 9Cr-1Mo steel studied by atom probe tomography	S. Sampreeth	IGCAR
17:15 - 17:30	Speaker-7	Microstructure evolution of AlCoCrFeNi high entropy alloy during electrospark deposition	R. K. Bhupal	IIT Hyderabad
17:30 - 17:45	Speaker-8	Microstructure, Texture and Hardness evolution in high pressure torsion of Fe ₄₀ Mn ₄₀ Co ₁₀ Cr ₁₀ High Entropy Alloy	K. Kishore	Tata Steel
17:45 – 18:00	BEAKOUT ROOM			

Session 7 (Hall – 5) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. C.P. Paul	
15:45 - 16:00	Speaker-1	Correlation Between Bending and Uniaxial Creep in Additively Manufactured AlSi10Mg Alloy	S. P. Singh	IISC Bangalore
16:00 - 16:15	Speaker-2	Characterization of Additively Manufactured Aluminum Alloys using Ultrasonic-based Non-Destructive Testing technique	A. K. Dube	IISC Bangalore
16:15 - 16:30	Speaker-3	Microstructure and Mechanical Properties of Additively Manufactured Al ₂ O ₃ with Different Heat Treatments	Saurabh Kumar	IISC Bangalore
16:30 - 16:45	Speaker-4	Research and Experiments in Non-Destructive Testing	S. V. S. B. L. Sarma	Retired
16:45 - 17:00	Speaker-5	Simulation methodology for evaluating the role of surface roughness on the high cycle fatigue life of Additively manufactured IN718	D. K. Mahajan	IIT Ropar
17:00 - 17:15	Speaker-6	Grain size and grain boundary misorientation distribution effects on thermal stability of nanocrystalline materials	Srikant Gollapudi	IIT Bhubaneshwar
17:15 - 17:30	Speaker-7	Development of a Ring Tensile Test Technique for Small Diameter Tube	Ulaganathan	IGCAR

17:30 - 17:45	Speaker-8	On the differences in the shear band characteristics between a binary Pd-Si metallic glass and nanoglass	Abhinav Sharma	IIT Indore
17:45 – 18:00	BEAKOUT ROOM			

Session 8 (Hall – 6) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Arvind Sinha	CSIR-NML, Jamshedpur
8:30 - 9:00	Keynote-1	Emergence of Resorbable Magnesium Based Implant: Road ahead for India	Prof. Manoj Gupta	National University of Singapore
9:00 - 9:15	Speaker-1	Design and Development of High Entropy Alloy Coatings for Orthopaedic Implants	Burla Aditya	IIT Hyderabad
9:15 - 9:30	Speaker-2	Fabrication of Mg porous metal structure through vapor phase dealloying	Rakesh Behera	IIT Gandhinagar
9:30 - 9:45	Speaker-3	Fe-Mn-Cu alloy as a novel antibacterial biodegradable material	Santanu Mandal	IIT Kharagpur
9:45 - 10:00	Speaker-4	Laser shock peening of Nitinol at high laser power densities and high overlap ratio	T. R. Dora	IIT Bhubaneswar
10:00 - 10:15	Speaker-5	Fabrication and characterization of Mg-Ca biodegradable alloy by powder metallurgy	Y. L. Reddy	CSIR-IMMT
10:15 - 10:30	Speaker-6	Effect of Heat Treatment Temperatures on the Microstructure & Mechanical Properties of Lithium Disilicate Glass Ceramics in Dental Restorations.	S. S. Sawant	COEP Pune
10:30 – 10:45	BEAKOUT ROOM			

Session 9 (Hall – 6) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. S.B. Singh	IIT Kharagpur
10:45 - 11:15	Keynote-1	MATERIALS FOR DEFENCE SYSTEMS	Samir V Kamat	DRDO
11:15 - 11:30	Speaker-1	Studies on Structure and Texture Evolution in B-added Modified 9Cr1Mo (P91) Steel with varying Boron concentration	Akhil Nair	IGCAR
11:30 - 11:45	Speaker-2	Influence of cell geometry on impact response of closed cell Al foam	S. N. Sahu	DMRL

