

## IIM-ATM 2025 Posters

### **Guidelines for Poster Session Presenters:**

- Presentation Venue: Lecture Hall Complex (Lower and Upper floors), IIT Hyderabad, Kandi, Telangana.
- Schedule for the Poster presentation: **[15:30 – 17:30 on 5th December, 2025 (Friday)]**
- It is the presenter's responsibility to print their posters, and **NO printing facility** will be provided.
- Poster should have **A0 size** (height: Max. 1189 mm and Width: Max. 841 mm)
- Please affix the posters at their assigned poster number on the first day of the conference (4th Dec. 2025).
- The presenter must be next to the poster during the presentation time.
- For any clarification, please contact: [suresh@msme.iith.ac.in](mailto:suresh@msme.iith.ac.in) or [nn@nitw.ac.in](mailto:nn@nitw.ac.in)

	Poster No.:	Abstract ID	Presenting Author	Presenting Author Affiliation	Title
	<b>Advanced Materials Characterization (AMC)</b>				
1.	AMC_P001	AMC_003	Chalavadi Prashanthi	ARCI, Hyderabad	Effect of Hatch Width Overlap on Microstructural Evolution of 15-5 PH Steel Fabricated by Laser Powder Bed Fusion
2.	AMC_P002	AMC_005	Debjani Niyogi	CGCRI	Correlating Surface Chemistry with Structural Evolution in 2D Ti3C2TX MXene: Insights from Multi-Modal Characterization
3.	AMC_P003	AMC_008	G. Bharat Reddy	BARC	Experimental characterization and physically-informed constitutive modelling of the deformation behaviour of Zircaloy-4 across quasi-static to dynamic strain rates
4.	AMC_P004	AMC_010	B Ranga Rao	Aditya Birla Science & Technology Company Pvt Ltd	Challenges of Electronic Waste (E-Scrap) Characterisation on Spectroscopy Techniques

5.	AMC_P005	AMC_011	Nishant Kumar	Tata Steel, Jamshedpur	Comparative study of oxide scale characteristics of hot rolled strips produced through TSCR and conventional HSM
6.	AMC_P006	AMC_014	Bhupendra Kumar Kumawat	BARC	Mechanical Testing of Structural Materials in High-Pressure Hydrogen Environments
7.	AMC_P007	AMC_020	Utkarsh Uttam	IIT Bhilai	Fabrication of Al-based metal matrix composite reinforced with Al-enriched high entropy intermetallics processed by mechanical milling and spark plasma sintering
8.	AMC_P008	AMC_021	Kartikeyan Rajan Kumar	IIT Bhilai	Fabrication and Characterization of Al-Cu-Fe Quasicrystal Reinforced Aluminium Matrix Nanocomposites by Mechanical Milling and Spark Plasma Sintering
9.	AMC_P009	AMC_022	Tushar Rai	IIT Madras	Effect of Si on Phase formation and Mechanical Behavior of Fe-Mn-Al-C-Ni Steels
10.	AMC_P010	AMC_024	Muruganantham R	IIT Madras	Enhanced Mechanical Performance via Ni-Al B2 Precipitation in High-Ni Alloyed Fe-Mn-Al-C High Specific Strength Steels
11.	AMC_P011	AMC_027	Mayank Pratap Singh	IISc, Bengaluru	Effect of localized phase transformation on solute segregations and mechanical properties of multicomponent alloy
12.	AMC_P012	AMC_029	Himanshu Gupta	IISc, Bengaluru	Ultrasonic wave propagation in RR1000 alloy: Linking microstructure to NDE
13.	AMC_P013	AMC_032	Rupesh Kumar	NFC, Hyderabad	Effect of thermo-mechanical processing parameters on microstructure and second phase precipitates in quaternary Zr-Sn-Nb-Fe alloy
14.	AMC_P014	AMC_034	R Kiran	SAIL, RSP	Controlling quality of FerroAlloy material-Ferromanganese in steel industry by development of new analysis method in XRF analyzer
15.	AMC_P015	AMC_038	N D Vara Prasad	DMRL	Quantitative Depth Profile characterization of Tantalum coatings on Low alloy steel substrate using Glow Discharge Optical Emission Spectrometry

16.	AMC_P016	AMC_041	Vinay Joru	University of Hyderabad	Correlating the structural and mechanical properties of (AlCrNbSiTi)N thin films as a function of substrate bias
17.	AMC_P017	AMC_042	Abhishek Shukla	IIT Madras	A Comparative Study on Strain Analysis of Additively Manufactured (LP-DED) and Wrought Haynes 282 – Ni-based Superalloy
18.	AMC_P018	AMC_043	Surendra Urvasha	VNIT Nagpur	Effect of laser power and heat treatment on the microstructure and mechanical properties of additively manufactured Inconel 718
19.	AMC_P019	AMC_044	Suraj Kumar	DMRL	Microstructural characterization of 3D printed SS316L alloy for process-structure-property correlations
20.	AMC_P020	AMC_046	Korra Usha Sri	University of Hyderabad	Deconvoluting high speed Nano indentation data on multiphase steels by Machine learning clustering algorithm
21.	AMC_P021	AMC_047	J Joshua Daniel	University of Hyderabad	Characterization of texture evolution during large rolling reduction in low carbon steels
22.	AMC_P022	AMC_048	Pathuri VSR Krishnadwaipayana	University of Hyderabad	Multiscale Structure-Property Correlation in Multiphase Steels by Correlative Electron Back Scattered Diffraction and Nanoindentation Mapping
23.	AMC_P023	AMC_049	Adirae Dinesh	IIT Hyderabad	ANALYSIS OF OXIDE SCALE FORMED ON $\gamma$ -TiAl USING CORRELATIVE MICROSCOPY
24.	AMC_P024	AMC_050	Kapil Dev Sharma	IIT Roorkee	Exploring Tribological Characteristics of Cu-added Low-Carbon Quenched Structures
25.	AMC_P025	AMC_051	Katta Saikumar	University of Hyderabad	Effect of Substrate Bias on Structural and Mechanical Properties of (MoNbTaW)N Coatings Deposited by Reactive DC Magnetron Sputtering
26.	AMC_P026	AMC_053	Narasinga Rao Gullipalli	VNIT Nagpur	Nanoscale Precipitation Behavior and Hardness Evolution in Laser Powder Bed Fused 17-4 PH Stainless Steel During Heat Treatment: An Atom Probe Tomography Study

27.	AMC_P027	AMC_055	Arka Jyoti Roy	IIT Hyderabad	Insights into plasmonic nanostructures using correlative in-situ micro-spectroscopy
28.	AMC_P028	AMC_056	Meera V	TIFR Hyderabad	Sb2S3 FILMS FOR LOW-LOSS RECONFIGURABLE PHOTONICS
29.	AMC_P029	AMC_059	Sunil Kumar Gudur	IIT Hyderabad	Study to understand the microscale and near atomic scale behavior of Multi component alloy for aqueous corrosion
30.	AMC_P030	AMC_061	Raghavendra Juluri	IIT Hyderabad	Sample Preparation for Transmission Electron Microscope
31.	AMC_P031	AMC_062	Nagini Macha	IIT Hyderabad	DST-SATHI Centre on In-situ and Correlative Microscopy: A Cornerstone to Cutting-Edge Characterisation Across Multiple Length Scales
<b>Archeometallurgy (AMT)</b>					
No Posters					
<b>Advanced Structural Materials (ASM)</b>					
1.	ASM_P032	ASM_002	Vikas Kumar	IIT Jammu	Experimental and Numerical Investigation on Biaxial Testing of GFRP Composites Using Miniature Cruciform Specimen Geometry
2.	ASM_P033	ASM_004	Ankit Kumar	SSAB	Hardox® HiTemp – Coke Quenching Car Liners
3.	ASM_P034	ASM_005	Dr. Prasenjit Barick	ARCI, Hyderabad	Silicon carbide and its important applications
4.	ASM_P035	ASM_012	Polasani Ajay	IIT Roorkee	Role of Zr and Hf in enhancing the mechanical properties of ODS Inconel 718 superalloy synthesised through mechanical alloying and powder forging
5.	ASM_P036	ASM_013	Rahul Sharma	MANIT Bhopal	Effect of Sn addition on creep behaviour of Mg-Al-Zn alloys at two different temperatures of 180°C and 150°C

6.	ASM_P037	ASM_014	Rajendra Pathak	MANIT Bhopal	Effect of Heat Treatment on Mechanical and Microstructural Properties of Mg – 1Zn – 1Y alloy
7.	ASM_P038	ASM_020	Somnath Nandi	BHEL, Hyderabad	Creep behaviour and Microstructural evolution of Alloy 105 for high temperature power plant applications
8.	ASM_P039	ASM_023	Ankur Srivastava	IISc, Bengaluru	Diffusion analysis in binary and ternary Ni-based alloys following Experimental, Density Functional Theory (DFT) and Physics-informed neural network numerical inverse method (PINN)
9.	ASM_P040	ASM_025	Avinash Kant Kaushal	IIT Patna	Revisiting the Validity of the ‘Garvie Criterion’ for the Stabilization of Doped Tetragonal Zirconia Systems
10.	ASM_P041	ASM_027	Swapnil Sureshrao Sable	COEP Technological University, Pune	Gas atomized copper-based HEA for laser cladding and its characterization
11.	ASM_P042	ASM_031	Anil Kumar	NIT Hamirpur	Microstructural and Mechanical Evolution of Steel nanocomposite Fabricated by Mechanical Alloying and Spark plasma sintering technique
12.	ASM_P043	ASM_033	Nellutla Sahithyu	NIT Warangal	Microstructural evolution and mechanical properties of Al-2.4Ce alloy with minor addition of Sc
13.	ASM_P044	ASM_035	Suman Sadhu	IISc, Bengaluru	Generation of mobility database in correlation to various experimental methods and PINN-based numerical inverse method in ternary and Multicomponent systems
14.	ASM_P045	ASM_038	Ishu Yadav	IIT BHU	Microstructure, Mechanical and Corrosion Behaviour of As-Cast and Heat-Treated Ti-Mn Alloys
15.	ASM_P046	ASM_041	Ruttala Naidu	MANIT Bhopal	Severe Plastic Deformation-Induced Microstructural Refinement and Property Enhancement in INCONEL 600

16.	ASM_P047	ASM_043	Ismail Kamil	IISc, Bengaluru	Diffusion study in Ni-base System by Following Experimental and a physics-informed neural network numerical inverse method
17.	ASM_P048	ASM_049	Annadaa Shankara Dash	IIT Kharagpur	Optimization of Laser Surface Alloying Parameters and the Role of Mechanical Milling on the Isothermal Oxidation Behaviour of CoNiCrAlY Coatings on Inconel 718
18.	ASM_P049	ASM_051	Dhansingh Nalage	Bharat Forge Ltd, Pune	Microstructural evolution during hot deformation of haynes 188
19.	ASM_P050	ASM_055	Anant Kumar	NIT Rourkela	Unraveling the Mn effect on the microstructural anisotropy and performance of hot forged steels
20.	ASM_P051	ASM_056	Manish Kumar Singh	IIT(ISM) Dhanbad	Simulation-Driven Design and Development of Novel Precipitation-Strengthened High-Entropy Alloys
21.	ASM_P052	ASM_057	Prakash Katdare	MANIT Bhopal	Effect of Kevlar/Glass/Carbon Hybridization Sequence on Water Absorption and Mechanical Properties of the Hybrid Composites
22.	ASM_P053	ASM_059	Shruti Rajendra Diwase	IIT(ISM) Dhanbad	Design and Development of New High Entropy Shape Memory Alloys (HESMAs) with Excellent Mechanical Properties
23.	ASM_P054	ASM_060	Apurba Mahato	IIT Roorkee	Design of dual-phase high-entropy alloys with optimized strength-ductility balance: Microstructure and mechanical properties
24.	ASM_P055	ASM_061	Soumita Chakraborty	VECC, Kolkata	Depth wise characterisation of irradiation response in 4MeV Ar ion irradiated Incoloy – 800H
25.	ASM_P056	ASM_062	R. Priya	IGCAR, Kalpakkam	Lead-bismuth eutectic corrosion behaviour of alumina coated titanium modified 316 stainless steel
26.	ASM_P057	ASM_063	Sana Anilkumar	University of Hyderabad	Phase Evolution and Micro-indentation Behavior of NbV and NbVTi Multi-Principal Element Alloys
27.	ASM_P058	ASM_064	Navanit Kumar	IIT Kharagpur	Understanding the Influence of Relative Content of Ni and Mn on the Austenite Reversion and Its Correlation with the Cast Microstructures

28.	ASM_P059	ASM_065	Avula Indu	IIT Kharagpur	Ta-enriched Refractory High Entropy Alloys for Articulating Surfaces in Total Joint Replacement
29.	ASM_P060	ASM_067	Harun Rashid Siddiqui	University of Hyderabad	Synthesis and Structural Evolution of Nanocrystalline Equiatomic TiNbTaVZr High-Entropy Alloy
30.	ASM_P061	ASM_068	Punam Pragya	IISc, Bengaluru	Designing a Re-lean Ni-Based Superalloy
31.	ASM_P062	ASM_069	Subhomoy Gupta	IIT Kharagpur	Elucidating the role of strain rate on mechanical properties in nanocrystalline Al <sub>0.3</sub> CoCrFeNi High Entropy Alloy at different temperatures employing Molecular Dynamics Simulations
32.	ASM_P063	ASM_071	Aditi Paul	Arcelor Mittal Nippon Steel India	Development of Atmospheric Corrosion Resistant Steel Plates for Elevated Temperature Application
33.	ASM_P064	ASM_072	Jiten Das	DMRL	Dissolution behaviour of SiC in AlN phase in SiC-AlN composite
34.	ASM_P065	ASM_073	Visakh Manoj	NIIST	Squeeze infiltration processing and characterization of A356/SiC/Synthetic diamond hybrid composite for thermal management in electronic devices
35.	ASM_P066	ASM_075	Malar Vadani Gt	IIT Delhi	Investigation on effects of bilayer sequential cold spray deposition on coating properties in cold sprayed Ni-base superalloys
36.	ASM_P067	ASM_078	Akshay Shingweker	Arcelor Mittal Nippon Steel India	Thermo-Mechanical Simulation and Microstructural Evolution in Heavy Gauge Line Pipe Steels: Influence of Rolling Strategy and Cooling Rate
37.	ASM_P068	ASM_084	Thipparthi Raja Gopala Chary	IIT Bhilai	A study on the Tribological and corrosion behaviour of Titanium Aluminide alloy
38.	ASM_P069	ASM_086	Vamsi Apuroop	IIT Delhi	Quantitative analysis of deformation characteristics and corrosion properties of high energy laser shock peened Ni-based superalloy
39.	ASM_P070	ASM_088	Abdur Rouf	NIT Durgapur	Processing, densification and microstructural properties of MgAl <sub>2</sub> O <sub>4</sub> spinel ceramics prepared from two types of Al <sub>2</sub> O <sub>3</sub>

40.	ASM_P071	ASM_089	Kaushki Tewari	IIT(ISM) Dhanbad	Effect of Co Addition on TiNiCuZr High Entropy Shape Memory Alloy
41.	ASM_P072	ASM_092	Dr Manab Mallik	NIT Durgapur	Non-isothermal and cyclic oxidation kinetics of ZrB <sub>2</sub> -MoSi <sub>2</sub> based ceramic composites
42.	ASM_P073	ASM_093	S.V.Santosh Kumar	MIDHANI	A Case Study on improve the Soundness of Alloy C276 Ingot after ESR remelting
43.	ASM_P074	ASM_095	Lekhraj Verma	MNIT Jaipur	Dilution of high strength Al-Zn alloy from galvanized dross
44.	ASM_P075	ASM_097	Sanjay Krishna K	DIAT, Pune	High-Temperature Creep Behaviour and Life Prediction of the High Entropy Alloy-AlCrFeNiNb <sub>0.1</sub> : A Computational Study
45.	ASM_P076	ASM_099	Shashank Mishra	DIAT, Pune	Wear studies of fusion spray coated IN625 on AISI 4230 steel
46.	ASM_P077	ASM_106	Abhishek Kumar	NIT Durgapur	Structure-property correlation of pyramid-shaped alumina fabricated by direct ink writing
47.	ASM_P078	ASM_108	Sanjula Pradhan	IIT BHU	Development of high-entropy (Mn <sub>0.6</sub> Cr <sub>0.6</sub> Co <sub>0.6</sub> Li <sub>0.6</sub> Al <sub>0.6</sub> )O <sub>4</sub> ferrimagnetic oxide for efficient photocatalytic degradation of organic dye
48.	ASM_P079	ASM_109	Sayansh Jindal	IIT BHU	Design and fabrication of Al <sub>2</sub> O <sub>3</sub> coated CNT reinforced Al MMCs through powder metallurgy route for lightweight applications
49.	ASM_P080	ASM_110	B Rahul Sai	IIT Jammu	Flushing Away the Debris: Understanding Wear Mechanisms in Alumina Ceramics
50.	ASM_P081	ASM_111	Sudeepta Mukherjee	IISc, Bengaluru	Designing Oxidation Resistant Ni-Co-Cr-Fe-Al-Ti Superalloys: A Three-Pronged Strategy for a Configurationally Complex Matrix
51.	ASM_P082	ASM_112	Mohan Kumar N	IISc, Bengaluru	Ballistic performance of Al-Al <sub>3</sub> Ti-Ti metal intermetallic laminates
52.	ASM_P083	ASM_114	Prahlad Halder	NTPC LTD, ASM	High Temperature Behaviour of Boiler Components of Super Critical & Ultra Super Critical Power Plants – An NTPC Experience