11:45 - 12:00	Speaker-3	Achieving isotropic elastic modulus and hardness in anisotropic Ti-6Al-4V alloy	K. N. C. Kumar	IIT Roorkee
12:00 - 12:15	Speaker-4	Relative effect of B and N concentrations on the microstructural stability and creep properties of modified 9Cr-1Mo steel	R. Reejesh	IIT Kharagpur
12:15 - 12:30	Speaker-5	Mechanical behaviour of ultrafine-grained SS304L produced by reversion of strain induced martensite.	Saurav Sunil	BARC
12:30 - 12:45	Speaker-6	Development of Ring Forgings of 11Cr-10Ni-2Mo-1Ti PH Martensitic Stainless Steel for Rocket Motor Application	Bhavanish Singh	MIDHANI
12:45 – 13:00	BEAKOUT ROOM			

Session 10 (Hall – 6) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Raghuv eer Singh	CSIR-NML, Jamshedpur
13:30 - 14:00	Keynote-1	Corrosion and its implications to Industry	Kallol Mondal	IIT Kanpur
14:00 - 14:15	Speaker-1	Effect of post-heat treatment on stress corrosion cracking behaviour of selective laser melted Inconel 718 alloy	Anoop S	VSSC
14:15 - 14:30	Speaker-2	Study on surface cracking and interfacial delamination of metallic coatings using a tension test	Deepesh Yadav	IIT Ropar
14:30 - 14:45	Speaker-3	Tribocorrosion Behaviour of Ultrafast Laser Surface Textured Ti-6Al-4V	M. Dileep	IIT Kharagpur
14:45 - 15:00	Speaker-4	Effect of process parameters on Co-deposition of Ni and Al in cold sprayed coatings of Ni/Al mixtures	T. Sivaji	IIT Madras
15:00 - 15:15	Speaker-5	Effect of annealing time on coating microstructure evolution and electrochemical behavior of galvanized interstitial-free steel	Harikrishna Kancharla	IIT Kanpur
15:15 - 15:30	Speaker-6	DC and Pulsed electrodeposition of Zn-Ni alloy coatings on IF steel substrate from acidic chloride baths	Rajdeep Mondal	Tata Steel
15:30 – 15:45	BEAKOUT ROOM			

Session 11 (Hall – 6) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Marur	Tata Steel
15:45 - 16:15	Keynote-1	Present and future trends of composites research and product in India	Prof. B. C. Ray	NIT Rourkela

16:15 - 16:30	Speaker-1	The Quest for High-Strength and High-Ductility Composite Materials	Ajay Kumar	IIT Patna
16:30 - 16:45	Speaker-2	Fabrication of MWCNTs reinforced iron metal matrix composite fabricated by conventional powder metallurgy: effect of wet milling and MWCNTs content	B. S. Meher	NIT Rourkela
16:45 - 17:00	Speaker-3	Thermo-Fisher-1	Anup Biswas	Thermo-fisher
17:00 - 17:15	Speaker-4	Carbon fibre reinforced zirconium diboride (C _f -ZrB ₂) ultra high temperature ceramic matrix composite	S. S. N. Murthy	DMRL
17:15 - 17:30	Speaker-5	NiAl Intermetallic Composite – A Review On Process Property Co-Relationship	Sujata Panda	VSSUT, Burla, Sambalpur
17:30 - 17:45	Speaker-6	Mean-Field Based Micromechanical Models to Investigate the Effect of Reinforcement Shape and Orientation on the Effective Electroelastic Properties of Polymer Composites with Orthotropic Matrix	Neelam Mishra	IEST Shibpur
17:45 - 18:00	Speaker-7	Failure Analysis of Stud of Finishing Mill in Hot Rolling Mill	Piyas Palit	TATA Steel
18:00 – 18:15	BEAKOUT ROOM			