53.	ASM_P084	ASM_115	Chandan Kumar	IIT Kharagpur	Impact deformation behavior of a centrifugally cast multi-reinforced functionally graded AA6061 composite
54.	ASM_P085	ASM_117	B. Venkata Manoj Kumar	IIT Roorkee	Advanced Ceramics in High Temperature Erosive Wear Contacts
55.	ASM_P086	ASM_118	Sanjib Mondal	CGCRI	Microstructure–Property Relationships in h-BN Reinforced Ti-6Al-4V Composites for High-Temperature Applications
56.	ASM_P087	ASM_119	Pooja Jangra	IIT Jodhpur	Effect of prior flash annealing treatment on ageing behavior of a novel Ni-base high entropy conventional superalloy (HECSA)
57.	ASM_P088	ASM_123	Parasuramar S	NIT Trichy	Evaluation of Wear Mechanisms in Wrought and DMLS Ti-6Al-4V Using a Linear Reciprocating Tribometer
58.	ASM_P089	ASM_124	Shubham Singh	IIT Patna	Transient Liquid Phase Flash Sintering of 3 mol% Yttria-Stabilized Zirconia with ZnO–Cu <sub>2</sub> O Eutectic: Insights into Structural and Microstructural Evolution
59.	ASM_P090	ASM_128	Dhiman Kumar Mahata	IIT Bhubaneswar	Microstructure, hardness, and corrosion performance of a AA 5086 matrix composite reinforced with AlCuFeMn alloy
60.	ASM_P091	ASM_129	Md Shahwaz	IIT Kharagpur	PBF-LB IN939 Superalloy: From Microstructure to High Temperature Performance
61.	ASM_P092	ASM_133	Lokesh Kumar Singh	IIT Roorkee	Design and development of high strength $\beta$ -titanium alloys using electronic parameters
62.	ASM_P093	ASM_139	Padiri Murali	IIT BHU	Synthesis and Characterization of High-Performance Ti-Fe-Mo Alloys via Vacuum Hot Pressing for Enhanced Mechanical Properties
63.	ASM_P094	ASM_141	Shailendra Kumar Verma	IISc, Bengaluru	Mean field modeling of $\gamma'$ precipitate coarsening in additively manufactured Ni-base superalloy

64.	ASM_P095	ASM_142	Meet Gor	IIT Hyderabad	Microstructure and mechanical properties of Ti-6Al-4V alloy processed by additive friction stir deposition over a wide temperature range
65.	ASM_P096	ASM_143	Sharon Shaju	BITS Pilani, Hyderabad	Comparative Evaluation of a Novel Epoxy System Against Other Benchmark Resins for Improved Toughness and Thermal Stability
66.	ASM_P097	ASM_144	Pankaj Kumar Ojha	IIT Hyderabad	Microstructure and mechanical properties of heavily cold-rolled and annealed high entropy alloy with highly deformable Laves phase
67.	ASM_P098	ASM_146	Sagar Das	NIT Durgapur	Tribological and Mechanical Performance of Spark Plasma Sintered Al-Cu-Ni Alloys with and without Microalloying
68.	ASM_P099	ASM_150	Ajfarul Islam	NIT Durgapur	Enhancing Thermal Stability and Microhardness of Nanocrystalline Fe-42Ni-Zr Alloys: Role of Zr addition
69.	ASM_P100	ASM_153	Soumik Das	NIT Warangal	Effect of temperature and hold time on creep fatigue crack growth rate of IN 617M
70.	ASM_P101	ASM_155	Bal Mukund Singh	IIT Jodhpur	Effect of Mo addition on microstructural evolution and strength-ductility synergy in Fe-Mn alloy
71.	ASM_P102	ASM_157	Mahesh Pandiripalli	NIT Warangal	Achieving Bulk Superplasticity through a Combination of Super-solvus Heterogenization annealing and Sub-solvus multi-axial forging in Medium alloyed Nickel based superalloy DMR SN 742
72.	ASM_P103	ASM_158	Siddharth Yadav	IIT Roorkee	Tuning phase stability and deformation mechanisms of high entropy alloys: Aluminium's multifaceted role in AlxNiCoCrFe
73.	ASM_P104	ASM_161	R.Chandana	DMRL	Study of hot deformation behavior of a refractory Complex Concentrated alloy
74.	ASM_P105	ASM_165	Mohammed Kedir	IISc, Bengaluru	Effect of Cu addition on microstructure, mechanical properties, and Heat treatment response of in situ Al-15Mg2Si-4.5Si composite

75.	ASM_P106	ASM_166	Manashi Sabat	IIT Kharagpur	Insight into the micro-mechanisms of wear in oxide dispersion strengthened Ni-rich high entropy alloy
76.	ASM_P107	ASM_169	Dhanraj Aepurwar	MNIT Jaipur	Microstructural Evolution and Phase Analysis of Ni-25Cr-15W Superalloy
77.	ASM_P108	ASM_173	Ampolu Haribabu	MIDHANI	Indigenization of Creep-Resistant Martensitic Stainless Steel, AE 866W for Aeronautical Applications: Challenges and Solutions
78.	ASM_P109	ASM_174	Manoj Kumar Yadav	IIT Kanpur	Role of martensitic transformation, twinning on the cryogenic deformation behaviour of a metastable high entropy alloy
79.	ASM_P110	ASM_175	Pothula Vijaya Durga	MIDHANI	Processes Optimization for Large Diameter Inconel 718 Ingot
80.	ASM_P111	ASM_178	Ramreddy Yara	IIT Hyderabad	Deformation and Recrystallization Behaviour of Phase-Separated High Entropy Alloy
81.	ASM_P112	ASM_179	Adya Charan Arohi	IIT Bombay	Effect of post-deposition heat treatment on microstructure evolution and mechanical performance of IN718 superalloy fabricated using direct energy deposition technique
82.	ASM_P113	ASM_184	Akshit Dutta	IIT Jodhpur	Effect of cryo-rolling on microstructural evolution and concurrent mechanical properties of a novel complex alloy after annealing
83.	ASM_P114	ASM_185	Sudhansu Maharana	IIT Kharagpur	Precipitation-strengthened Ni-rich high entropy superalloy with excellent thermal stability and superior high temperature mechanical properties
84.	ASM_P115	ASM_187	Marshal Hembram	IIT BHU	Development of Precipitation Strengthened High Entropy Steels (P-HESs) for Enhanced Mechanical Properties at Elevated Temperature
85.	ASM_P116	ASM_188	Veneil Sai Indla	MVSR Engineering College, Hyderabad	Structural Design and Analysis of Filament Wound Composite Propeller Shafts
86.	ASM_P117	ASM_190	Gyan Prakash Sahoo	ARCI, Hyderabad	Development of Oxide Dispersion Strengthened Iron and Nickel Aluminides for High-Temperature Applications

87.	ASM_P118	ASM_193	Jhaya Gomathy S	HBNI, BARC	Influence of Carbides on Microstructure Evolution and Densification of High-Entropy Borides
88.	ASM_P119	ASM_201	Deo Kumar Singh	NIT Raipur	Microstructure, mechanical and ballistic performance of shielded metal arc welded high nitrogen stainless steel
89.	ASM_P120	ASM_203	Kotla Sairam Goud	IIT Hyderabad	Effect of molybdenum on the tensile creep behaviour of Fe-30Mn-5Al-1C-(0-3) wt.% Mo Light Weight Austenitic Steels
90.	ASM_P121	ASM_204	Gajendra Patel	IIT Hyderabad	Effects of Cobalt addition on the microstructure evolution and thermal stability of Tantalum-strengthened non-equiatomic CoCrNi medium entropy alloys
91.	ASM_P122	ASM_205	Irshad Afzal	IIT Hyderabad	Elevated temperature tensile characteristics of W–Ti–V micro-alloyed steel
92.	ASM_P123	ASM_206	Ajit Hanumant Shinde	JSW, Vijayanagar	Development of Nb-Mo Microalloyed “Fire Resistance” Construction Steels
93.	ASM_P124	ASM_208	Dhanendra Kumar Sahu	IIT Bombay	Effect of Prior Microstructure on the Mechanical Properties of Intercritically Annealed Mn Containing Advanced High Strength Steel
94.	ASM_P125	ASM_209	Kadambari Venkata Durga Prasad	IIT Hyderabad	Tensile and Creep Behavior of Hybrid 55 Steel
95.	ASM_P126	ASM_211	Vikas Singh	IIT Kanpur	Very Hard and Wear Resistant Novel Mixed Cemented Carbides containing WC and Cr-Fe-C with Metallic Cr as the Binder
96.	ASM_P127	ASM_214	Baibhav Karan	IIT Delhi	Achieving Superior Strength in 316L Stainless Steel Nanocomposites by incorporating Dual reinforcements manufactured by Laser Powder Bed Fusion Approach
97.	ASM_P128	ASM_215	Kottapalli Venkatesh	JNTU, Vizianagaram	Enhanced Mechanical and Tribological Performance of AlFeTiCoCr High-Entropy Alloy Reinforced with Red Mud: A Sustainable Approach

98.	ASM_P129	ASM_217	Varsha Florist	LPSC, ISRO	Metallurgical analysis on cracked XH67MBTiO-BD Nickel base superalloy used in Liquid-Kerosene rocket engine
99.	ASM_P130	ASM_218	Shubham Kumar	LPSC, ISRO	Study on Heat affected zone cracking susceptibility in ICNi-4314-706 (XH43EMTiO-BD) nickel-based superalloy
100.	ASM_P131	ASM_223	Rahul Mitra	IIT Kanpur	Mechanistic Insights into Oxidation and Arc-Jet Response of ZrHfTaC and ZrHfTaTiC Multicomponent Carbides
101.	ASM_P132	ASM_225	Dinesh Kumar Rathore	MNIT Jaipur	Effects of carbon nanotubes (CNTs) on mechanical properties and damage sensing response of CFRP composites
102.	ASM_P133	ASM_230	Sangi Bharath Kumar	University of Hyderabad	Effect of V Content on Microstructure and Mechanical Properties of CoCrMnNi High Entropy Alloy
103.	ASM_P134	ASM_231	Krishanu Biswas	IIT Kanpur	Machine Learning: Tool to Design and Discover Novel High Entropy Materials and Prediction of Properties
104.	ASM_P135	ASM_232	Anand Prasad	JSW, Vijayanagar	Effect of final cold rolling thickness on the microstructure, texture and magnetic properties of 2.0 – 2.5 % Si Non-Oriented Electrical Steel
105.	ASM_P136	ASM_233	Ritik Roshan Tripathy	IIT BHU	Stability of B2 phase on alloying of chromium and silicon in AlCrFeMnNi: Experimental and Simulation approach
<b>Extractive Metallurgy (EXM)</b>					
1.	EXM_P137	EXM_004	Sneha Prashant Akre	Evonith Metallics Limited, Maharashtra	Coal Blend Optimization in the Iron and Steel Industry: Advances, Challenges, and Future Prospects
2.	EXM_P138	EXM_008	Biswajit Seal	Tata Steel, Jamshedpur	Safe & Successful Blowdown and Salamander Tapping of G Blast Furnace, Tata Steel

3.	EXM_P139	EXM_012	Nabanita Halder	Tata Steel, Jamshedpur	Hot metal cost reduction by use of Carbon black in Blast Furnace
4.	EXM_P140	EXM_013	Bhagyaraj D	JSW, Salem	Low Grade Iron Ore Utilization in Blast Furnace
5.	EXM_P141	EXM_018	Ravindra Kumar	JSW, Vijayanagar	Utilization of SMS Dust in Iron Ore Pelletization: Process Optimization and Quality Assessment
6.	EXM_P142	EXM_019	Suguna Soumya Varanasi	RINL	Cost Effective Decarbonization of BOF Steel Making: A Heat Balance Approach
7.	EXM_P143	EXM_021	Amit Kumar Uke	Tata Steel, Jamshedpur	Reducing CO <sub>2</sub> Emissions per Ton of Crude Steel (tcs) Through TPM Initiatives
8.	EXM_P144	EXM_033	Shilpi Sharma	RINL	Macrostructural Evaluation of LHBR19M Grade Rounds: Insights into Centreline Segregation and Soundness
9.	EXM_P145	EXM_037	Kumari Deepshikha	Tata Steel, Jamshedpur	Control of Surface and Internal crack in Crown Wheel by optimizing process parameters
10.	EXM_P146	EXM_038	Bathina Naveen Kumar	RINL	re-commissioning & stabilisation of larger capacity blast furnaces, vizag steel, rinl
11.	EXM_P147	EXM_044	Kumar Madan Mohan	Tata Steel, Jamshedpur	Energy Optimisation: The CDQ way
12.	EXM_P148	EXM_045	Pratyush Ranjan Samantaray	Tata Steel, Jamshedpur	Forecasting Sinter Composition to minimise raw flux consumption in blast furnace operation through matrix operation
13.	EXM_P149	EXM_055	Hamza Ahmed	Tata Steel, Jamshedpur	Seven Hole Lance Tip - A New Lance Tip for BOF Steel Making
14.	EXM_P150	EXM_057	Vallabhu Venkata Ramana Rao	NAVA LIMITED, Hyderabad	An Experimental Study On Characterization And Thermal Energy Calculations Of Indian Manganese

					Oxide Ores In The Production Of Silico-Manganese Alloys
15.	EXM_P151	EXM_058	Vikas Kumar	Tata Steel, Jamshedpur	Cost Reduction of Aluminum in LD3 through product mix optimization
16.	EXM_P152	EXM_059	Prasenjit Chanda	Tata Steel, Jamshedpur	Slag Engineering and Inclusion Control for Enhanced Steel Cleanliness in Special Bar Quality Grades
17.	EXM_P153	EXM_060	Priyanka Kumari	Tata Steel, Jamshedpur	From Waste to Worth: An Integrated Approach to Emission Reduction, Resource Optimization, and Process Efficiency in Ironmaking
18.	EXM_P154	EXM_061	Sankara Rao Narisetty	JSW, Salem	Journey towards GHG reduction in mini blast furnace through digitalization and process optimization
19.	EXM_P155	EXM_062	Sethu Prasanth S	JSW, Salem	Development of cleaner steels for bearing application
20.	EXM_P156	EXM_064	Samanta Ray	Tata Steel, Jamshedpur	Stabilization of I Blast Furnace Operation with High Pellet Percentage in Burden
21.	EXM_P157	EXM_069	Debarshi Roy	SAIL, ISP	Utilization of alternate fuel to optimize cost and sinter quality
22.	EXM_P158	EXM_070	Anusuya P	JSW, Salem	Improving inclusion absorption through slag optimisation for 100Cr6 bearing steel
23.	EXM_P159	EXM_074	Nagareddy S	JSW, Vijayanagar	Enhancing Refractory Life and Kiln Availability through Refractory Quality Improvements in RD-15 Lime calcination plant Kiln

24.	EXM_P160	EXM_078	Karthik G	JSW, Vijayanagar	Use of Non-Coking Anthracite Coal in Coal Blend to Make Metallurgical Coke
25.	EXM_P161	EXM_079	Madegowda N	JSW, Vijayanagar	Optimization of Calcined Lime (CL) in Sintering Process: Process and Quality Effects
26.	EXM_P162	EXM_085	Vinay K	JSW, Vijayanagar	Implementation and Scale-Up of Cold Tundish Practice at SMS-2 A Sustainable Approach to Steelmaking
27.	EXM_P163	EXM_089	Siddalinganagouda	JSW, Vijayanagar	Optimizing KR Pre-Treatment Production Performance Using Value Stream Mapping for SMS1 Productivity Improvement
28.	EXM_P164	EXM_097	Balamurugun Muthu	JSW, Vijayanagar	Innovative approach adopted for KR impeller refractory life improvement
29.	EXM_P165	EXM_098	Ravish Kumar	SAIL, ISP	Enhancing Blast Furnace Productivity by Optimizing Burden Distribution
30.	EXM_P166	EXM_102	Phani Kiran K S	JSW, Vijayanagar	Enhancing DRI Metallization Efficiency via Optimization of Pellet Characteristics and Process Parameters
31.	EXM_P167	EXM_107	Vikas U	JSW, Vijayanagar	Utilization of Coke Breeze in Coking Blend
32.	EXM_P168	EXM_111	Mohanraj	JSW, Vijayanagar	A Case Study on the Commissioning of a Super Large Blast Furnace in JSW Steel: Technical and Operational Perspectives
33.	EXM_P169	EXM_112	Koona Prasanth	Tata Steel, Jamshedpur	Towards the path of sustainable iron making with DRI addition at blast furnaces
34.	EXM_P170	EXM_114	Dhiraj Madhukar Kadhe	Tata Steel, Jamshedpur	HErCuls-Novel Approach to reduce CO2 in Sintering by reducing coke consumption.