Session 12 (Hall – 8) <Date:15.11.2021>

Timing			Name	Organization
	Session Chair		Prof. Debdulal Das	IEST, Shibpur
15:45 - 16:00	Speaker-1	Thermo-fisher-2	Anup Biswas	Thermo-fisher
16:00 - 16:15	Speaker-2	Repeatability of Friction and Wear of Different Material Pairs at 1000 °C	Veera Gowda	DUCOM
16:15 - 16:30	Speaker-3	Novel hybrid sacrificial anodes based on high phosphorus pig iron and Zn for the cathodic protection of steel	N. K. Prasad	IIT Kanpur
16:30 - 16:45	Speaker-4	Corrosion resistance of Fe-based metallic glass composite coating: Role of amorphicity and porosity	S. K. Nayak	IIT Kanpur
16:45 - 17:00	Speaker-5	Creep damage model and its applicability to long-term life prediction of 9% Cr steels	J. Christopher	IIT Madras
17:00 - 17:15	Speaker-6	Characterization of fracture resistance of Modified 9Cr-1Mo steels	B. S. Dutt	IGCAR
17:15 - 17:30	Speaker-7	An Improved Method for Prediction of UTS from Small Punch Test	A. V. Pandey	IGCAR
17:30 - 17:45	Speaker-8	Titanium alloy development using machine learning guided by physical metallurgy principles	N. Khandelwal	IIT Kanpur
17:45 - 18:00	Speaker-9	Thermodynamic Re-Assessment of Nb-Zr Binary Alloy Systems Assisted by Ab-Initio Calculations	Ishu Yadav	IIT BHU
18:00 – 18:15	BEAKOUT ROOM			

Theme: Ferrous Process Metallurgy

Session 1 (Hall 7) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Indrajit Paul	Tata Steel
14:30 - 15:00	Keynote-1	Recent Innovative Development in Agglomeration	Dr. Jagannath Pal	CSIR-NML, Jamshedpur
15:00 - 15:15	Speaker-1	Effect of Temperature and Reducing Conditions on Physico-chemical Properties of Sinter	M.K. Jha	Tata Steel
15:15 - 15:30	Speaker-2	Improvement in Pellet Quality in Straight Gate Induration Furnace	Amit Mogale	JSW
15:30 - 15:45	Speaker-3	Effect of High Temperature Interaction between Sinter and Pellet on Softening-Melting Behavior	Pritesh Garg	Tata Steel
15:45 - 16:00	Speaker-4	Investigation on the Pilot Scale Pelletization Process Using Low Grade Iron Ore	Golap Chowdhury	SAIL
16:00 – 16:15	Speaker-5	Effect of Mixing Pre-heated Water on Granulation and Iron Ore Sinter Properties	Dharmendra Rajak	JSW
16:15 – 16:30	Speaker-6	Lowering the Sinter Return Fines at H blast furnace	Awadh Gupta	Tata Steel
16:30 - 16:45	BREAKOUT ROOM			

Session 2 (Hall 7) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Jagannath Pal	CSIR-NML, Jamshedpur
16:45 - 17:15	Keynote-1	Landscape of Trends and Technologies of Western Pelletizing Plants	Maycon Athayde	Pelletizing Tech Dev,Vale
17:15 - 17:30	Speaker-1	Factors Affecting Sinter Bed Permeability and its Impact on Other Process Parameters at Sinter Plant-3	Kevin Bhengra	SAIL
17:30 - 17:45	Speaker-2	Magnesium Oxide Based Product Spray Over Product Sinter to Reduce RDI	Aditya Sarda	Tata Steel
17:45 - 18:00	Speaker-3	Influence of Sinter MgO on Flame Front Properties and Sintering Process	Subhra Dhara	SAIL
18:00 – 18:15	Speaker-4	Mitigating the Detrimental Effect of High Alumina in Sinter Making	Debanik Mitra	Tata Steel
18:15 - 18:30	Speaker-5	Optimize the Use of Pyritic Ashes in Sinter Plant	Bhaskar Khatravath	JSW