35.	EXM_P171	EXM_121	Shikhar Ranjan	Tata Steel, Jamshedpur	Briquetted wastes as carbon saving source in Blast furnace: Challenges and improvements
36.	EXM_P172	EXM_122	Somenath Mukherjee	IIT(ISM) Dhanbad	Blended Dataset for Reliable Slag Eye Prediction in Steelmaking
37.	EXM_P173	EXM_123	Vinay Thool	Tata Steel, Jamshedpur	Techno-Economic Strategies for Coal Blend Cost Reduction at Tata Steel Kalinganagar
38.	EXM_P174	EXM_124	Sanjoy Gorai	Tata Steel, Jamshedpur	Effect of CDQ Outage on Coke Quality and Mitigation Approaches
39.	EXM_P175	EXM_127	Sovan Kumar Patra	Tata Steel, Jamshedpur	Innovative use of Biocarbon reductant for sustainable ferro alloy production
40.	EXM_P176	EXM_129	Kunal Blahatia	JSW, Vijayanagar	Evaluation of Hydrogen Injection in COREX Gas Based DRI Furnace Using CFD Model
41.	EXM_P177	EXM_133	Sibasis Tripathy	JSW, Vijayanagar	Operational Improvements in RH Preheating: A Case Study from JSW Vijayanagar
42.	EXM_P178	EXM_134	Sitanu Pattnaik	LECHLER (INDIA) PVT. LTD.	Improved Strip Quality through use of Lechler Zero Degree SCALEMASTER ECO+ Descaling Nozzle
43.	EXM_P179	EXM_135	Varun Mishra	Tata Steel, Jamshedpur	Sustainable DRI: Reducing Coal with Temp. Control in DRI Making
44.	EXM_P180	EXM_139	Galla Ashwini	JSW, Vijayanagar	Increasing Converter O2 blowing Lance Availability
45.	EXM_P181	EXM_140	Nisha Gupta	JAMIPOL LTD	Influence of Raw Bentonite Characteristics on Sodium-Activated IOP grade Bentonite
46.	EXM_P182	EXM_141	Abdul Rohid	IIT Hyderabad	Physical Modeling of the Hot Metal Desulphurization Process using T-Lance

47.	EXM_P183	EXM_142	Abinash Mahanta	Rungta Mines Limited, Chaibasa	Reduction of furnace oil consumption by utilization of producer gas in iron ore pellet industry
48.	EXM_P184	EXM_147	Sudhakar Karre	JSW, Vijayanagar	Study on Emission Reduction and Sinter Quality Enhancement at Sinter Plant
49.	EXM_P185	EXM_149	Sudip Kar	JAMIPOL LTD, Jamshedpur	Enhance the flowability of speed lime by using a modified polysiloxane-based additive
50.	EXM_P186	EXM_150	Devendra Kumar Singh	JSL, Jaipur	Influence of Spinel Inclusions on Surface quality of Ti-Stabilized Ferritic Stainless Steel 409L grade
51.	EXM_P187	EXM_152	Aslam Ansari	SAIL, Ranchi	Introduction of Torpedo Re-Ladling Pits In HM Mixers Shop Through Numerical Modelling For Enhancing Plant Capacity
52.	EXM_P188	EXM_160	Shyam Jee	SAIL, Ranchi	Addressing Cooling Challenges in Primary Gas Coolers of Coke Oven Battery
53.	EXM_P189	EXM_162	Subham	SAIL, BSP	Control of Nitrogen in Liquid Steel: Influence of Process Parameters and Insights from Industrial Experience
54.	EXM_P190	EXM_163	Shree Prakash	SAIL, Ranchi	Enhancing Safety and Efficiency in Ladle Handling through Remote Viewing and Wireless Communication at SMS, ISP
55.	EXM_P191	EXM_167	Anurag Sharma	JSW, Dolvi	Managing Elevated Zinc and Alkali Inputs in Blast Furnace Operations: A Case Study of JSW Dolvi
56.	EXM_P192	EXM_168	Sudipta Sahana	JSW, Dolvi	"Optimization of High Flux Sinter Chemistry and Quality for Enhanced Blast Furnace Efficiency at JSW Dolvi"

57.	EXM_P193	EXM_170	Ankit Sharan	JSW, Dolvi	"MEROS and EOS Technologies: Optimizing sintering with Reducing Fuel Consumption and Minimizing Dust Emissions"
58.	EXM_P194	EXM_172	Andugula Ashish Babu	IIT Hyderabad	Ash Fusion characteristic study of Coal – Biochar blends
59.	EXM_P195	EXM_175	Arghya Swarnakar	JSWBPSL, Sambalpur	Minimization of Edge Cut/Chip Defects in Continuous Casting by Process Optimization
60.	EXM_P196	EXM_176	Akshay Vitthalrao Bhandare	JSW, Dolvi	Maximization usage of manganese ore at sinter plants JSW Steel Dolvi
61.	EXM_P197	EXM_178	Ravi Shankar	Tata Steel, Jamshedpur	Systematic Decommissioning after Campaign Life: Blowdown, Salamander Tapping, and Quenching at G Blast Furnace, Tata Steel Jamshedpur
62.	EXM_P198	EXM_182	Harshal Satish Nerpagar	JSW, Dolvi	Enhancement of PCI rate to 210 kg/thm at BF-1 JSW Steel Dolvi
63.	EXM_P199	EXM_184	Sahil Patil	JSW, Dolvi	Prediction and Optimization of Metallization Degree in a DRI Plant Using Advanced Analytical Modeling
64.	EXM_P200	EXM_190	Tarun Jakhar	JSW, Salem	Optimization of Hot Blast Stove Cyclic Operation to Enhance Thermal Efficiency, Reduce BFG Consumption, and Lower GHG Emissions
65.	EXM_P201	EXM_191	Sinchana Gowda	JSW, Vijayanagar	Pathways to Net Zero: Decarbonizing Pellet Making
	<b>Failure Analysis &amp; Corrosion (FAC)</b>				
1.	FAC_P202	FAC_005	Thiyagesan G	NIT Trichy	Corrosion Behaviour of Squeeze-Cast Zn-Al Alloys Reinforced with Cerium in 3.5% NaCl Solution
2.	FAC_P203	FAC_006	A Abdul Rahiem	Ashok Leyland Technical Centre, Chennai	Failure Resolution of Front Axle Stub Assembly in CV

3.	FAC_P204	FAC_010	Jitendra Narayan Mohapatra	JSW, Vijayanagar	Failure Analysis of Heat-Exchanger Sheets at Coke Oven
4.	FAC_P205	FAC_011	Kurapati Sushma Jyothirmai	JSW, Vijayanagar	A failure analysis study on the gate valve bonnet bolts
5.	FAC_P206	FAC_012	Shardendu Shukla	IIT Roorkee	Understanding Hydrogen-Induced Mechanical Degradation in X70 Pipeline Steel Using In-Situ and Ex-Situ Testing
6.	FAC_P207	FAC_013	Aditya Prakash	Tata Steel, Jamshedpur	Understanding early fatigue failure in compression springs
7.	FAC_P208	FAC_015	B. Amarendhar Rao	RCI and NIT Warangal	Fatigue Life Estimation of Ti6Al4V Cantilever Beam Under Vibratory Loading Using Modal Testing and Miner's Rule
8.	FAC_P209	FAC_021	Krishnamoorthy K	Ashok Leyland Technical Centre, Chennai	Fractographic and Metallurgical Evaluation of failed leaf springs in commercial vehicle
9.	FAC_P210	FAC_023	Sukanta Badaik	NIT Jamshedpur	Synergistic Effects of Bentonite and Ti3C2TxMXene in Polyimide Coatings for Anticorrosion Application.
10.	FAC_P211	FAC_024	Karthikeyan G	Ashok Leyland Technical Centre, Chennai	Material characterization study on Corrosion-Induced failure in Gear Shift Cable
11.	FAC_P212	FAC_031	Vikas Sharma	JSW, Vijayanagar	Investigation of Cut Edge Protection on Zn-Mg Alloy Products: Formation of Simonkolleite in Salt Spray Environment
12.	FAC_P213	FAC_032	Alka Jangid	IIT Kanpur	Improved Wear and Corrosion Resistance of Nanocrystalline NiCo Alloy

13.	FAC_P214	FAC_033	Rakhi Senapati	NIT Durgapur	Evaluating structural-reactivity correlation of benzothiazole derivatives as effective corrosion inhibitors
14.	FAC_P215	FAC_034	Srikaran S	NIT Durgapur	Synergistic Effect of KI on Corrosion Inhibition of Mild Steel in Acid Medium by 2,3-Dihydro-1H-Perimidine Derivatives
15.	FAC_P216	FAC_042	Ramamoorthy V	IIT Indore	Hydrogen Induced Failure Analysis on Friction Stir Processed AA7075 Aluminium Alloy
16.	FAC_P217	FAC_044	Sumit Jha	IIT BHU	Hydrogen Embrittlement in Microalloyed Steels: Mechanistic Insights into Precipitate Trapping and Microstructural Effects
17.	FAC_P218	FAC_049	Irfan Ahmad	IIT(ISM) Dhanbad	Anticorrosive application of biopolymer as an environment friendly and sustainable corrosion inhibitor for mild steel in an acidic medium.
18.	FAC_P219	FAC_050	Dr. Sourabh Shukla	GH Rasoni College of Engineering, Nagpur	Effect of Grain boundary engineering on Corrosion Resistance of Ultra Low-Ni Steel
19.	FAC_P220	FAC_054	Smruti Ranjan Pattanayak	JSW, Vijayanagar	Reducing Loose Scale Formation by Optimizing Finishing and Coiling Temperature
20.	FAC_P221	FAC_055	Gurushantappa	JSW, Vijayanagar	Analysis of the Ductile-to-Brittle Transition (DBTT) Behavior in Different Micro Alloyed Steels Using Instrumented Charpy V-Notch Testing
21.	FAC_P222	FAC_056	Vivek Kumar Yadav	JSW, Vijayanagar	Corrosion Behaviour and Mitigation Strategies for Low Relaxation Pre-stressed Concrete (LRPC) Strands in Marine Environments
22.	FAC_P223	FAC_058	Harshita Paliwal	Hindalco Industries Limited, Dahej	RCA of Converter Bed Fouling and Catalyst Degradation in Sulphuric Acid Production

23.	FAC_P224	FAC_059	Kirti Yadav	DIAT, Pune	Assessment of Low Cycle Fatigue Life in DMR249A–SS316L Dissimilar Welds through Laser Welding and FEA
24.	FAC_P225	FAC_060	Abhigna Kodam	IIT Delhi	Effect of Zinc Content on the Microstructure and Corrosion Behavior of Mg-0.6Ca-0.5Sc Alloy
25.	FAC_P226	FAC_063	Sandeep Kushwaha	JSW, Vijayanagar	Evaluation of corrosion resistance performance of coated steels in different pH
26.	FAC_P227	FAC_064	Rupesh Kumar	Tata Steel, Jamshedpur	Delaying Rust of Rebar
27.	FAC_P228	FAC_065	Jayakar Raju Potharla	JSW, Vijayanagar	Analysis and characterization of Inclusion type Cracking in Drawing Applications
28.	FAC_P229	FAC_068	Syed Junaid	IIT Delhi	Hybrid Tribofilm Formation at Lubricated Sliding Interfaces Induced by Cu and SiO <sub>2</sub> Nanoparticles Dispersed in Oil
29.	FAC_P230	FAC_069	Md Dr. Murtuja Husain	NML, Jamshedpur	Metallurgical Failure Investigation of Gate of Barrage
30.	FAC_P231	FAC_071	Vinit Kumar Singh	IIT Kharagpur	Fatigue Failure Assessment in Al (6-10 wt%) Containing Ferritic Low-Density Steels
31.	FAC_P232	FAC_073	Madhawan Chandrawanshi	Tata Steel, Jamshedpur	Resolution of High Temperature Scale (HTS) Defect in Surface Critical Hot Rolled Steel Grades at Hot Strip Mill
32.	FAC_P233	FAC_077	Dhandapani P	Mahindra and Mahindra ltd	Failure Analysis and Mitigation of Residual Stress and Hydrogen Embrittlement in Hot Stamped Structural Components

33.	FAC_P234	FAC_081	Rumu Halder Banerjee	BARC	Surface Chemistry and Microstructural Evolution of Ni–Cr–Mo Alloys Under Combined Tellurium and Molten salt Environment
34.	FAC_P235	FAC_082	Thillairajan Arumugam	Steer Engineering Pvt Ltd, Bengaluru	Key learnings from the Failure Investigation of hollow screw shaft breakage in Reciprocating Single Screw Extruder used for Processing Powder coat application
35.	FAC_P236	FAC_083	Dr Premkumar Manda	DMRL	Metallurgical Failure Analysis of Steel Bolts Used in Missiles
36.	FAC_P237	FAC_085	Ramesh Mamedipaka	NIT Warangal	Influence of Overlap Strategy on Microstructure and Corrosion Behavior of Thick-Walled SS316L Fabricated by Wire Arc Directed Energy Deposition
37.	FAC_P238	FAC_089	Dr. Swapna Dey	NML, Jamshedpur	Effect of hydrogen on fracture toughness of X70 pipeline steel in hydrogenating environment
38.	FAC_P239	FAC_092	Kapil Agrawal	JSW, Vijayanagar	Corrosion Analysis and Mitigation plan for Sour Gas Pipelines
39.	FAC_P240	FAC_095	Mahesh Bharati	IIT Patna	A DIC-based failure analysis of Cr-Mo steel: revealing the coupled effect of hydrogen charging condition and strain rate
40.	FAC_P241	FAC_100	Arivarasu Moganraj	VIT, Vellore	High-temperature thermal cycling behaviour of additively manufactured aerospace alloy IN-718 with thermal barrier coating.
41.	FAC_P242	FAC_101	Golu Gehlot	IISc, Bengaluru	Low-Cycle Fatigue Behaviour of AA2014, AA2219, and AA5083 Aluminium Alloys: A comparative study

42.	FAC_P243	FAC_102	Rohan Asbe	JSW, Dolvi	Investigation of the Failure Mechanisms of a Blast Furnace Tuyere Sleeve with surface hard-facing layer
43.	FAC_P244	FAC_105	Sucheta Juneja	Jindal SAW Ltd, Nanakapaya	Metallurgical Investigation of Carbon Steel Pipes in Hydrogen Sulfide Environment: A Sustainable Perspective
44.	FAC_P245	FAC_108	Boddu Vara Lakshmi	JSL, Hisar	Effect of copper on Gold dust defect in 430WG Stainless Steel for aesthetic application and high corrosion resistance
45.	FAC_P246	FAC_110	Banti Chauhan	MNIT Jaipur	Corrosion studies of electrodeposited Ni-Ag alloy coatings on copper substrate
46.	FAC_P247	FAC_120	Ashwini Nalge	Tata Steel, Jamshedpur	Effect of Hot Rolling Parameters on Edge Cracking of Cold Rolled Strip
47.	FAC_P248	FAC_121	Siriki Neeraja	JSW, Salem	Investigation on Premature Failure of 54SiCr6 Coil Spring
<b>Functional &amp; Smart Materials (FMSM)</b>					
1.	FMSM_P249	FMSM_002	Mahesh Gulab Walunj	NML, Jamshedpur	In-Situ Modulation of Hot Dip Galvanized Coated Advanced High Strength Steel through One-Step Novel Route: A New Approach
2.	FMSM_P250	FMSM_004	Pritam Banerjee	Technical University of Denmark (DTU)	Strain-Driven Oxygen Vacancy Ordering and Structural Stability in LaNiO <sub>3</sub> Thin Films
3.	FMSM_P251	FMSM_011	Waghchoure Nehal Ashok	BITS Pilani, Goa	(Ba, La) (Sn, Fe) O <sub>3</sub> Solid Solution: Tuning Morphology and Energy Bandgap through A-and B-site Substitution in Cubic Perovskite BaSnO <sub>3</sub>



4.	FMSM_P252	FMSM_012	Adwait Kane	IIT Bombay	Prussian blue as an alternate to the more widely used WO <sub>3</sub> based blue electrochromic system
5.	FMSM_P253	FMSM_013	Mudavath Praveen Kumar	NIT Warangal	Microstructural and Mechanical Characterization of SrTiO <sub>3</sub>
6.	FMSM_P254	FMSM_017	Reyas Ali	IIT Madras	Spontaneous Phase Formation of Two-dimensional Metal Organic Chalcogenolates
7.	FMSM_P255	FMSM_018	Dr.Simi V.S	NIIST	In-vitro evaluation and corrosion behaviour of electrochemically anodized and calcium phosphate coated AZ31 magnesium alloy
8.	FMSM_P256	FMSM_020	Priyam Srivastava	IIT Jammu	Oral High-Performance Thermoelectric MXene/SWCNT Composites
9.	FMSM_P257	FMSM_021	Indranil Lahiri	IIT Roorkee	Graphene and graphene based materials: Scalable production methods and multifarious applications
10.	FMSM_P258	FMSM_024	Bandaru Aparna	University of Hyderabad	Morphological Optimization of In-Situ Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> Core-Shell Nanoparticles for Drug Delivery Applications
11.	FMSM_P259	FMSM_026	Shiksha Tiwari	IIT BHU	Magnetic Hyperthermia Application of Zr-substituted $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> MNPs
12.	FMSM_P260	FMSM_027	Vineeth V S	NIIST	Magnesium –Rare Earth Alloy Systems for Orthopaedic Applications: In Vitro Assessment of Degradation Behaviour and Biocompatibility
13.	FMSM_P261	FMSM_028	V Uday Kumar	NIT Warangal	Critical comparison of corrosion rates of Zn-Mn alloys processed by conventional and severe plastic deformation techniques

14.	FMSM_P262	FMSM_029	Satheeshkumar K	University of Hyderabad	Sol–Gel Derived $\text{Ca}_5(\text{PO}_4)_2\text{SiO}_4$ for Stronger and More Bioactive Bone Substitutes
15.	FMSM_P263	FMSM_030	Rohit Kumar Arora	Tata Steel, Jamshedpur	Next generation Multifunctional Colour changing Coating using PVDF/MMA polymer matrix with Enhanced Performance for Galvanized Steel
16.	FMSM_P264	FMSM_037	Mitali Mishra	IIT Kharagpur	Exploring Ancient Metallurgical Approaches to ZnO Micro–Nanoparticle Synthesis and their potential in Biomaterial applications
17.	FMSM_P265	FMSM_038	Mohamed Niyas A	PSG Tech	Study and Tailoring Magnetic Performance of Nd-Fe-B Permanent Magnets through Particle Size Control and Consolidation Methods
18.	FMSM_P266	FMSM_039	Gautam Kumar	IIT BHU	Synthesis and study of different substrate for SERS Study
19.	FMSM_P267	FMSM_043	Suhela Tyeb	University of Jammu	Emerging Role of Polysaccharide Transdermal Patches in Chronic Wound Healing: Advances and Clinical Translation
20.	FMSM_P268	FMSM_044	Jahnavi Vuppala	RGUKT Nuzvid	Rare Earths (RE) containing Mg-Zn alloy for Orthopaedic Implant applications: Evaluation of Microstructure, Mechanical Properties and Corrosion behaviour
21.	FMSM_P269	FMSM_045	Indira Gupta Priyadarshini	NML, Jamshedpur	Lattice expansion, residual stresses, crystallographic texture and superconductivity in nanocrystalline Niobium thin films
22.	FMSM_P270	FMSM_047	Debasis Mishra	IIT(ISM) Dhanbad	Study on Effect of Infill Geometry and Layer Thickness with constant infill density on Compression Behaviour in FDM 3D Printing.