18:30 – 18:45	Speaker-6	Enhanced Simulation of Sintering Process in an Experimental Pot Sintering Unit through Innovative Measurement, Monitoring and Control System	Archana Sharan	SAIL
18:45 – 19:00	Speaker-7	Need of Pelletization and Mecon's Role	Kunal Singh	MECON
19:00 - 19:15	BREAKOUT ROOM			

Session 3 (Hall 7) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Mr. Biswajit Ghosh	Tata Steel
8:30 - 9:00	Keynote-1	Modern Tools for Steel Research and Process Improvement	Prof. P. Chris Pistorius	Carnegie Mellon University
9:00 - 9:15	Speaker-1	Oxygen Prediction Model in Energy Optimizing Furnace (EOF)	Krishnakumar K	JSW Steel Salem
9:15 - 9:30	Speaker-2	Double Slag Practice in Induction Furnace Steelmaking	Ammasi A	CSIR-NML, Jamshedpur
9:30 – 9:45	Speaker-3	Effect of B2O3 as Fluxing Material on Steel and Slag Properties in Ladle Furnace Refining	Suguna Varanasi	VIZAG Steel
9:45 – 10:00	Speaker-4	Reduction of Aluminium and Lime Consumption by Suitable Selection of Alternate Deoxidizing Compound	Prasenjit Chanda	Tata Steel
10:00 – 10:15	Speaker-5	A Curious Case of Carbon Pick-up in Electrical Steel	Basavarajappa Hitalamani	JSW Steel Bellary
10:15 – 10:30	Speaker-6	Improvement in RH Input Conditions to Enhance the Steel Quality for Automotive Industry	Avnish Kumar	Tata Steel
10:30 - 10:45	BREAKOUT ROOM			

Session 4 (Hall 7) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. Samik Nag	Tata Steel
10:45 - 11:15	Keynote-1	Overview of Mechanisms of Pellet Degradation in DRI Process	Mrigendra Singhai	JSW
11:15 - 11:30	Speaker-1	Operational Experience with Increased Pellet Burden JSW BF2	Aurobinda Dash	JSW
11:30 - 11:45	Speaker-2	BF Stack Shotcrete and Process Improvement at F Blast Furnace TATA STEEL	Ishwari Gupta	Tata Steel
11:45 - 12:00	Speaker-3	Blast Furnace Operation with High LOI (Loss on Ignition) & High SiO2 Ore@ JSW Steel Ltd. Salem Works	Raja Natarajan	JSW

12:00 - 12:15	Speaker-4	Investigation of Gas Dynamics Processes for Improved Aerodynamics of Large Blast Furnace	Rajeev Ranjan Kumar	SAIL
12:15 – 12:30	Speaker-5	Strategies Deployed for High Liquid Production in Blast Furnace Units, JSW Steel Ltd	A.V.R. Dasu	JSW
12:30 - 12:45	BREAKOUT ROOM			

Session 5 (Hall 7) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Mr. R.V. Ramna	Tata Steel
13:15 - 13:45	Keynote-1	Rebuilding the Airplane While in Flight – Decarbonizing Steelmaking in India	Kedar Palekar	MIDREX Technologies India
13:45 - 14:00	Speaker-1	Critical Parameters Affecting Blast Furnace Coke Rate	Pramod Kumar Gupta	JSW
14:00 - 14:15	Speaker-2	Optimisation and Stabilisation of Hot Metal Production during Pandemic Period at Blast Furnaces, Vizag Steel- RINL	Utpal Kumar Parui	Vizag Steel
14:15 - 14:30	Speaker-3	Productivity Enhancement with Existing Facility in E Blast Furnace	Ujjal Dutta	Tata Steel
14:30 – 14:45	Speaker-4	Improvement in Coal Combustibility through Lance Design Modification and Blowing Parameters Adjustments	Boina Sagar	Tata Steel
14:45 – 15:00	Speaker-5	Stabilization of Blast Furnace-1 Operation at Higher Slag Rate	Shashank Pandey	JSW
15:00 – 15:15	Speaker-6	Dual Lance Injection System and Improvement Journey to Sustain as Indian Benchmark	Sumeet Dube	Tata Steel
15:15 - 15:30	BREAKOUT ROOM			