23.	FMSM_P271	FMSM_051	Bhuneshwar Paswan	IIT Jodhpur	Synergistic Co <sub>3</sub> O <sub>4</sub> @Hematite Hybrid Architecture with Improved Photocurrent Response for Advanced Photosensing
24.	FMSM_P272	FMSM_052	Arulmozhiselvar S	NIT Durgapur	Hexagonal close packed to face centered cubic polymorphic transformation in nanocrystalline Titanium–Magnesium binary alloys by mechanical alloying
25.	FMSM_P273	FMSM_053	Babra Abbas	IIT Delhi	Biomechanical Performance of Nanostructured SiO <sub>2</sub> -Coated TAV Alloy for Orthopaedic Implant Applications
26.	FMSM_P274	FMSM_057	Kowshic K T	Anna University	Biocompatibility testing of 3d printed pla scaffolds coated with gelatin / cap hybrid layer for bone regeneration
27.	FMSM_P275	FMSM_059	Amritha J Nair	IIT Roorkee	Electron-Deficient $\beta$ -Trisubstituted Porphyrins: Synthesis, Spectral, Structural, DFT, Electrochemical Studies and Their NLO Application
28.	FMSM_P276	FMSM_060	Shaswata Chowdhury	IIT Hyderabad	Synthesis and characterization of barium titanate based piezoelectric composite material for medical ultrasound applications
29.	FMSM_P277	FMSM_061	Tanay Bag	VNIT Nagpur	Hydrogen Evolution and Corrosion Behaviour of Twin Roll Cast AZ31 Alloy in Simulated Body Fluid (SBF)
30.	FMSM_P278	FMSM_062	Uday Kumar Jonnala	NIT Warangal	Compressive and energy absorption properties of linearly graded Ti-6Al-4V Split-P metamaterials for biomedical applications
31.	FMSM_P279	FMSM_064	Ravinder Kaur	IIT Hyderabad	Stripe Domains in GdCo Ferrimagnetic Alloys near Magnetic Compensation

32.	FMSM_P280	FMSM_065	Chennoju Raghu	IIT Hyderabad	Effect of deposition temperature on structural and Magnetic properties of Co <sub>2</sub> MnSi thin films
33.	FMSM_P281	FMSM_066	Shreya R	IISc, Bengaluru	RSM-Optimized Piezoelectric Electrospun Nanofibers for Potential usage in Cardiac Tissue Engineering
34.	FMSM_P282	FMSM_070	Akhil P.S	NIT Warangal	Mechanism of core-shell formation in Nd-Fe-B sintered magnets during grain boundary diffusion process using Tb <sub>4</sub> O <sub>7</sub> diffusion source
35.	FMSM_P283	FMSM_071	Juhi Rani Verma	VNIT Nagpur	Evaluation of Structural, Mechanical, and Biocompatibility Properties of Zr <sub>47</sub> Cu <sub>40</sub> Al <sub>8</sub> Ag <sub>5</sub> Bulk Metallic Glass for Biomedical Applications
36.	FMSM_P284	FMSM_074	Ranjan Kumar Sahu	IIT Hyderabad	High-Performance Energy Storage and Robust Thermal-Frequency Stability in Lead-Free Relaxor Ceramics via Single-Element Engineering
37.	FMSM_P285	FMSM_076	Nadipudi Jahnavi Lakshmi Sivani	IIT Hyderabad	Understanding magnetoplasmonic effects in alloy thin films and applications
38.	FMSM_P286	FMSM_078	Reeti Mukherjee	Osmania University, Hyderabad	Thermo-Mechanical Performance of a Novel Bio-degradable Composite Laminate Reinforced with Calotropis gigantea Fiber and Cornflour Matrix
39.	FMSM_P287	FMSM_083	K Chakravarthy	IIT Madras	Controlling magnesium biocorrosion kinetics for orthopedic applications using struvite-bioactive coating
40.	FMSM_P288	FMSM_085	N. Sai Anuraag	C-MET, Hyderabad	Optimizing NdF <sub>3</sub> synthesis: Comparative Insights into Dry and Wet Synthesis Techniques
41.	FMSM_P289	FMSM_087	Sonali Garje	IISc, Bengaluru	Plant-Based Bioink for High-Fidelity Extrusion 3D Bioprinting

42.	FMSM_P290	FMSM_092	Garima Rohilla	VNIT Nagpur	Understanding the Influence of Microstructure on Mechanical properties and Corrosion Performance of Beta-Type Ti-Alloy for Biomedical Applications
43.	FMSM_P291	FMSM_093	Yaswanth Surya Vangara	IIT Hyderabad	Assembly of gold bipyramid nanoparticle layers for large area high-efficiency SERS substrates
44.	FMSM_P292	FMSM_094	Sri Harsha Molleti	IIT Hyderabad	Multi length-scale evaluation of magnetoelastic phase transformation in magnetocaloric (Mn,Fe) <sub>2</sub> (P,Si)- type compounds
45.	FMSM_P293	FMSM_096	Sanjeev Kumar	IIT BHU	Efficient removal of Congo Red dye using MoS <sub>2</sub> -modified Mg-Al LDH nanocomposites for efficient wastewater remediation
46.	FMSM_P294	FMSM_098	Bipratip Niyogi	IIT Delhi	Assessment of Mechanical Properties in NiTi Porous Fibre Networks Fabricated using Low Temperature Sintering Route
<b>Integrated Computational Materials Engineering &amp; AI/ML (ICME)</b>					
1.	ICME_P295	ICME_004	Dhruva Mehrotra	IIT BHU	Computation of Thermodynamic Data of Ti-Nb, Ti-V and Sc-Zr Systems using First Principles Methods
2.	ICME_P296	ICME_014	Dr. Akash Gupta	TCS, Pune	Multi-Agent Artificial Intelligence System for Alloy Design
3.	ICME_P297	ICME_021	Prakash Gulabrao Ranaware	NIT Rourkela	Predicting the stacking fault energy of austenitic Fe-Mn and Fe-Mn-C alloys by Thermodynamic Modeling with Modified Interfacial Energy Term
4.	ICME_P298	ICME_025	Prashant Choudhary	JSW, Bellary	Optimizing Welding Simulation Parameters for Improved Weld Quality of Dual Phase Steel Using SysWeld Software

5.	ICME_P299	ICME_030	Apara Chaurasia	SRM, Chennai	Implementation of an Emerging Machine Learning Algorithm – ‘Hybrid Vision Transformers’ for Image Classification in Materials Science
6.	ICME_P300	ICME_032	Vijith P	IIT Madras	TransChem: A hybrid transformer and cheminformatics based framework for enhanced polymer informatics
7.	ICME_P301	ICME_033	Monish Kumar D	NIT Andhra	Domains of Various Invariant Reactions in the Binary System: A Quasi-Chemical and Regular Solution Approach
8.	ICME_P302	ICME_046	Dhanasekar	PSG Tech	Integrating Machine Learning and Thermodynamic Modeling for the Design and Evaluation of High Nitrogen Stainless Steels
9.	ICME_P303	ICME_047	Abhishek Kumar Thakur	Tata Steel, Jamshedpur	Enhancing microstructure prediction using phase-field modeling coupled with machine learning
10.	ICME_P304	ICME_048	Loladhattu Abhishekta Varma	GITAM, Visakhapatnam	Machine Learning and Generative AI-Driven Design of High-Entropy Alloys Minimising Critical Elements
11.	ICME_P305	ICME_049	V S Hariharan	Lincoln Electric Company (India) Pvt. Ltd.	An ICME-Based Framework for Predicting Hydrogen-Induced Porosity in Wrought and HPDC Aluminium Welds
12.	ICME_P306	ICME_051	Sunraj Patel	IIT Kanpur	Physics-Informed Neural Network for Stress Analysis in In-Plane Crack Problems
13.	ICME_P307	ICME_052	Vankayala Satyam	IIT Madras	Thermodynamic reassessment of the Fe-Cr-Ni system
14.	ICME_P308	ICME_053	Saurav Singh Bisht	IIT Bombay	Phase-field modelling of domain evolution in BZCT using CUDA

15.	ICME_P309	ICME_057	Bharat Kumar	JAMIPOL LTD	Physics-Informed Machine Learning for Efficient Hot Metal Desulfurization
16.	ICME_P310	ICME_058	Karthikeyan M	IIT Madras	Ab Initio and Experimental study of phase Equilibria of the Nb–Al–C System
17.	ICME_P311	ICME_065	V Srinivas	DMRL	Multitrack and Multilayer Simulations of Laser Powder Bed Fusion Additive Manufacturing of Maraging Steel using AM PravaH
18.	ICME_P312	ICME_068	Gulivindala Gopi	IIT Bombay	Modeling Elevated Temperature Deformation in Polycrystalline Nickel and Tungsten
19.	ICME_P313	ICME_069	Ayub Khan	IIT Kanpur	Dislocation Density Based Grain Boundary Region Model for Bicrystals
20.	ICME_P314	ICME_071	Rakesh Maurya	IIT Kanpur	Effect of Magnetic Field on Grain Growth in Polycrystalline Materials: A Phase Field Study
21.	ICME_P315	ICME_072	Devaguptapu Atchyut Kumar	IIT Hyderabad	Rafting and Morphological Evolution of $\gamma/\gamma'$ Phases in Ni-Based Single Crystalline Alloys: A Phase-Field Approach
22.	ICME_P316	ICME_075	Pushkar A Pandit	IISc, Bengaluru	Observation of $\gamma'$ precipitate splitting associated with dendritic instability in Ni–Al–X alloys
23.	ICME_P317	ICME_076	Namrata Das	IIT Hyderabad	Modeling the effect of point defects on the spontaneous polarization of ferroelectric oxides using first-principles
24.	ICME_P318	ICME_077	Amarendra Kumar Singh	IIT Kanpur	Integrating Process Models with ICME and AI/ML: A Scalable Pathway to Materials and Product Design

25.	ICME_P319	ICME_080	Srijita Chakraborty	IIT Hyderabad	First-Principles Investigation of Defect Induced Magnetism in 2D van der Waals Materials for Spintronics Applications
26.	ICME_P320	ICME_083	Yash Pandit	IIT Kanpur	Engineering Metastability in High Entropy Alloys: A Genetic Algorithm-Driven Machine Learning Approach to Predict Gibbs Free Energy
27.	ICME_P321	ICME_084	Saurabh Tiwari	IIT Roorkee	Phase-field simulations of dendritic and grain-scale microstructures under additive manufacturing solidification conditions
28.	ICME_P322	ICME_088	Yamini Janghel	IIT Hyderabad	First-Principles Study of Electronic Structure and Native Point Defects in Polymorphs of HfO <sub>2</sub>
29.	ICME_P323	ICME_089	Dr. Ashish Pathak	DMRL	Heat Treatment Study in IN718 Superalloy: A CALPHAD Based Approach
30.	ICME_P324	ICME_092	Gaijinliu Gangmei	IIT Hyderabad	Accelerating " Precipitates Prediction in Al-Cu Alloys with Physics-Informed Neural Operators
31.	ICME_P325	ICME_093	B.Pabitra Mohan Prusty	IIT Madras	Accelerated Design and Discovery of High-Temperature Shape Memory Alloys via Machine Learning
32.	ICME_P326	ICME_098	Aravind K	IIT Kanpur	Three-dimensional Phase-field Modelling of Droplet Evolution on Patterned Substrates
33.	ICME_P327	ICME_099	Harshita Sharma	IIT Bombay	Thermodynamics-based modification of the Koistinen-Marburger model for martensitic transformation in metal additive manufacturing
34.	ICME_P328	ICME_100	Bhongiri Prasuna	DMRL	Microstructure-Property Analysis using PyMKS and Machine Learning pipeline



35.	ICME_P329	ICME_106	Vaishnavi S M	IIT Hyderabad	Effect of misfit strain and strain gradient on domain structure of ferroelectric thin films
36.	ICME_P330	ICME_107	Pawan Tejram Bohane	VNIT Nagpur	Data-driven approach for simultaneous optimization of strength and conductivity in Al-alloys
37.	ICME_P331	ICME_108	Ankosh Dadaram Deshmukh	Savitribai Phule Pune University	Atomic-Scale Understanding of CdS/Cu <sub>2</sub> NiSnS <sub>4</sub> Heterointerfaces: Work Function Alignment, Charge Transfer, and Binding Energetics
38.	ICME_P332	ICME_110	Sandeep Kumar	IIT Roorkee	Effect of Spatial Dimensionality on the Interplay between Spinodal Decomposition and Wetting in Multicomponent Mixtures
39.	ICME_P333	ICME_111	Deepak Sharma	IIT Hyderabad	A Unified CALPHAD, Machine Learning, and Atomistic Modeling Framework for the Inverse Design of Refractory Complex Concentrated Alloys
40.	ICME_P334	ICME_113	Guguloth Abhishek	IIT Hyderabad	Phase Field Simulation of Martensitic Transformation in Ti-6Al-4V
41.	ICME_P335	ICME_117	Bethanapalli Jyothirmai	IIT Bombay	A 3D CFD-CA model for rapid solidification in additive manufacturing
42.	ICME_P336	ICME_121	Vishal	IIT Kanpur	Process-Structure-Property Computation for Crystallographically Complex Multiphase alloy: Ti-6Al-4V
<b>Physical &amp; Mechanical Metallurgy (PMM)</b>					
1.	PMM_P337	PMM_002	Sk Md Hasan	IIT Jodhpur	Formation of Martensite in Medium Mn Steel: Effect of Austenite Grain Size and Quenching Temperature

2.	PMM_P338	PMM_005	Jose Immanuel	IIT Bhilai	A novel lightly alloyed Magnesium with improved mechanical performance and superior specific strength
3.	PMM_P339	PMM_011	Sujit Kumar	Tata Steel, Jamshedpur	Development of 51CrV4 Grade Round Bars for Automotive Stabilizer Bar Application with stringent Toughness in Hardened & Tempered Condition
4.	PMM_P340	PMM_014	Santoshi Kumari	Tata Steel Gamharia	Reduction of Scale Anchoring in Spring steel during hot rolling at WRM of TSG
5.	PMM_P341	PMM_019	Shubhangini Yadav	IIT Roorkee	Growth of intermetallic phases in the Metal–Zinc systems
6.	PMM_P342	PMM_020	Subhasis Das Gupta	Tata Steel, Jamshedpur	Improving microstructure & mechanical properties through heat treatment in 42CrMo4 grade
7.	PMM_P343	PMM_024	Kumar Karuna Nidhi	IIT Kharagpur	Microstructural evolution and mechanical properties of ductile iron subjected to quenching & partitioning and austempering
8.	PMM_P344	PMM_025	Jyoti Chaudhary	IISc, Bengaluru	Kinetically Induced Spinodal Nanocluster Formation in Al- and Fe-Based Alloys via Multicomponent Diffusional Coupling
9.	PMM_P345	PMM_030	Beauty Pal	Tata Steel, Gamharia	Optimization of Stress Relieving Cycle to Improve Upsetability of 10B35 Wire Rods
10.	PMM_P346	PMM_032	Gautam Mishra	IIT BHU	Mechanical behavior of QLT-treated 3Ni-5Mn steel based on examinations of microstructural evolution
11.	PMM_P347	PMM_036	Sandip Kumar Bauri	IIT(ISM) Dhanbad	Dilatometry investigation on phase transformations during austempering in a high-carbon steel

12.	PMM_P348	PMM_043	Pravin Jadhav	Bharat Forge Ltd, Pune	Influence of Solution Temperature on the Charpy Impact Properties of Super Duplex Stainless Steel 2507
13.	PMM_P349	PMM_044	Mohan Mehta	Bharat Forge Ltd, Pune	The effect of quenching media on the microstructure and mechanical properties of near- $\alpha$ ti alloy
14.	PMM_P350	PMM_052	Muhammad Imtiaz Hussain	IIT Roorkee	Twin–Dislocation Interactions and Grain Boundary Controlled Superplasticity of FSP AZ91 Mg Alloy
15.	PMM_P351	PMM_053	Subhmit Kumar Roy	JSW, Vijayanagar	Role of Hot Rolling and Welding Strategies in Achieving Superior Toughness of API X65MS Pipeline Steel
16.	PMM_P352	PMM_055	Sunny Chakroborty	IIT(ISM) Dhanbad	Strain Rate Effects on Work Hardening Mechanisms in Cu-Modified Cr–Mn Austenitic Stainless Steel
17.	PMM_P353	PMM_056	Arnab Sarkar	NIT Rourkela	Decoding the deformation behavior of high Mn steel following the profilometry-based indentation plastometry (PIP) tests
18.	PMM_P354	PMM_058	Yogendra Reddy	JSW, Vijayanagar	Enhancing Cold-Rolling Processability of Non-Oriented Electrical Steel through Optimized Chemical Design
19.	PMM_P355	PMM_065	Anmol Bakshi	IIT Kharagpur	Study on damage initiation during deformation in metallic alloys
20.	PMM_P356	PMM_066	Dr. K Deekshith Goud	Tube Investments of India Limited, Chennai	A Digital Image Correlation Approach to Decode Fracture in Surface-Modified Automotive Steels
21.	PMM_P357	PMM_070	M Pranavram	IIT Bhubaneswar	Influence of Annealing Parameters on Microstructural Evolution in Advanced High-Strength Steels

22.	PMM_P358	PMM_073	Ragasree R K	JSW, Vijayanagar	Enhancing DWTT Toughness of API X70 Linepipe: Optimising Rolling Schedule Using MicroSim-PM®
23.	PMM_P359	PMM_075	Rahul K R	JSW, Vijayanagar	Root Cause Analysis and Resolution of Poor Shape in CRCA Tube Grade Coils
24.	PMM_P360	PMM_076	Sajal Kumar Dey	Tata Steel, Jamshedpur	Elimination of Copper Induced Surface Defects in Hot Rolled Structural Steel for Railway Wagon Applications
25.	PMM_P361	PMM_078	Sushil Kumar Giri	Tata Steel, Jamshedpur	Development of 780 MPa grade high strength hot rolled steel for chassis applications
26.	PMM_P362	PMM_081	K L Anantha Krishna	University of Hyderabad	Experimental investigation of Al-Co-V and Cr-V-Zr ternary systems towards the design of high temperature alloys
27.	PMM_P363	PMM_082	Banoth Shivakumar	NIT Warangal	Creep–Fatigue Interaction in Hastelloy C-276: Role of Temperature and Strain Amplitude
28.	PMM_P364	PMM_083	Ganesh GH	JSW, Vijayanagar	Investigation of Root cause for Poor Impact toughness in Hot rolled S355MC Steel
29.	PMM_P365	PMM_085	Kuldeep Singh Chauhan	Arcelor Mittal Nippon Steel India	Development of Hot Rolled & Annealed Boron added 0.20% Carbon Steel with fully spheroidized microstructure by controlled hot rolling practices for use in Fine blanking applications
30.	PMM_P366	PMM_088	Sujit Kumar Nayak	IIT Kharagpur	Deformation behavior of hot-rolled titanium under three-point bending
31.	PMM_P367	PMM_089	Saurav Sunil	BARC	Superplastic Behaviour of Ultrafine-grained Austenitic steel produced by Reversion of Strain Induced Martensite

32.	PMM_P368	PMM_092	Amit Kumar Mohanty	Tata Steel, Jamshedpur	Influence of Rolling and Coiling condition on Microstructure and Mechanical properties of a low Carbon Nb-Ti microalloyed steel
33.	PMM_P369	PMM_094	Pabitra Pattanayak	Tata Steel, Jamshedpur	Elimination of tiny scale defect in ultralow carbon steel used in car outer bodies
34.	PMM_P370	PMM_095	Sayali Dounde	IISc, Bengaluru	Periodic segregation of Zn at the nanoprecipitate/ $\alpha$ -matrix interface in extruded Mg-Al-based alloy
35.	PMM_P371	PMM_096	Laxya Gupta	BARC	Development of Fe-Cr-Ni-Al alloys for accident-tolerant fuel (ATF) cladding
36.	PMM_P372	PMM_097	Shantanu Nitin Deo	COEP Technological University, Pune	Development of High Tensile Brass (C86300)
37.	PMM_P373	PMM_098	Mansha Ram Verma	IIT(ISM) Dhanbad	Enhancing Work Hardening and Wear Resistance Mechanisms in Hadfield Steel
38.	PMM_P374	PMM_104	Aman Jyoti Shukla	IIT Kharagpur	Microstructure and texture evolution during uniaxial compression of Mg-Zn-Ca alloy
39.	PMM_P375	PMM_106	Rachit Trivedi	IIT Roorkee	Dry sliding wear behaviour of pearlitic wheel steels used for Indian Railways
40.	PMM_P376	PMM_109	Sakshi Garkoti	IIT Bhilai	Synthesis and characterization of Two-Dimensional Al <sub>65</sub> Cu <sub>22.5</sub> Fe <sub>12.5</sub> Icosahedral Quasicrystals by Liquid Exfoliation
41.	PMM_P377	PMM_110	P. Mallikarjuna Rao	JSW, Vijayanagar	Improvement of mechanical properties of dual phase steel by martensite tempering
42.	PMM_P378	PMM_112	Sourabh Chatterjee	Tata Steel, Jamshedpur	Full Pearlite Formation in Continuously Cooled Medium Carbon Steel

43.	PMM_P379	PMM_114	Hitesh Kumar	JSW, Vijayanagar	Microstructural Engineering of Tinplate Steel for Superior Cupping Performance
44.	PMM_P380	PMM_115	Deepayan Roy	DMRL	Characterization of High-Temperature Flow Behaviour and Recrystallization in a HSLA Steel
45.	PMM_P381	PMM_118	Dr. Sumanta Bagui	NML, Jamshedpur	Effect of yttria dispersion on the creep deformation behavior of iron aluminide alloy
46.	PMM_P382	PMM_120	Ajit Kumar Mohanty	BPSL (A JSW Group Company)	Development of EN 10268 HC420LA Grade for Automotive application through EAF-CSP-BAF Route
47.	PMM_P383	PMM_124	Poornachandra Satyampet	JINDAL	Role of Titanium Additions in Improving Precipitation Behavior and $\gamma$ -Fiber Texture of Cold-Rolled AISI 430 Stainless Steel
48.	PMM_P384	PMM_125	Bhanu Pratap Singh	IIT Roorkee	Microstructure based constitutive modeling of flow curve for high-nitrogen steel at high strain rates and temperatures
49.	PMM_P385	PMM_126	Avanish Kumar Singh	IIT Madras	Temperature-Dependent Austenite Nucleation and Its Influence on Transformation Texture in Warm Rolled Fe–0.15C–6Mn Medium Mn Steel
50.	PMM_P386	PMM_130	Pravendra Pratap Singh	IIT Roorkee	Microstructure and texture evolution in 0.3 CrMoV steel: Role of strain path, quenching, and tempering
51.	PMM_P387	PMM_132	S. Panneer Selvi	IGCAR, Kalpakkam	Effect of Temperature Change on Creep Properties of Grade 91 Steel
52.	PMM_P388	PMM_133	V Ganesan	IGCAR, Kalpakkam	Tensile and Creep Deformation Behavior of Soft Iron

53.	PMM_P389	PMM_137	Satyabrata Sahoo	JSL, Jajpur	Development of Cost-effective ferritic Stainless Steel for structural application
54.	PMM_P390	PMM_140	Pramod Kushwaha	VNIT Nagpur	Exploring small punch creep to study creep behaviour of pre-cycled Su-263
55.	PMM_P391	PMM_143	Apoorva Atul Ballal	VNIT Nagpur	Study of Creep Behavior of AM 316 L SS Using Small Punch Creep
56.	PMM_P392	PMM_153	Anshuman Kumar Singh	DRDO	Microstructural Study of As-Cast, Homogenized and Hot Deformed AA2219-Based Al Alloy Microalloyed with Mn, Zr, and Ce
57.	PMM_P393	PMM_154	Dudala Srinivas	IIT Hyderabad	Towards understanding the dual effect of microalloying on the phase stability and mechanical properties of high temperature Al-alloys
58.	PMM_P394	PMM_155	Aniket Kumar Dutt	JSL, Hisar	Strength–Ductility Trade-off in Ferritic–Martensitic Stainless Steel (410L Grade) for Rebar Applications
59.	PMM_P395	PMM_157	Mohammad Mehaboob Johny	IIT Hyderabad	Development of Magnesium Alloys for High Temperature Structural Applications
60.	PMM_P396	PMM_158	Ambe Radha	IIT Hyderabad	Microstructure and welding characteristics of single- and two-phase Al <sub>0.2</sub> CoCrFeNi produced by designed thermomechanical treatments
61.	PMM_P397	PMM_160	Nayan Krushna Somkuwar	VNIT Nagpur	Effect of Strain Ratio on Low Cycle Fatigue Behavior of Superalloy Su-263
62.	PMM_P398	PMM_161	Prasanna Dupare	VNIT Nagpur	Effect of Tensile Hold on Cyclic Deformation Behavior of Alloy 617M
63.	PMM_P399	PMM_162	Dharun Raghavan C	PSG Tech	Effect of Ultrafast Heating on the Microstructure and Mechanical Properties of a Medium Carbon Steel

64.	PMM_P400	PMM_166	Pulluri Sravani	JSL, Hisar	Influence of Ti & Nb stabilizing elements on the performance of SUS 436J11 stainless steel grade in Sub muffler application
65.	PMM_P401	PMM_170	Apoorv Sobti	IIT Madras	Microstructural Evolution and Mechanical Response of Bainitic Steel under Different Isothermal Holding Times
66.	PMM_P402	PMM_171	Chinnam Sivateja	IIT Hyderabad	Fatigue Crack Growth Life Prediction in Aluminum Alloy 2024-T3 under Service Loading Using Fundamental Deformation Properties
67.	PMM_P403	PMM_172	Sejal Sinha	JSL, Hisar	Improvement of R-Value (R45) Lankford Value in 409L Ferritic Stainless Steel through Process and Alloy Optimization
68.	PMM_P404	PMM_175	Balbir Kumar Singh	HBNI, Mumbai	Creep deformation and Damage behaviour of 304L Stainless Steel at 973 K
69.	PMM_P405	PMM_180	Kocharla Sai Durga Deepak	JSW, Vijayanagar	Development of 1X7, 15.20mm, 1960 grade Low Relaxation Prestressed Concrete (LRPC) Strands for Metro Girders.
70.	PMM_P406	PMM_181	Srijan Yadav	IEST	Effect of TiB <sub>2</sub> Reinforcement and Processing Temperature on Cu Matrix Texture and Microstructure during ECAP
71.	PMM_P407	PMM_182	A Abhijith	BARC	Dynamic uniaxial compression of single-crystal tungsten: Probing strain-rate effects with molecular dynamics
72.	PMM_P408	PMM_183	Srimon Narayanasamy P	JSW, Vijayanagar	Reduction of Sliver Defects in Galvannealed (GA) Steel through RH-in Temperature Optimization



73.	PMM_P409	PMM_184	Umesh Mahendra Ahire	JSW, Vijayanagar	Effect of Micro-alloying Elements on Hot Ductility Behaviour of HSLA Steel
74.	PMM_P410	PMM_185	Venkatesh Meka	MIDHANI	Effect of Heat treatment on anisotropy in Structural and mechanical properties of TITAN32B alloy
75.	PMM_P411	PMM_186	D Ratiram Naik	MIDHANI	Optimizing Heat Treatment cycles of Superalloys and Steels Using Metallographic Techniques
76.	PMM_P412	PMM_187	Gopalam Anusha	MIDHANI	Optimized process parameters of SuperNi80A by Metallography analysis
77.	PMM_P413	PMM_188	J Christopher	IGCAR, Kalpakkam	Internal Stress–Based Hyperbolic Kinetic Rate Law and Its Applicability to Creep and Stress-Relaxation Behaviour of Structural Materials
78.	PMM_P414	PMM_189	Dr. Chandan Choudhary	The Automotive Research Association of India, Pune	Optimization of hot deformation parameters of Al-7075 alloy through processing map
<b>Materials for Energy Devices (MDSE)</b>					
1.	MDSE_P415	MDSE_002	Ravi Raj	Central University of Karnataka	Integrated Solar Plant: A Multi-Functional Renewable Energy Solution
2.	MDSE_P416	MDSE_004	Sachindra Kumar Nayak	IMMT BHUBANESWAR	Sustainable Extraction and Enhanced Utilization of Manganese from Low-Grade Ores for Redox Flow Battery Application and Cell Architecture
3.	MDSE_P417	MDSE_006	Basitti Hitesh	IIT Roorkee	Significance of Single and Multi-element Doping on Physical and Electrochemical Properties of Rare Earth and Transitional Metal Doped NASICON

4.	MDSE_P418	MDSE_008	Puli Akshita Govind	NIT Trichy	Thermoelectric efficiency of boron-doped multicomponent BiSbTeSe alloy synthesized by spark plasma sintering
5.	MDSE_P419	MDSE_009	Parul Aggarwal	IISER Bhopal	Temperature-Dependent Synthesis of Robust Ultrathin Cobalt Oxide Nanomesh for Oxygen Evolution Reaction
6.	MDSE_P420	MDSE_011	Sweety	IISER Bhopal	Remarkable solid-state proton conduction in sulphur- and nitrogen-functionalized few-layer graphene
7.	MDSE_P421	MDSE_017	Samanyu Acharjya	IIT Madras	Tailored MOF-Derived Layered Copper Oxide Dodecahedra for Oxygen reduction reaction
8.	MDSE_P422	MDSE_019	Rehana Batool Batool	IIT Jammu	Processing and characterization of Ceria–Zirconia structured catalysts for High-Temperature Solar Fuel Applications using Dip Coating technique
9.	MDSE_P423	MDSE_028	Mitesh M V	JSW, Vijayanagar	Integrated Technologies for Diesel Efficiency in Locomotives
10.	MDSE_P424	MDSE_030	Shovan Samanta	IIT Madras	Correlating Phase Evolution and Optical Properties of Tin-based Metal Organic Framework Towards Reduction of CO <sub>2</sub> Using Visible Light
11.	MDSE_P425	MDSE_031	Manjeet Jakhar	IIT Roorkee	Enhanced performance of cobalt ferrite-based hydroelectric cell with the irradiation of gamma rays
12.	MDSE_P426	MDSE_034	Saurabh Kumar Jha	IIT Jammu	Development of Thermoelectric device for sustainable energy applications
13.	MDSE_P427	MDSE_037	Dino Ashmi R V	IIT Hyderabad	Structural, Microstructural and Thermoelectric properties of Ga-doped Higher Manganese Silicide

14.	MDSE_P428	MDSE_038	Harsha Rajput	IIT Roorkee	Effect of Al <sub>2</sub> O <sub>3</sub> interlayer on interfacial behaviour of Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> based solid electrolyte with Li-metal anode
15.	MDSE_P429	MDSE_039	Derick R	CHRIST, Bengaluru	Advancing Sustainable Li-ion Batteries: Synthesis, Characterization, and Optimization of Nickel-Rich Cathode Materials for High-Performance Energy Storage
16.	MDSE_P430	MDSE_040	Karthik Manoj	CHRIST, Bengaluru	Unlocking the Potential of Nickel-Rich Cathodes: A Pathway to High-Performance, Cobalt-Free Li ion Batteries for Electric Vehicles
17.	MDSE_P431	MDSE_042	Kovuru Hemamruth	CHRIST, Bengaluru	A Hybrid Quantum-Classical Framework for Accelerating the Discovery of High-Performance Energy Materials
18.	MDSE_P432	MDSE_043	Andrews Cyril	IIT Jodhpur	Sustainable benign to utilize spent lead acid battery for producing of PbCl <sub>2</sub> electrodes for next-generation Li-ion micro batteries
19.	MDSE_P433	MDSE_046	Sankalpa Banerjee	DIAT, Pune	FeCoCuCrNi-MoS <sub>2</sub> -MoP based electrocatalyst for water splitting: Experiment and DFT Modelling
20.	MDSE_P434	MDSE_047	Shubhradeep Maity	IIT Jodhpur	Rechargeable Zn-Cu aqueous micro-Battery by formation and deformation of CuSO <sub>4</sub>
21.	MDSE_P435	MDSE_048	Dinesh Kumar A	IIT Madras	Additively Manufactured Ag Nanowire/Ionic Liquid-Integrated PVDF Nanocomposites with Self-Polishing for Enhanced Triboelectric Performance
22.	MDSE_P436	MDSE_051	Arunkumar J S	IIT Hyderabad	Electrocatalytic Performance Evaluation of Metal Ferrite-MoS <sub>2</sub> Composite for Efficient Electrochemical Water Splitting

23.	MDSE_P437	MDSE_052	Ankur Srivastava	IIT Hyderabad	Electrodeposited High-Entropy Oxide Using All Transition Metals for Enhanced Hydrogen Evolution Reaction (HER)
24.	MDSE_P438	MDSE_053	Sahithi Thatla	NIT Raipur	Enhanced HER Activity and Durability via Surface-Engineered Multicomponent Ni-based Catalysts
25.	MDSE_P439	MDSE_057	Sourav K Krishnan	NIIST	Corrosion Characteristics and Discharge Behaviour of Aluminium Alloys for Al–Air Battery Applications
26.	MDSE_P440	MDSE_059	Uday Kumar M	IIT Hyderabad	Carrier engineering of Higher Manganese Silicide for Thermoelectric Power generation
27.	MDSE_P441	MDSE_060	R. S. Nathiya	IIT Hyderabad	High electrochemical performance of Cobalt-free high-entropy oxide
28.	MDSE_P442	MDSE_064	Aparna Yadav	IIT Roorkee	A Novel Design Fin-Integrated PCM–Liquid Hybrid Cooling System for Lithium-Ion Battery in EVs: Simulation study
29.	MDSE_P443	MDSE_066	Saurabh Srivastava	IIT Kanpur	Elucidating the Role of Tantalum Doped TiO <sub>2</sub> Electron Transport Layer in Suppressing Halide Segregation in Wide Bandgap Perovskite Solar Cells
30.	MDSE_P444	MDSE_068	R. S. Ganesh	IIT Hyderabad	Fabrication of Polycrystalline CALF-20 films for Carbon Capture Applications
31.	MDSE_P445	MDSE_070	Aditi Satrupa	IIT Bhubaneswar	Hydrogen evolution behavior of nanostructured iron alloys
32.	MDSE_P446	MDSE_071	Hunaid Fani	BARC	Materials of Construction for Iodine – Sulfur Thermochemical Process
33.	MDSE_P447	MDSE_074	Akshaya Nachagoni	University of Hyderabad	Bio-sourced carbon materials for energy storage

34.	MDSE_P448	MDSE_077	Haridhaa S	University of Hyderabad	Biomass-derived carbon materials for energy storage
35.	MDSE_P449	MDSE_078	Dharani Kumar	University of Hyderabad	Ni/NiFe <sub>2</sub> O <sub>4</sub> /rGO: A bifunctional non-noble metal catalyst for hydrogen and oxygen evolution reactions
36.	MDSE_P450	MDSE_079	Akshay Rao	University of Hyderabad	Biomass-derived carbon materials for supercapacitor applications
37.	MDSE_P451	MDSE_084	Rashi Verma	IIT Hyderabad	Multi-Objective Optimization of Multi-Stage Constant Current Charging Strategy for Lithium-ion Battery
38.	MDSE_P452	MDSE_087	Swarna S Ravisankar	IIT Tirupati	Insulating Metal Oxide and Self-Assembled Monolayer Interface for Efficient Perovskite Solar Cells
39.	MDSE_P453	MDSE_088	Vaishnavi S	VIT Vellore	Stability and Thermal Transport Features of Cubic HfO <sub>2</sub> and TiO <sub>2</sub> :A DFT Approach
40.	MDSE_P454	MDSE_089	Subhesh S	NIT Trichy	Bacterial Cellulose-Derived Carbon Nanofibers as Sustainable Cathodes for Aqueous Aluminium-Ion Supercapacitors
41.	MDSE_P455	MDSE_091	Lalit Kumar Jena	IIT Hyderabad	Energy Storage and Harvesting Potential of Eco-friendly Ca-substituted Ba <sub>0.8</sub> Sr <sub>0.2</sub> TiO <sub>3</sub> /PVDF Ferro-Flexible Composite Films
42.	MDSE_P456	MDSE_093	Hafijul Islam	IICT	Advanced Characterization Techniques for Single-Atom and Dual-Atom Catalysts in Solar-Driven Hydrogen Evolution
43.	MDSE_P457	MDSE_098	Abhiram	IIT Hyderabad	Band engineering of CuSbSe <sub>2</sub> via Te alloying for Thermoelectric Power Generation

44.	MDSE_P458	MDSE_099	Parvez Masood Mondal	IIT Hyderabad	Band Engineering of Ternary Chalcogenides for Enhanced Thermoelectric Power Generation
45.	MDSE_P459	MDSE_100	Achal Singh	IIT Hyderabad	BioSynthesis and characterisation of anisotropic gold nanoparticles for biosensing applications
46.	MDSE_P460	MDSE_101	Ranjith Reddy Patthi	University of Hyderabad	Electrochemical mechanism of Al-based composites for efficient hydrogen production through hydrolysis
47.	MDSE_P461	MDSE_104	Vivek Kumar	IIT Kanpur	Improved thermoelectric performance of SrTiO <sub>3</sub> -based entropy-stabilized perovskite oxide for high-temperature waste heat recovery
48.	MDSE_P462	MDSE_107	Saurabh Soni	IIT Bombay	Soft and conductive polyacrylamide hydrogel-based flexible wearable sensors for electrocardiogram (ECG) monitoring
49.	MDSE_P463	MDSE_108	Harita Pant	University of Hyderabad	Mesoporous Carbon derived through Biomass Conversion as an Electrode Material for Symmetric Supercapacitor
50.	MDSE_P464	MDSE_110	Harsha Varthanan P	Anna University	Highly Sensitive Flexible Footstep Energy Harvester Sensor Using PZT Thin Film on PVDF Substrate
51.	MDSE_P465	MDSE_120	Chinmaya Mohapatra	IIT BHU	Enhanced Hydrogen Production via Water Splitting Using Zr-Doped (Fe <sub>3</sub> C/ $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> )@C/NF Electrocatalysts
52.	MDSE_P466	MDSE_121	Mathivarsini P	VIT, Vellore	Computational Insights into KCaX <sub>3</sub> (X = Cl, Br, I) Halide Perovskites for Energy Conversion and Optoelectronics