Session 6 (Hall 7) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. K.D. Mehta	CSIR-NML, Jamshedpur
15:30 - 16:00	Keynote-1	Fundamental Understanding on the Use of Different Carbon Sources in the Alternative Ironmaking Hisarna Process	Prof. Zushu Li	University of Warwick

16:00 - 16:15	Speaker-1	Utilization of Lean Grade Iron Ore for Iron Making in Microwave-assisted Carbothermic Reduction	Tapas Ranjan Pati	CSIR IMMT
16:15 - 16:30	Speaker-2	Experience of Using Low Grade Pellets at the Gas based DRI Plant at JSW Steel Limited	Shyam Sundar Yadav	JSW
16:30 - 16:45	Speaker-3	Low Carbon Blast Furnace Ironmaking, JSW Steel Limited, Vijayanagar works	Mohanraj Nagarajan	JSW
16:45 – 17:00	Speaker-4	A Drive Towards the Production of Green Steel By Improvement In Hot Blast Temperature	Sujata Panda	VSSUT, Burla
17:00 – 17:15	Speaker-5	Chromium Partitioning Studies on Production of Low Carbon Ferrochrome Alloy from Sukinda Chromite Ore Fines	Sanjay Agarwal	CSIR-NML, Jamshedpur
17:15 - 17:30	BREAKOUT ROOM			

Session 7 (Hall 3) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. S.K. Ajmani	Ex Tata Steel
13:30 - 14:00	Keynote-1	Performance Improvements and Innovations in Process Metallurgy through Computational Fluid Dynamics	Prof. Vivek Buwa	IIT Delhi
14:00 - 14:15	Speaker-1	Optimization of the Chute Angle for Centre Coke Discharge in Blast Furnace using DEM Simulations	Arijit Chakraborty	Tata Steel
14:15 - 14:30	Speaker-2	Three-Reactor Approach to Basic Oxygen Steel Making Process using FactSage and its Macro Facility	Prasenjit Singha	IIT Madras
14:30 - 14:45	Speaker-3	Numerical Modelling of Thermal Behaviour in a Step Mould Ingot Casting Process	Aditya Swain	Tata Steel
14:45 – 15:00	Speaker-4	Development of a Thermal Model for Continuous Casting Process Using OpenFOAM	Tejaswi K.S.	IIT Madras
15:00 - 15:15	BREAKOUT ROOM			

Session 8 (Hall 1) <Date: 15.11.2021>

Timing		Name	Organization
	Session Chair	Kedar Palekar	MIDREX technologies India
10:45 - 11:15	Keynote-1	Industry Must Begin using Coal through Gasification Technology	V.R. Sharma JSPL
11:15 - 11:30	Speaker-1	A Study on Critical Parameters of CDCP	Praveen Jha SAIL
11:30 - 11:45	Speaker-2	Effect of Volatile Content of Coal on Final Burnout in Raceway	Saurabh Kawale JSW
11:45 - 12:00	Speaker-3	Effect of heating rate on rheological properties of coal and on coke quality	Anup Kumar SAIL
12:00 – 12:15	Speaker-4	Advance Technological/Process Modifications for Productivity Improvement and Effective Waste Utilization	Srisuman Kanamarlapudi JSW
12:15 – 12:30	Speaker-5	Improving Coal Combustibility through Injection of Calcium Oxide Along with Pulverized Coal Injection at I Blast Furnace, TATA Steel	Dhiren Patnaik Tata Steel
12:30 – 12:45	Speaker-6	PCI at RINL - Challenging Start to a Promising Journey	Bhaktavatsalarao Rajana Vizag Steel
12:45 - 13:00	BREAKOUT ROOM		