	Materials for strategic Sectors (MFTS)				
1.	MFTS_P467	MFTS_001	Sandeep Thakare	Bharat Forge Ltd, Pune	Optimization of electron beam welding parameters for Ti-6Al-4V alloy by using Taguchi method
2.	MFTS_P468	MFTS_005	Shubham Kumar	BARC	Preparation and characterization of W-BCA composite for S type tungsten dispenser cathode material
3.	MFTS_P469	MFTS_007	Dipshikha Rakshit	Tata Steel, Jamshedpur	Development of Defence-Grade Round Bar Materials for Bomb Shell, Shell Body, and Projectile Body Applications
4.	MFTS_P470	MFTS_009	Himanshu Pal	IIT Roorkee	Effect of Nano Oxide Dispersion on Microstructure and Tensile Performance of Powder Forged 15Cr-ODS Ferritic Steel
5.	MFTS_P471	MFTS_020	T Narayana Murty	BARC	Development of an internal pressurization set up to perform the burst tests on pressure tubes
6.	MFTS_P472	MFTS_031	Sachin Kumar	IIT Kanpur	Effect of Molar Volume on Interdiffusion Coefficients in the B2 Ni-Al-Ru System at 1100 °C
7.	MFTS_P473	MFTS_033	M Anil Kumar	HAL	Initiatives in Aerospace material development activates
8.	MFTS_P474	MFTS_036	Sandipan Das	LPSC, ISRO	Microstructural characterization and strengthening mechanisms in an indigenous Ni-based 55Ni–17Cr–12Fe–9Mo–2Nb–1.5Al superalloy for cryogenic engine
9.	MFTS_P475	MFTS_039	Rajat Gupta	IIT BHU	A novel approach to enhance thermal transport in Al based hybrid composites with functionally graded layers through PM route

10.	MFTS_P476	MFTS_040	Phani Kishore	NFC, Hyderabad	Finite element simulation of Zircaoy-4 tube extrusion process
11.	MFTS_P477	MFTS_042	Vipin Kumar Sharma	UCIL (DAE)	High-Density Polyethylene (HDPE) Pipelines as a Sustainable Alternative to Mild Steel Rubber Lined (MSRL) Pipelines for Tailings Management in Mineral Processing
12.	MFTS_P478	MFTS_045	Sebastian PP	LPSC, ISRO	Friction Welding of Ti-6Al-4V to SS304L: development, characterization, and qualification for human-rated launch vehicle
13.	MFTS_P479	MFTS_046	Anantaaaa Narayan Behera	BARC	Study of Terminal Solid Solubility of Hydrogen and Deuterium in Zr-2.5Nb Alloy Pressure Tube Material
14.	MFTS_P480	MFTS_048	Samyuktha Gaddam	NFC, Hyderabad	Synthesis of Micron-Sized Zr70Ni30 Intermetallic Powder
15.	MFTS_P481	MFTS_050	Gourahari Das	NFC, Hyderabad	Development and Optimization of Process Parameters for Manufacturing of Monel -400 Tubes for Aerospace Application
16.	MFTS_P482	MFTS_052	Arnomitra Chatterjee	BARC	Development of Heat Treated Pressure Tube for Indian Pressurized Heavy Water Reactor
17.	MFTS_P483	MFTS_058	Aditya Rameshwar Balpande	IIT Jodhpur	Effect of ratio prior to Ti content on high-temperature oxidation resistance of Ti-rich and Ti-lean complex alloys
18.	MFTS_P484	MFTS_059	Govind Kumar	IISc, Bengaluru	High Pressure Compressive Reverse Shearing: A New Severe Plastic Deformation Process for Industrial Scale-up
19.	MFTS_P485	MFTS_061	Kvk Deshpande	NFC, Hyderabad	Developments in Manufacturing, Inspection & Testing of Alloy-800 Steam Generator Tubes for



					Indian Pressurized Heavy Water Reactors under Fleet Mode
20.	MFTS_P486	MFTS_062	Sirasavada Ravi Varma	MIDHANI	Indigenization of Alloy Superfer 909 (Inconel 909)
21.	MFTS_P487	MFTS_063	Ujjain Vaidya	ISRO	EFFECT OF PROCESS PARAMETERS ON THE ELECTRON BEAM WELDING OF ADDITIVELY MANUFACTURED INCONEL 718 ALLOY
22.	MFTS_P488	MFTS_067	J Siva Prasad	MIDHANI	Development of Near Net Shape Conical Forging of TITAN31 Through Open Die Forging
23.	MFTS_P489	MFTS_071	Dr. Poulami Chakraborty	BARC	Irradiation response of Indian Reduced Activation Ferritic/Martensitic Steel for Fusion
24.	MFTS_P490	MFTS_073	Santhoshkumar R	ISRO	Indigenous development of Cu-Ag-Mn-Zn alloy for brazing of LOX-Kerosene rocket engine
25.	MFTS_P491	MFTS_074	Srinath Jonnalagadda	VSSC, Trivandrum	Comparative Evaluation of MoS <sub>2</sub> -Based Coatings for Aerospace Fasteners
26.	MFTS_P492	MFTS_075	Pradip Kumar Sahoo	NFC, Hyderabad	An integrated approach for Zircaloy discard recycling for sustainable nuclear component fabrication
27.	MFTS_P493	MFTS_078	Midhat Ahsan	IIT Jammu	Effect of Cobalt Volume Fraction on the Mechanical and Tribological Properties of WC-Co Composite Coatings.
28.	MFTS_P494	MFTS_080	Siddhartah Jaddivada	IISc, Bengaluru	Optimization of Crystal Growth in the Bridgman Setup through Predictive Modeling
29.	MFTS_P495	MFTS_083	S. Murugan	IGCAR, Kalpakkam	Characterisation of Fusion Deposition made using ER316L Flux cored wire in Automated Gas Tungsten Arc Welding

30.	MFTS_P496	MFTS_087	Dineshraj S	VSSC, Trivandrum	Innovative Hot Isostaic Pressing (HIP) -Based Approaches for Fabrication and Enhancement of Advanced Aerospace Materials
31.	MFTS_P497	MFTS_090	Siddharthan N	NIT Trichy	In-Situ Y–W–O Phase Evolution and W Diffusivity in As-Annealed Nano-Y <sub>2</sub> O <sub>3</sub> Strengthened Tungsten Heavy Alloys with Variant Ni-Based Binder System
32.	MFTS_P498	MFTS_091	M S Rishav Subhin	CHRIST, Bengaluru	Data-Driven Ballistic Property Prediction of Ceramic Armor Materials for Advanced Protection Systems
33.	MFTS_P499	MFTS_092	M P Phani Raj	MGIT, Hyderabad	Nanoindentation Studies on Ordered and Disordered Iron Aluminides
<b>Mineral Processing (MPR)</b>					
1.	MPR_P500	MPR_002	Soumyadip Mondal	BARC	Atmospheric combined acid for nickel leaching from limonitic laterite origin - an answer to HPAL (High Pressure Acid Leaching) process conditions
2.	MPR_P501	MPR_008	Reshu Sinha	BARC	Process Development Studies For The Recovery Of Uranium From Kanchankayi Uranium Ore Deposit (Karnataka)
3.	MPR_P502	MPR_011	Jyoti Pendam	JNARDDC	Recovery of Nickel from Secondary Stainless Steel Industry Waste
4.	MPR_P503	MPR_014	Gajanan Uddhaorao Kapure	Tata Steel, Jamshedpur	Technology Development for Production of Nickel Pig Iron from Low Grade Chromite Overburden for Use in Alloy and Stainless-Steel Production
5.	MPR_P504	MPR_020	Kirti Kumari	JSL, Jajpur	Pioneering Sustainable Pellets through Waste Materials:Transforming Industrial Waste into High-Strength Resources

6.	MPR_P505	MPR_024	Gulipalli Rama Murthy Naidu	JSW, Vijayanagar	Statistical Optimization of Spiral Concentrator Parameters for Low-Grade Iron Ore Beneficiation
7.	MPR_P506	MPR_025	Santosh Deb Barma	IMMT Bhubaneswar	Ultrasonic Assisted Flotation of Oxidized Indian Low-Grade Coals using Bio-Collector
8.	MPR_P507	MPR_029	Suruchi Kumari	IIT(ISM) Dhanbad	Hydrometallurgical and Pyrometallurgical Approaches for Lithium Extraction from Hard Rock Deposits/ spodumene: A comprehensive review
9.	MPR_P508	MPR_030	Pranav K J	NIIST	Influence of Fe on Intermetallic Phase Evolution and Mechanical Behavior of Cast and Wrought Aluminium Alloys
10.	MPR_P509	MPR_031	Madhusmita Baliarsingh	JSW, Vijayanagar	Evaluation of Dry Beneficiation Technologies for BHQ Ore Processing
11.	MPR_P510	MPR_032	Akash Padhan	IIT(ISM) Dhanbad	India's Dependence on Critical Minerals: Geopolitical Risks and Strategic Pathways
12.	MPR_P511	MPR_034	D Vijaya Mitra	JSW, Vijayanagar	Advanced Mineral Processing Techniques: Transforming BHQ Tailings into High-Grade Iron Concentrates
13.	MPR_P512	MPR_036	Eswaraiah Chinthapudi	IMMT BHUBANESWAR	Modeling and Simulation of Flow Dynamics in a Dynamic Air Classifier
14.	MPR_P513	MPR_038	Vardhaman Patil	Hindalco	Effect of Lime on Process Optimization of Bayer Alumina Refinery
15.	MPR_P514	MPR_039	Suchismita Senapati	IMMT BHUBANESWAR	Direct Lithium Extraction from Low-grade Indian $\alpha$ -Spodumene using KOH roasting and water leaching
16.	MPR_P515	MPR_040	Subhashree Nayak	IMMT BHUBANESWAR	Reduction aspects of a low-grade iron ore using agricultural biomass residues

17.	MPR_P516	MPR_041	Shyam Sundar Yadav	JSWBPSL	Effect of Coal-Blend Moisture on Coke Reactivity (CRI) and Coke Strength after Reaction (CSR) Using a Pilot Coke-Oven Simulator
18.	MPR_P517	MPR_042	Rajanikant Jadhav	Hindalco	Characterization of Bauxite through cyclic digestion to assess the organics level in Liquor in long term operation
19.	MPR_P518	MPR_044	Pradeep Kumar Pankaj	SAIL, Ranchi	Circular Economy Approach for Coke Oven Wastes: From Waste to Wealth
20.	MPR_P519	MPR_046	Bablu Ghosh	SAIL, Ranchi	Optimizing Indigenous Coking Coal for Sustainable Steel Production
21.	MPR_P520	MPR_048	Ujjal Kumar Mondal	SAIL, Ranchi	Enhancing Performance and Availability of High-Inclination Belt Conveyors through Practical Innovations in Holdback Mechanism
22.	MPR_P521	MPR_052	Ainkara Karthiga R	IIT Hyderabad	A Coupled CFD-DEM Model for Fluid and Particle Flow Dynamics in a Coal Spiral
23.	MPR_P522	MPR_053	Dr Pallishree Prusti	IMMT BHUBANESWAR	Magnetized Roasting Process for Low-Grade BHQ Ore: A Feasibility Study based on Critical Process Variables
24.	MPR_P523	MPR_055	Biren Kumar Samal	IMMT BHUBANESWAR	Utilization of Iron Ore Roasting Tailing for Sustainable Building Materials
25.	MPR_P524	MPR_062	Teja Reddy Vakamalla	NIT Calicut	Effect of inlet connecting angle and flow aligners on the performance of a large hydrocyclone: A numerical study
26.	MPR_P525	MPR_064	Hemanth Kumar Talloju Karanam	IIT Hyderabad	Comparative CFD Analysis of Two-Phase Flow in Novel Two Stage Hydrocyclone and Conventional Hydrocyclone

27.	MPR_P526	MPR_065	Dr. Jyotirmayee Mahanta	IMMT BHUBANESWAR	Oxidation-Reduction treatment for Iron removal from Rare Earth bearing Lateritic-Goethitic mine overburden
28.	MPR_P527	MPR_070	Ganesh Chalavadi	NML, Jamshedpur	Mineralogical and textural inference on the metallurgical quality of iron ore Concentrate processed on Airtable
29.	MPR_P528	MPR_071	Jagannath Sahoo	Tata Steel, Jamshedpur	New method developed for Nickel Briquette by Titration tactic Initiative taken at TATA STEEL Gamharia
30.	MPR_P529	MPR_072	Sudeep Kumar Patra	Tata Steel, Jamshedpur	DETERMINATION OF MANGANESE IN MANGANESE-METAL BRIQUETTE
31.	MPR_P530	MPR_073	Shivanagouda Biradar	Aditya Birla Science & Technology Company Pvt Ltd	A Novel Instability Detection Algorithm in Aluminium Electrolysis Process
32.	MPR_P531	MPR_074	Vikash Prasad Soni	Aditya Birla Science & Technology Company Pvt Ltd	Deep Learning Approach for ALF3 Demand Forecasting in Aluminium Electrolysis Process
33.	MPR_P532	MPR_075	Deepika Kumari Sahu	NALCO	Impact of Input Materials on Impurity Levels in Primary Aluminium Production
34.	MPR_P533	MPR_076	Vishal Kinikar	Hindalco	Enhancing Operational Continuity: Dampers Installed in Lumpy Chambers for Uninterrupted Cleaning
35.	MPR_P534	MPR_077	Sistla Neelagreeva Suprabhat	Hindalco	Effect of Free Oxygen on Weak Sulphuric Acid concentration in Mitsubishi Continuous Smelting Process

36.	MPR_P535	MPR_078	Reddi Jagadish	Aditya Birla Science & Technology Company Pvt Ltd	Effect of operating parameters on copper loss in bath smelting slag
37.	MPR_P536	MPR_079	Kuchipudi Akshay	IIT(ISM) Dhanbad	Experimental investigations on microwave assisted reduction of low grade chromite ore
38.	MPR_P537	MPR_080	Kaligotla Krishna Sai	IGCAR, Kalpakkam	Studies on the factors governing the dendrite suppression over liquid metal cathode during electrodeposition
39.	MPR_P538	MPR_081	Kiran Lata Bhaskar	Punjab Engineering College	Recovery of Ferronickel and value -added products from Chromite overburden for Zero Waste processing.
	<b>Materials Recovery &amp; Recycling (MRR)</b>				
1.	MRR_P539	MRR_003	Deepalakshmi	Ashokleyland	Introduction of Ecological Sustainable adhesive grade for bus floor carpet application
2.	MRR_P540	MRR_004	Sista Kameswara Srikar	Tata Steel, Jamshedpur	Synthesis of rich Iron from oxide scales: Hydrogen based sustainable approach for valorisation of steel industry by-product
3.	MRR_P541	MRR_005	Shafi Ahmad Khan	Tata Steel, Jamshedpur	Sustainability Initiatives for Green Environment at Hooghly Met Coke
4.	MRR_P542	MRR_006	Dhirendra Prasad	Tata Steel, Jamshedpur	Towards Achieving Zero Waste - Recent Advancement in Solid Wastes Processing in Sinter & Pellet Plant
5.	MRR_P543	MRR_011	Dayananda C B	JSW, Vijayanagar	Effect of ESP Dust Usage on Iron Ore Sintering Performance

6.	MRR_P544	MRR_014	Vijayasathya Bellary	JSW, Vijayanagar	Hybrid Energy System towards Green Power for Green Steel
7.	MRR_P545	MRR_016	Anilkumar.K	GITAM	Mechanical, Microstructural, Machinability and Corrosion Studies on Recycled Aluminium Alloys containing Sc: for Automobile Pistons
8.	MRR_P546	MRR_018	Mohammed Fahad Gauri	MNIT Jaipur	Industrial waste as a sustainable source for microwave absorption
9.	MRR_P547	MRR_019	Rajanna K	JSW, Vijayanagar	From Waste to Performance: Maximizing Blast Furnace Cyclone Dust in Micro Pellet Plants for Green Steelmaking
10.	MRR_P548	MRR_027	Seera Pavan Kumar	GITAM, Visakhapatnam	High temperature Creep & Mach-inability studies of Automotive pistons made from Recycled Aluminium scrap
11.	MRR_P549	MRR_028	Bushra Munir	IIT Jammu	Microstructural and Mechanical Evaluation of Rare Earth-Rich Slag obtained from pyrometallurgical smelting of oxidized NdFeB Magnets
12.	MRR_P550	MRR_036	Anand Prakash Srivastava	Tata Steel, Jamshedpur	Steel Reimagined: Waste as the New Raw material
13.	MRR_P551	MRR_039	Abhisar Saklani	IIT Hyderabad	Optimization of Oxygen Blowing Parameters to Enhance Cu Recovery from WPCBs
14.	MRR_P552	MRR_040	Varsha Vanapalli	IIT Hyderabad	Optimization of Fayalite Slag Composition to Enhance Copper Recovery during PCB Smelting
15.	MRR_P553	MRR_041	Rama Murthy Yanamandra	Tata Steel, Jamshedpur	Exploring pathways for Valorisation of BOF Slag in Construction Applications

16.	MRR_P554	MRR_043	Bhupendra Kumhare	Godawari Power & Ispat Limited, Raipur	Low temperature valorization of Iron Ore beneficiation Tailings
17.	MRR_P555	MRR_045	Sri Lekha	IIT Hyderabad	Comprehensive Characterization of Multi-Grade Printed Circuit Boards for Sustainable Recycling
18.	MRR_P556	MRR_046	T Vishnu Vardhan Rao	RGUKT Basar	Sustainable Synthesis of Alum from Waste Aluminium Beverage Cans for River Water Purification
19.	MRR_P557	MRR_047	Gautam Behera	IIT Kharagpur	Upgrading Bauxite residue for Iron Recovery via Optimized Alumina Extraction and CO <sub>2</sub> Precipitation
20.	MRR_P558	MRR_049	Sai Praveen Ch V K	MIDHANI	An Approach to Utilize Consolidated Plant Reverts in Vacuum Induction Melting for Manufacture of Steels and Super alloys of Stringent quality.
21.	MRR_P559	MRR_050	Nehal Shankarbhai Patel	IIT Hyderabad	Omics as a Tool for Circular Economy in Metals: From Detoxification to Metal Recovery
22.	MRR_P560	MRR_052	Gaurab Patnaik	IIT Hyderabad	Characterisation and valorisation of silica and lime sludge from aluminium fluoride industry
23.	MRR_P561	MRR_053	Satyendra Sudershan	SAIL, Ranchi	Performance assessment of jhama coal on sinter quality
24.	MRR_P562	MRR_054	Kumar Abhishek	SAIL, Ranchi	Recycling of Aluminium-Killed Steel Ladle Slag as a Sustainable Alternative to Slag Modifiers in Silicon-Killed Steel Production: A Case Study
25.	MRR_P563	MRR_055	Alap Sahoo	IMMT Bhubaneswar	Recovery of critical metals & non-metals from different varieties of spent battery black mass: Characterization and process development