Session 9 (Hall 1) <Date: 15.11.2021>

Timing		Name	Organization
	Session Chair	Prof. Zushu Li	Warwick Manufacturing Group
13:15 - 13:45	Keynote-1	Influence of Physicochemical Properties of CaO-Al ₂ O ₃ -MgO Based Slags on Cleanliness of Al-Killed Steels in Secondary Refining and Continuous Casting Processes	Prof. Joo Hyun Park Hanyang University, Seol
13:45 - 14:00	Speaker-1	Study of Effect of Calcium Treatment on Non-Metallic Inclusions in Si-Mn Killed Steel Grade	Sk Wasim Haidar JSW
14:00 - 14:15	Speaker-2	Experiences with Pure Calcium Treatment of Steel at IISCO Steel Plant	Rishu Kumar SAIL
14:15 - 14:30	Speaker-3	Effect of Shroud Geometry on Melt Residence in Steelmaking Tundish System	Prince Singh IIT Ropar
14:30 – 14:45	Speaker-4	Reduction in SEN change Failure at the Thick Slab Caster	Aditi Raj Tata Steel

14:45 – 15:00	Speaker-5	Understanding SEN Clogging during Casting of Stainless Steel	Arnab Kundu	Jindal Stainless
15:00 – 15:15	Speaker-6	Mold Flux Design Criteria for Continuous Casting of High Aluminium Steels	Bhupendra Kumhare	CSIR-NML, Jamshedpur
15:15 - 15:30	BREAKOUT ROOM			

Session 10 (Hall 1) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Dr. A.K. Ray	IIM Kolkata Chapter
15:30 - 16:00	Keynote-1	Approaches for Differentiation and Value Creation in Steelmaking	P.K. Tripathy	Tata Steel
16:00 - 16:15	Speaker-1	Elimination of Ovality Defect in 200 Round Section by Optimizing the Casting Parameters	Duraisamy Karrupanna	JSW
16:15 - 16:30	Speaker-2	Failure Analysis of Continuous Cast Slab through Internal Quality Assessments and Measures for Quality Improvement	Snehangshu Roy	SAIL
16:30 - 16:45	Speaker-3	Controlling of Hydrogen Crack in Rolled Product of Cr-Mo-Ni Steels	Soorya Jayaraj	JSW
16:45 – 17:00	Speaker-4	Reduction of Longitudinal Cracks at Thin Slab Caster	Nagarjuna V.L.	JSW
17:00 – 17:15	Speaker-5	Investigations on Intercolumnar Cracking in High Carbon Steel Slab During Continuous Casting	Milind Thoke	Tata Steel
17:15 – 17:30	Speaker-6	Inclusion Characterization of Free Cutting Steel with Different Heavy Elements	Sethu Shanmugam	JSW
17:30 - 17:45	BREAKOUT ROOM			

Theme: Safety

Session 1 (Hall 8) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Prof. Valerio Cozzani	University of Bologna, Italy
14:30 – 15:00	Keynote-1	Key Performance Indicators for the assessment of inherent safety and escalation hazard in the early process design	Prof. Valerio Cozzani	University of Bologna, Italy
15:00 – 15:30	Keynote-2	Safety Competency Development of Workforce to achieve Zero Harm	Neeraj Sinha	Tata Steel
15:30 – 15:45	Spekaer-1	Deployment of Past Incidents learnings to avoid recurrence	Amit Singh	Tata Steel
15:45 – 16:00	Speaker-2	Hardware intervention projects	Amol Mahajan	TSBSL
16:00 – 16:15	Speaker-3	'Leveraging digital technologies to build safety competency of workforce to achieve zero harm'	Dip Koner	Tata Steel
16:15 – 16:30	Speaker-4	Digital and Technology driven Safety Excellence at Tata Steel'	Shikhar Kaushik & Udit Verma	Tata Steel
16:30 – 16:45	BREAKOUT ROOM			

Session 2 (Hall 8) <Date: 14.11.2021>

Timing			Name	Organization
	Session Chair		Prof. Uday Kumar	Lulea University, Sweden
16:45 – 17:15	Keynote-1	Transformative Technologies and Business Solutions for Safety Management Issues and Challenges	Prof. Uday Kumar	Lulea University, Sweden
17:15 – 17:30	Spekaer-1	Driving road safety though technology and artificial intelligence'	Amitabh Singh	Tata Pigments
17:30 – 17:45	Speaker-2	Road Safety through DFMS	Arijit Kundu	Tata Steel