26.	MRR_P564	MRR_056	Musthaq Syed	IIT Kanpur	Recovery of Rare Earth Elements form Magnetic Scrap: Scientific Understanding and Technological Development
27.	MRR_P565	MRR_057	Chhatar Singh Mewada	NIT Raipur	Sustainable Delamination of Cathode Active Materials from Spent Lithium-Ion Batteries for Direct Recycling
28.	MRR_P566	MRR_061	Rohith Vinod K	C-MET, Hyderabad	Properties of Recyclied NdFeB Magnet through HDDR Process
29.	MRR_P567	MRR_063	Priya Pande	VNIT Nagpur	Recovery of Strategic Materials from End-of-Life Lithium Coin Cells
30.	MRR_P568	MRR_064	Billakanti Ashritha	SR UNIVESITY	Microstructural Analysis of Sludge Ash and Mechanical Properties Self-Compacting Concrete with Partial addition of Sludge Ash
31.	MRR_P569	MRR_065	Prasanth G	IIT Hyderabad	Sustainable Recycling of Spent Lithium-Ion Battery Cathodes Using Deep Eutectic Solvents
32.	MRR_P570	MRR_068	Suresh Vanguri	IIT Hyderabad	Investigations on the formation of cementitious phases in BOF slag through hot slag engineering
	<b>Secondary Materials Processing (SMP)</b>				
1.	SMP_P571	SMP_001	Siddhant Ashok Vyavahare	Hindalco	Effect of crosslinker on epoxy coating for aluminium closure application
2.	SMP_P572	SMP_003	Shubham Satish Dongre	Hindalco	Effect of crosslinker on epoxy coating for aluminium closure application
3.	SMP_P573	SMP_006	Mylapilli Bhavyakeerthi	IIT Bhubaneswar	A Comprehensive Modelling Study on the Influence of Ester and Oleic Acid Additives in Hot Rolling

					Emulsions on Aluminium Strip Profiles, Heat Transfer and power consumption
4.	SMP_P574	SMP_009	Tuhin Subhra Bain	Tata Steel, Jamshedpur	Effect of microscale architecture on the mechanical properties of additively manufactured AlSi10Mg microlattice structures Reduction of Nitrogen in Electrode cat
5.	SMP_P575	SMP_011	Gautam Mishra	IIT BHU	Welding behaviour of 7% Ni steel for the formation of a Liquefied Natural Gas (LNG) tanker
6.	SMP_P576	SMP_014	Nemai Chandra Gorain	Tata Steel, Jamshedpur	Development of a Novel Uncoated Ultra-High-Strength Steel with Exceptional Corrosion Resistance
7.	SMP_P577	SMP_015	Rony Jijo	NIT Trichy	Electrospun PVA/PVP Nanofibre Coatings Embedded with Silver Nanoparticles and Carbon Nanotubes for Infrared Signature Reduction
8.	SMP_P578	SMP_016	Akshay Dhanraj Gaurkhede	Tata Steel, Jamshedpur	Mitigation of Transverse Cracking in Peritectic and Micro-Alloyed Steel Grades at Slab Caster, TSJ
9.	SMP_P579	SMP_019	Siddhi Surbhi	IIT Roorkee	Surface modification of AISI 4340 steel using Tungsten Inert Gas (TIG) arcing technique
10.	SMP_P580	SMP_026	Ajay Kumar Jha	Tata Steel, Jamshedpur	Rolling Operations: A Metallurgical and Fluid-Dynamic Approach to Process Stabilization
11.	SMP_P581	SMP_032	Sriram S	IIT Jodhpur	Process Optimization of SS316L Deposition on Cylindrical Substrates Through Wire Laser Additive Manufacturing (WLAM)
12.	SMP_P582	SMP_034	Abhijeet Premkumar Moon	Tata Steel, Jamshedpur	A new Eco-Friendly Method of Manufacturing Iron-Silicon Powder

13.	SMP_P583	SMP_037	Ashok Kumar S	PSG Tech	EFFECT OF CYCLIC HEAT TREATMENT ON MICROSTRUCTURE AND MECHANICAL PROPERTIES OF AISI 4140 STEEL
14.	SMP_P584	SMP_039	Gold Suganth S	NIT Trichy	Influence of Temperature on the Microstructure and Corrosion Behaviour of 316L Stainless Steel Fabricated by Additive Manufacturing via Laser Metal Deposition and the Wrought Process
15.	SMP_P585	SMP_040	Pranay Ranjan	Tata Steel, Jamshedpur	Reduction in Caster sliver in Interstitial free Carbon grade at LD#2 Slab Caster of
16.	SMP_P586	SMP_041	Harsha Haridas	IIST Trivandrum	Evaluation of the synergistic effect of g-Carbon nitride and ZDMA for High-Performance Anticorrosion Coatings
17.	SMP_P587	SMP_042	Pavan Kumar Rajavarapu	IIT BHU	Microstructural Characterisation of Additively Manufactured CM247LC superalloy
18.	SMP_P588	SMP_045	Bhumpelly Saiprasad	NIT Warangal	Effect of In-Situ Post-Weld Heat Treatment on Mechanical and Microstructural Characteristics of Resistance Spot Welding Mild Steel Sheets
19.	SMP_P589	SMP_048	K.Duraisamy	JSW, Salem	Optimization of Casting Parameters to Eliminate Centre Cracks in Continuously Cast Micro-Alloyed Steel Billets
20.	SMP_P590	SMP_050	Litto Mary Tom	NIT Trichy	Development of TiC-Enriched Composite Coatings on Low Carbon Steel Using Neem Leaves (Azadirachta indica) Derived Biochar
21.	SMP_P591	SMP_052	Anant Kumar Gupta	IIT Jammu	Solid-State Reactive Decomposition Processing of Rare Earth-Based High Entropy Oxides for High Temperature Applications

22.	SMP_P592	SMP_053	Dipak Tarade	Bharat Forge Ltd., Pune	Effect of section thickness and alloying element on microstructure and mechanical properties of Austempered Ductile iron.
23.	SMP_P593	SMP_054	Siddhant Hota	Tata Steel, Jamshedpur	Development of a compatibilized Epoxy-Silicone resin system for improved performance in harsh environments
24.	SMP_P594	SMP_059	Ashrumochan Sahoo	JSW, Salem	Mathematical Modelling for Prediction and Control of Oscillation Marks in Continuous Casting of Blooms.
25.	SMP_P595	SMP_067	Rakesh L	Government College of Engineering, Salem	OPTIMIZATION AND CHARACTERIZATION OF FRICTION STIR WELDING OF AA6061/AA8011 DISSIMILAR JOINTS
26.	SMP_P596	SMP_071	Rakesh Sahu	NML, Jamshedpur	Processing and Characterization of Gas Atomized Fe-based Alloy Powders
27.	SMP_P597	SMP_073	Selva Balaji N	SRM, Chennai	Influence of ZrB <sub>2</sub> Reinforcement on Dry Sliding Wear and Mechanical Properties of Aluminium Matrix Composites Synthesized via Powder Metallurgy
28.	SMP_P598	SMP_074	Hariprasath P	VSSC, Trivandrum	Diffusion Bonding of Cu-Cr-Nb alloy
29.	SMP_P599	SMP_076	Madhumanti Bhattacharyya	IIT(ISM) Dhanbad	Liquid Metal Embrittlement Studies in Zn-coated Dual-Phase Steels for Automotive
30.	SMP_P600	SMP_077	Vinothkumar G	JSW, Vijayanagar	Development of Pre-Painted ZM steel for High Corrosion Resistance Industrial Roofing

31.	SMP_P601	SMP_078	Nilesh M Chaudhari	JSW, Vijayanagar	Containment Strategy for Edge-Proximal Dull Surface Banding During Temper Rolling in Galvanized IF Steel Coils
32.	SMP_P602	SMP_079	L Gouri Naidu	JSW, Vijayanagar	Investigation and Control of Dull Surface Formation in GI Steel During Continuous Hot Dip Galvanizing
33.	SMP_P603	SMP_080	Sujata Panda	JSW, Vijayanagar	Study on Colour Fading and Shade Variation in Colour Coated Steel Sheets
34.	SMP_P604	SMP_082	Pownsamy V	JSW, Vijayanagar	Influence of Processing Parameters on Magnetic Properties of Non-Oriented Electrical Steel: Comparative Analysis of Hot Band Annealed and Conventional Routes
35.	SMP_P605	SMP_086	Archit Kumar	JSW, Vijayanagar	Correlation between Paint Viscosity and Long Term Properties of Pre-painted Galvalume Coated Steel
36.	SMP_P606	SMP_089	Vibha Sharma	VSSC, Trivandrum	Flow Forming of D6AC: Preform, Post Heat Treatment & Mechanical Properties
37.	SMP_P607	SMP_091	Manojkumar Palanivel	ARCI, Hyderabad	Ca–Mg–Y Stabilized Zirconia as a replacement for conventional YSZ TBCs: Comparative characterization and performance studies
38.	SMP_P608	SMP_093	Selva Balaji N	SRM, Chennai	Experimental and Numerical Study on the Effect of Heat Input in Electron beam Welding of Ti-6Al-4V Alloys
39.	SMP_P609	SMP_095	Vamsikrishna Bagadi	JSW, Vijayanagar	Mitigation of Stretch Mark Defects in Thicker Gauge of Low-Carbon Galvanized Steel
40.	SMP_P610	SMP_096	Swarna Sri Mattaparthi	RGUKT Nuzvid	Influence of Sintering Temperature and Composition of Al-Sn-Cu alloys on the properties of Automotive Bearing Applications by P/M route

41.	SMP_P611	SMP_097	Ashish Sam Shaji	SRM, Chennai	Development and Evaluation of Graphene-Reinforced PETG Composite for Bone Scaffolds
42.	SMP_P612	SMP_098	Mohan M	NIT Trichy	Effect of heat treatment on microstructure and mechanical properties of maraging steel 250W fabricated by wire arc additive manufacturing using 2.5% CO2 shielding gas.
43.	SMP_P613	SMP_099	Kedar Madhukar Panchal	IIT Bombay	Design & Development of Hard, Wear Resistant Coating to Improve Roll Pass Life in Hot Rolling Mill
44.	SMP_P614	SMP_101	Rajnikant Patel	IIT Bhilai	Wire Arc Additive Manufacturing of Inconel 625: Optimization, Segregation Control, and FGM Transition to Austenitic Steel
45.	SMP_P615	SMP_102	Snehasish Adhikari	IIT Kharagpur	Performance enhancement of Aluminium Metal Matrix Composites through Customised Reinforcement Distribution in Multi-scale Segregated Structures
46.	SMP_P616	SMP_104	Kandala Bhavani	ARCI, Hyderabad	Microstructural and Performance Evolution of Composition-Tailored Yttrium Aluminium Garnet (YAG) Thermal Barrier Coatings
47.	SMP_P617	SMP_106	Naveen Jani Pechetti	JSWBPSL	ALTERNATE MATERIAL GRADE DEVELOPMENT FOR COST OPTIMIZATION IN STEEL TUBE MANUFACTURING
48.	SMP_P618	SMP_109	Vishwa Prabhu P	HAL	A Paper on The Indigenization of Casting for Aero-Engine Applications Using Low Pressure Sand Casting (LPSC), Simulation and Complex Tooling.

49.	SMP_P619	SMP_115	Rajan Kumar	Tata Steel, Jamshedpur	Auto Slab-Grading for IF Grade Steel
50.	SMP_P620	SMP_116	Tafzeelul Kamal	IIT Kanpur	Performance Enhancement of Powder Metallurgy Processed Cu-15Ni-8Sn Alloy through Microstructural Engineering
51.	SMP_P621	SMP_117	Bipasha Das	IIT Kharagpur	Improvement in Tribological and Electrochemical Properties of Ti6Al4V: A Hybrid Laser Processing Approach
52.	SMP_P622	SMP_119	Garima Verma	JSW, Vijayanagar	Plant-Scale Development & Validation of Dual Phase 1180 Advanced High-Strength Steel
53.	SMP_P623	SMP_121	Nandini K	JSW, Vijayanagar	A study on the effect of continuous annealing parameters on the microstructure and tensile properties of cold rolled DP980 steel
54.	SMP_P624	SMP_128	Sourabh Jain	MANIT Bhopal	Development of A356 alloy casting using copper slag as backup coating material in investment casting process.
55.	SMP_P625	SMP_129	Sachin Balbande	IIT Roorkee	Evaluation of wear resistance and residual stress of the hard phase layer formed by surface modification
56.	SMP_P626	SMP_130	Shalini Bhardwaj	IIT Roorkee	Influence of Processing Route on the Microstructural and Mechanical Properties of a Hypoeutectic Al–Si Alloy
57.	SMP_P627	SMP_131	Surya S S	NIT Trichy	Effect of Cold Rolling & Aging Treatment on Microstructure & Hardness of AA6061 Alloy
58.	SMP_P628	SMP_133	Sourav Das	NIT Durgapur	Magnetic stirrer-assisted photochemical machining of SS316L to fabricate a master mold of microfluidic channels: An investigation

59.	SMP_P629	SMP_134	Ch Raju	JSW, Vijayanagar	Enhancement of UTS/YS Ratio in TMT Rebars through Chemistry Modification and Process Parameter Optimization
60.	SMP_P630	SMP_135	Vyanaktesh Thodge	JSL, Raigarh	Holistic Casting Parameter Optimization for Minimizing Surface Cracks in Micro-alloyed Grade Slabs
61.	SMP_P631	SMP_136	Rashid Mumtaz	JSW, Vijayanagar	Improvement of Impact Toughness in Thicker Gauge for ship building application
62.	SMP_P632	SMP_137	Shashi Bhusan Ranasingh	JSW, Vijayanagar	Surface Issue : Descaling Band issue in Hot Rolled Coils
63.	SMP_P633	SMP_144	Botcha Appalanaidu	GITAM, Visakhapatnam	Development of Micro Tools Using Electrochemical Micromachining Process
64.	SMP_P634	SMP_145	Shivam Trivedi	IIT Roorkee	Influence of Arc Mode Selection on Microstructure, Mechanical Performance and Corrosion Resistance in WAAM of Hypoeutectic Al-Si Alloy
65.	SMP_P635	SMP_148	Bishnu Prasad Mahto	MNIT Jaipur	Microstructural Evolution and Mechanical Performance of Heat-Treated Additively Manufactured Ti6Al4V Alloy
66.	SMP_P636	SMP_151	Bandaru Dyva Isac Premkumar	NIT Warangal	Correlation of microstructure and mechanical properties of rotary friction welded iron–nickel-based superalloy joints
67.	SMP_P637	SMP_153	Anjali Kumari	IIT Kharagpur	Effects Of Current Density Variations On The Tribological And Electrochemical Characteristics Of Zn-Co Coatings Developed From A Non-Aqueous Electrolyte.
68.	SMP_P638	SMP_155	Swarna Madugula	ARCI, Hyderabad	Microstructural modifications to enhance Electrochemical Performance of HVOF-Sprayed



					NiCrBSiFe and CoCrMoSi Coatings via Post-Heat Treatment
69.	SMP_P639	SMP_160	Sudha Kumari	IIT Delhi	Enhancing the Durability of HVOF-Sprayed IN718 Coatings by Flame-Based Post-Processing
70.	SMP_P640	SMP_163	Sherin Thampi	IIT Madras	Low-Heat-Input Wire-Arc Additive Manufacturing of ER5356 Aluminium: Microstructural Characterisation and Phase Identification
71.	SMP_P641	SMP_164	Gurralla Laxmi Prasanna	IISc, Bengaluru	Melt Pool Dimension Agnostic Data Driven Determination of Processing Maps of Industrial Alloys for Laser Powder Bed Fusion Process with Understandings from Numerical Modelling
72.	SMP_P642	SMP_167	Subhadeep Saha	NIT Durgapur	Influence of Process Parameters on Microstructure and Hardness in WAAM-Fabricated Inconel 625 Using Active Cooling Technique
73.	SMP_P643	SMP_168	Akshay Kumar Chaturvedi	IIT Madras	Role of Scanning Strategy on The Texture Evolution and Mechanical Properties of Inconel718 Fabricated By Laser Powder Bed Fusion
74.	SMP_P644	SMP_170	P Romanshan	NIT Trichy	Dissimilar Friction Stir Welding of 6000 and 7000 Series Aluminium Alloys for Enhanced Mechanical and Corrosion Performance
75.	SMP_P645	SMP_171	Chalapaka Phani Nookarajendra	ARCI, Hyderabad	Role of Electrolyte Composition in Tailoring the Microstructure and Corrosion Resistance of MAO Coated AZ91 Magnesium Alloy
76.	SMP_P646	SMP_172	Swarup Kumar Malik	Tata Steel, Jamshedpur	Reduction in Hydrogen Flakes (defect) in alloy Steels through slow cooling

77.	SMP_P647	SMP_175	Lokendra Singh Mandloi	JSWBPSL	Enhancing Product Quality through Improvement of Low Bead Height in Hot Rolled Chequered Coils
78.	SMP_P648	SMP_177	Chakaravarthy K	JSW, Salem	Enhancing Ball Quality in GMM 30 Dia Line Through Process Modifications
79.	SMP_P649	SMP_180	Monalisa Char	Maulana Abul Kalam Azad University of Technology	Microstructural Evolution and Advanced Characterization of Multilayered Sn-SAC Solder Joints for Reliable Next-Generation Electronics
80.	SMP_P650	SMP_186	Sashikanta Sethi	IMMT Bhubaneswar	Role of LaAlTiO <sub>3</sub> Perovskite in Enhancing Phase Stability, Oxidation Resistance, and Thermomechanical Performance of YSZ Coatings
81.	SMP_P651	SMP_187	Nishkarsh Srivastava	IIT Gandhinagar	Numerical investigation of process parameters and scanning path in multi-layered directed energy deposition of CoCrFeMnNi high entropy alloy
82.	SMP_P652	SMP_189	Suman Mahata	IIT Bhubaneswar	Design and fabrication of additively manufactured 316L SS microarchitected materials
83.	SMP_P653	SMP_191	Sandeep R	PSG TECH	Evaluation of Material Behaviour of SS321 Fabricated Using Wire Arc Additive Manufacturing (WAAM)
84.	SMP_P654	SMP_193	Prabhat Kispotta	IIT Bhilai	The Role of Interpass Temperature in Microstructure, Defect Formation, and Mechanical Properties of Wire Arc Additive Manufactured SS316L
85.	SMP_P655	SMP_196	Ravi Golani	Tata Steel, Jamshedpur	Process Optimization of Bottom Blown Ladle for Enhanced Metallurgical Performance through Multi-Stage Argon Purging