17:45 – 18:00	Speaker-3	A safe practice of covering tarpaulin using safe platform and personal fall protection	Rakesh Behera	TSBSL
18:00 – 18:15	Speaker-4	Implementing mechanism to minimize risk of falling from top of bulker	Rashid Hussain	Jamipol
18:15 – 18:30	Speaker-5	Self guided movable safety guard at induction furnace crucible'	Srikanta Bera	Tata Metaliks Ltd.
18:30 – 18:45	Speaker-6	Usage of robotics and digitalization to improve safety in rolling mills'	Ved Prakash	Tata Steel
18:45 – 19:00	BREAKOUT ROOM			

Session 3 (Hall 8) <Date: 15.11.2021>

Timing		Name	Organization
	Session Chair	Prabir Ghosh	DSS
8:30 - 9:00	Keynote-1	Digitalization of Process Safety Performance Indicators (PSPI) for better business results	Amit Kumar Singh Tata Steel
9:00 - 9:30	Keynote-2	Risk Based Process Safety Management	Prabir Ghosh DSS
9:30 - 9:45	Speaker-1	Risk based inspection	Ajay Pratap Tata Steel
9:45 - 10:00	Speaker-2	Hook Vision-a new way of handling liquid steel'	Sourav Palit Tata Steel
10:00 - 10:15	Speaker-3	Process Safety Improvement in ladle teeming operation at Caster – through inherently safer design	Vinay Kumar Tata Steel
10:15 - 10:30	Speaker-4	SAP based Interlock Bypass Management System	Vikash Kumar Tata Steel
10:30 - 10:45	BREAKOUT ROOM		

Session 4 (Hall 8) <Date: 15.11.2021>

Timing		Name	Organization
	Session Chair	Prof. Jhareswar Maiti	IIT Kharagpur

10:45 - 11:15	Keynote-1	Science of Fit	Vinay Pathak	3M
11:15 - 11:45	Keynote-2	Breakthrough Innovation in Safety	Prof. Jhareswar Maiti	IIT Kharagpur
11:45 - 12:00	Speaker-1	Auto tracking and control of human intrusion at bundling stations	Ankit Agrawal	Tata Steel
12:00 - 12:15	Speaker-2	Automation of Raw material handling system in Mini blast furnace'	Anupam Nayek	Tata Metaliks Limited
12:15 - 12:30	Speaker-3	Safety Initiatives for injury free major shut down in sinter making plant	Mom Mitra	Tata Steel
12:30 - 12:45	Speaker-4	Learnings from failures of safety'	Kaushal Kishore	Tata Steel
12:45 - 13:00	BREAKOUT ROOM			

Session 5 (Hall 8) <Date: 15.11.2021>

Timing			Name	Organization
	Session Chair		Rajiv Desai	Tata Communications
13:30 – 14:00	Keynote-1	Developments in Occupational Health and Safety Management Systems & Practical ways for Accident Prevention in Metallurgical Industry Sector	Arun Chaturvedi	EQMS INGENUITY P LTD
14:00 – 14:30	Keynote-2	Connected Worker	Rajiv Desai	Tata Communications
14:30 – 14:45	Speaker-1	Human Reliability Assessment of critical manual task using Human Error Assessment & Reduction Technique (HEART)	Deepanwita Tripathy	Tata Steel
14:45 – 15:00	Speaker-2	A systematic approach of improving contractor safety performance through Business partners safety ABP'	Poonam Shukla	Tata Steel
15:00 – 15:15	Speaker-3	Excellence in Construction Safety'	Sukesh Jha	Tata Steel
15:15 – 15:30	Speaker-4	'Contractor safety performance: ensuring sustenance of performance'	Sunil Kumar	Tata Steel
15:30 – 15:45	BREAKOUT ROOM			