86.	SMP_P656	SMP_198	Ajay Kumar Yadav	IIT BHU	Towards defect-free Al6061 components through additive route
87.	SMP_P657	SMP_200	Athulya V	IGCAR, Kalpakkam	Corrosion Performance of Silane Based Superhydrophobic Coating on Carbon Steel: Fabrication, Characterization and Stability Evaluation in Seawater Environment
88.	SMP_P658	SMP_202	Lakhan Lal	NIT Raipur	Tribological and Electrochemical Properties of Electrodeposited Ni-W coatings on Mild Steel Substrate with Different Roughness
89.	SMP_P659	SMP_205	Dr. Ravi Ranjan Kumar	LPSC, ISRO	Development of dissimilar metal joint of Ti-5Al-2.5Sn and titanium aluminide through diffusion bonding from lab scale to industrial scale: interfacial microstructural evolution and its tensile response in temperature range of RT to 700 oC
90.	SMP_P660	SMP_207	Maheshbabu Vipparla	MIDHANI	A comparative study of additively manufactured vs wrought maraging 250 for various ageing parameters
91.	SMP_P661	SMP_212	Abhishek Pradhan	JSW, Vijayanagar	Electron Beam Surface Melting of Refractory Tungsten Under Additive Manufacturing Conditions
92.	SMP_P662	SMP_215	Sourabh Kumar Singh	JSL, Jajpur	Defect Mitigation and Microstructural Enhancement in Cr-Mn-N Austenitic Stainless Steel through Continuous Annealing & Pickling route
93.	SMP_P663	SMP_216	Angothu Mohan	Tata Steel, Jamshedpur	Oxy rich combustion to improve reheat furnace efficiency.
94.	SMP_P664	SMP_217	Krishna Kumar Yadav	HBNI Mumbai	Effects of oxide inclusion on mechanical and corrosion behaviour of 316L stainless steel deposited by CMT-WAAM process

95.	SMP_P665	SMP_220	Dipesh Ranjan	NIT Trichy	Optimization of Cooling Parameters to Minimize Spangle Variation and Flow Marks in Hot-Dip Galvanized Steel TIG Assisted Surface Modification: Impregnation of WC Nanoparticles onto Ti-6Al-4V Alloy Surface
96.	SMP_P666	SMP_221	Kondababu Kadali	IIT Hyderabad	Electron Beam Surface Melting of Refractory Tungsten Under Additive Manufacturing Conditions
97.	SMP_P667	SMP_222	Mohammad Mahaboob Jahanara	Ashok Leyland Technical Centre, Chennai	Light weighting of Automotive structures made of High strength Boron steel by heat treatment
98.	SMP_P668	SMP_223	Athira K S	ARCI, Hyderabad	Laser Direct Metal Deposition of AISI M2 Tool Steel and Post-clad Heat Treatment: Evaluation of Microstructure and Fretting Wear Behavior
99.	SMP_P669	SMP_225	Abhishek Raj	Tata Steel, Jamshedpur	R factor control regime for long product rolling
100.	SMP_P670	SMP_227	Niranjan Tanneer	DMRL	High Temperature deformation behaviour of highly alloyed nickel base superalloy in the sub and super solvus regime
101.	SMP_P671	SMP_228	Arijit Biswas	DMRL	Effect of Pt-Aluminide Bond Coating on Tensile Properties of Single Crystal Ni based Superalloy, CMSX4
102.	SMP_P672	SMP_229	Dinesh K	PSG TECH	Influence of Steel Shots Temperature on Heat Transfer and Solidification Behaviour in Grey Iron Round Test Bar Castings by Shell Moulding Method
103.	SMP_P673	SMP_231	Thumula Akhil	ARCI, Hyderabad	Effect of Substrate Preheating Temperature on Microstructure and Mechanical Properties of Ti6Al4V Fabricated via Laser Powder Bed Fusion

104.	SMP_P674	SMP_232	Snehangshu Roy	SAIL, Ranchi	Process Optimization for Reducing Centreline Segregation in Con-cast Slab of Low Carbon Steels
105.	SMP_P675	SMP_233	Sebabrata Kisku	DMRL	Effect of Process Parameters on the Properties of Magnetron Sputtered Thick Tantalum Coatings
106.	SMP_P676	SMP_237	Abhishek Maitra	SAIL, Ranchi	Boosting TMT Rebar Productivity through Optimized Cooling and Simulation-Driven Process innovation
107.	SMP_P677	SMP_238	Ravi Pratap Singh	SAIL, Ranchi	Investigations into Genesis of Sticker Marks on Rail Surface during Rolling
108.	SMP_P678	SMP_240	J Vinod Kumar	DMRL	Indigenous development of Spherical CMSX4 powder for Additive Manufacturing
109.	SMP_P679	SMP_242	Simran Nath	IIT Delhi	Fabrication of TiN and La <sub>2</sub> O <sub>3</sub> reinforced 4043 Al composites via Wire-arc additive manufacturing and its Mechanical characterization
110.	SMP_P680	SMP_243	Sai Kumar Balla	NIT Warangal	Tailoring Printability of Al7075 Alloy via Nano Zirconium Inoculation in LPBF Processing
111.	SMP_P681	SMP_244	Akhtedar Abbas Khan	VSSC, Trivandrum	Effect of Inoculants on Printability of Aluminium Alloy AA6061 Processed through LPBF Process
112.	SMP_P682	SMP_250	Tamanna Harihar Panigrahi	IIT Hyderabad	Influence of Compositional Complexity on Phase Evolution and Growth Kinetics in Co/Al, CoNi/Al, and CoCrNi/Al Diffusion Couples.
113.	SMP_P683	SMP_252	Anil Kumar Gouda	JSWBPSL	Control of Surface Decarburization in Spring Steel Grades (SAE9254 & 55SiCr63) through Optimized Furnace Operation and Charging Practices

114.	SMP_P684	SMP_254	U Naveen Kumar	Ashok Leyland Technical Centre, Chennai	Light weighting structures through laser welded heat treated high strength steel tubes
115.	SMP_P685	SMP_255	Durga Patel	NIT Raipur	Optimization of Ball Milling Process Parameters of $\gamma$ -TiAl Using Machine Learning
116.	SMP_P686	SMP_256	Vvsr Sai Sashank	IIT Hyderabad	Corrosion studies of additively manufactured Inconel 718 superalloy
117.	SMP_P687	SMP_259	Priyanka Sharad Ninawe	IIT Hyderabad	EFFECT OF POST PROCESSING ON INCONEL 718 ALLOY FABRICATED BY LASER-BASED DIRECT ENERGY DEPOSITION
118.	SMP_P688	SMP_260	Basavaraj Chandrashekhar	JSW, Vijayanagar	Dry Ice Cleaning of Coke Oven Gas Boosters
119.	SMP_P689	SMP_261	Balasubramanyam Rishikesh	ARCI, Hyderabad	Development of WZ21 alloy and powders for LPBF: Effect of SLM process parameters on densification, microstructure, phase, and properties.
120.	SMP_P690	SMP_262	Nagavelli Hemanth Kumar	ARCI, Hyderabad	An integrated pathway for high performance biodegradable implants: Alloy development, powder production, and LPBF of a novel Fe-Mn alloy
121.	SMP_P691	SMP_271	Pratikshya Priyadarshini	VSSUT, Odisha	Effect of Scan Speed on Properties of Laser Beam Welded Haynes 188 Superalloy
122.	SMP_P692	SMP_272	Pradip More	Tata Steel, Jamshedpur	
123.	SMP_P693	SMP_274	Akankshya Rout	IIT Kharagpur	Wire Feeding Orientation and Mixing Mechanisms in Twin-Wire GTAW Additive Manufacturing of Ti-Al Intermetallics Electrochemical performance and passivation behavior of atmospheric plasma sprayed Fe-based metallic glass coatings: Role of process parameters

124.	SMP_P694	SMP_275	Nozendra Meshram	VNIT Nagpur	Effect of Scan Speed on Properties of Laser Beam Welded Haynes 188 Superalloy
125.	SMP_P695	SMP_276	Gaurav Rajan	IIT Roorkee	Role of multiple-pass Friction Stir Processing as a secondary processing technique on stir cast Al5083-SiC nanocomposites
126.	SMP_P696	SMP_277	Lakshminarayanan AK	Sri Sivasubramaniya Nadar College of Engineering	Wire Feeding Orientation and Mixing Mechanisms in Twin-Wire GTAW Additive Manufacturing of Ti–Al Intermetallics
127.	SMP_P697	SMP_278	Chaitanya Gullipalli	IIT(ISM) Dhanbad	A Machine Learning Approach for Predicting the Spray Deposit's Profile of Low Pressure Low Pressure Cold Spray Deposition
128.	SMP_P698	SMP_280	Rupesh Jangam	IISc, Bengaluru	A study on microstructural changes with varying laser parameters in LPBF: Using multi-scale modelling approach
129.	SMP_P699	SMP_283	Kaushal Kishore	Tata Steel, Jamshedpur	Insights into micro-mechanisms of deformation of additively manufactured 316L stainless steel
130.	SMP_P700	SMP_284	P Divya	MIDHANI	Effect of Heat Treatment on Properties of FV520B Precipitation Hardening Martensite Stainless Steels
131.	SMP_P701	SMP_285	Praveen Kumar Kushwaha	NIT Raipur	Microstructure and mechanical performance of additively manufactured aluminium alloy 5083 by using Wire Arc Additive Manufacturing (WAAM) method
132.	SMP_P702	SMP_286	Dr V Jaya Prasad	JNTU Kakinada	Influence of Titanium Carbide Reinforcement on the Microstructural Evolution and Mechanical Performance of Wire Arc Additively Manufactured Inconel 625

133.	SMP_P703	SMP_288	Rakesh Das	IIT Bombay	Nano-size fragmentation of Tantalum in Copper composite using additive manufacturing
134.	SMP_P704	SMP_289	Ajith R	PSG Tech	Effect of Molybdenum on Microstructural Evolution and Wear Behavior of Laser-Cladded Co-Cr Alloy Coatings
135.	SMP_P705	SMP_290	Likitha S N	NIT Warangal	Interlayer Engineering for Dissimilar Bonding of Titanium and Stainless Steel by Laser DED
136.	SMP_P706	SMP_291	Aakanksha Jain	IIT Roorkee	Erosion-corrosion analysis of Cr <sub>2</sub> N/Ni <sub>3</sub> N multi-layer coating system deposited on Nickel aluminium bronze (NAB) using the DC magnetron sputtering
137.	SMP_P707	SMP_293	Dr. Vijayalakshmi Manugula	MGIT	Studies on effect of pre and post weld heat treatment on microstructure and mechanical properties of electron beam welded low carbon low alloy steel
138.	SMP_P708	SMP_295	Gopal Ji Rai	IIT Roorkee	Investigating Metallurgical Integrity and Mechanical Performance of Multi-pass Dissimilar Welds Between a Cast Superni-625 and 304H Stainless Steel
139.	SMP_P709	SMP_298	Elamurugu S	VSSC, Trivandrum	Directed Energy Deposition for Repairing Stainless Steel Casting Defects: An Optimized Approach for Aerospace Applications
140.	SMP_P710	SMP_299	Deepak	IIT Kanpur	Tool Geometry and Processing Temperature Effects on Gradient Structure Evolution and Deformation Response in Copper Subjected to SMGT: An Experimental–Computational Approach
141.	SMP_P711	SMP_300	Sandeep Ambardas Chowriwar	VNIT Nagpur	Hydrogen Embrittlement of Additively Manufactured 316L Stainless Steel



142.	SMP_P712	SMP_306	Sanyogita	JSL, Hisar	Manufacture of Crack-Free 303 Stainless Steel Plates with Optimized Alloy Chemistry and Rolling Parameters
143.	SMP_P713	SMP_308	Dr. Srinivasa Rao Nandam	DMRL	The Role of Machining Process in the Development of 3D Printed Components from Advanced Materials for Defence Applications
144.	SMP_P714	SMP_309	Sarat Chandra Mohanty	IIT Hyderabad	Effect of post-heat treatment on the microstructure and mechanical properties of EB-PBF Additively Manufactured Ti-6Al-4V alloy
145.	SMP_P715	SMP_310	Divya Nalajala	IISc, Bengaluru	Strategies for Achieving Single-Crystalline Growth in CMSX-4 Superalloy Builds Via Laser Directed Energy Deposition
146.	SMP_P716	SMP_314	Saravanayezhilan C	PSG Tech	Advanced Hardfacing of Composition Optimized Co-Cr Alloys by Laser Cladding Process: Towards Improved Life of Components
147.	SMP_P717	SMP_318	Jishnu Padman	VSSC, Trivandrum	Development of closed Impeller through Laser powder bed fusion process for aerospace application
148.	SMP_P718	SMP_319	Dr. Ashish Thakur	Abilities India Pistons & Rings Ltd.	Cold chamber high pressure die casting process for manufacturing piston
149.	SMP_P719	SMP_321	Tishta Das	IIT Bombay	Thermal Behavior and Microstructural Transitions in Multi-Material Laser DED of IN718–SS316 Functionally Graded Structures
150.	SMP_P720	SMP_324	Mohammed Rafi	NIT Warangal	Novel Graphite/Al-Bi-NaCl Nanocomposites for Enhanced H2 Generation

151.	SMP_P721	SMP_330	Bhanu Pratap Mishra	Tata Steel, Jamshedpur	Shear-Cooled Rolling of A356 Alloy and Composite for Enhanced Microstructure and Mechanical Performance
<b>Start Up, Digitalization &amp; Industry 4.0 (SMI)</b>					
1.	SMI_P722	SMI_005	Shubham Raj	Tata Steel, Jamshedpur	OPTIMIZATION STRATEGIES TO REDUCE GAS FLARING DURING STOVE CHANGE-OVERS IN BLAST FURNACE OPERATIONS
2.	SMI_P723	SMI_007	Aishwarya Priya	Tata Steel, Jamshedpur	<i>Holistic Approach to decrease environmental impact of coke-making process</i>
3.	SMI_P724	SMI_015	Soorya Prakash Jayaraj	JSW, Salem	A Computer Vision-Enabled Digitalization Approach for Optimizing Argon Shrouding in Continuous Casting Tundish
4.	SMI_P725	SMI_017	Tarun Jakhar	IIT Bombay	Integrated Simulation and Emissions Optimization of a Blast Furnace Using Aspen Plus
5.	SMI_P726	SMI_018	Santosh Parashuram Malottar	JSW, Vijayanagar	Digital Twin of Coke Oven Exhausters: Leveraging IoT and Machine Learning for Predictive Maintenance
6.	SMI_P727	SMI_022	Yudhveer Singh	Hindalco	Revolutionizing Copper Production with Intelligent Object Measurement Technology"
7.	SMI_P728	SMI_024	Vasanth Kumara M V	JSW, Vijayanagar	Industry 4.0-Driven Multi-Sensor Predictive Maintenance for Enhanced Transformer HT Box Reliability
8.	SMI_P729	SMI_025	Nishant Kumar Mehta	Tata Steel, Jamshedpur	AI-Driven Model for Optimizing Superheat in Continuous Casting Processes at TSL, Gamharia

9.	SMI_P730	SMI_027	G Ashok Kumar Rao	JSW, Vijayanagar	Improving Operational Efficiency and Safety through 6D Robotic Arm and Analytical Camera
10.	SMI_P731	SMI_029	Shishupal Kumar Baranwal	JSW, Vijayanagar	AI-Driven Video Analytics System for Safety Violation Detection across Gas pipeline
11.	SMI_P732	SMI_031	Pradeep Agarwal	JSW, Vijayanagar	Being Future-Ready in the Steel Industry through Technology Adoption and Customer-Centric Solutions
12.	SMI_P733	SMI_033	Prashant Kumar Verma	JSW, Vijayanagar	Data-Driven Prediction of Mechanical Properties in Wire Rod Steel Using Machine Learning
13.	SMI_P734	SMI_035	Kumar Gaurav	Tata Steel, Jamshedpur	AI driven Rake Logistics for enhanced Rake Planning & ETA Prediction
14.	SMI_P735	SMI_036	Marsa Harsha Vardhan	Tata Steel, Jamshedpur	Foreign object detection in sinter plant
15.	SMI_P736	SMI_038	Aneesh Singh	Tata Steel, Jamshedpur	Data driven optimization of Control system to enhance productivity in Hot Strip Mill
16.	SMI_P737	SMI_039	Aman Misra	Tata Steel, Jamshedpur	Real-Time Slag Occupancy Monitoring in Blast Furnaces for Easy Cast with Advanced Analytics
17.	SMI_P738	SMI_042	John Silvester	CHRIST, Bengaluru	Machine Learning Guided Discovery of Stable High Entropy Oxide-NMC Materials
18.	SMI_P739	SMI_043	Shreyashi Das	CHRIST, Bengaluru	Prediction of high entropy alloys using their thermal resist ivory by applying Machine Learning Models
19.	SMI_P740	SMI_046	Padidam Sankeerthana	JSW, Vijayanagar	Implementation of Conveyor Health Monitoring System for Downtime Reduction
20.	SMI_P741	SMI_048	Matcha Sai Madhuvani	JSW, Vijayanagar	Furnace Scheduling and Time Prediction Model for SMS

21.	SMI_P742	SMI_050	Radhika Kuracha	JSW, Vijayanagar	From Data Integration to Predictive Intelligence: Leveraging AI/ML with SAP–MES–LIMS in Steelmaking
22.	SMI_P743	SMI_051	Kalyan Kumar V	JSW, Vijayanagar	Automated Sealpot for Gasline Condensate Removal with Remote Operation
23.	SMI_P744	SMI_052	Abhi Anant Kinlekar	JSW, Vijayanagar	Digital Transformation of Coke Oven Heating Systems at JSW Steel Vijayanagar
24.	SMI_P745	SMI_056	Maya Shankar Singh	TSL	Digital and Analytical Interventions for Improving Automotive Steel Quality
25.	SMI_P746	SMI_059	Kirubakaran C	Hindalco	Data-Driven Coil Predictive Performance Allocation Model - CAM, for Customising Copper Rod Production for Improved Downstream Application Runs and Tailored Customer Solutions
26.	SMI_P747	SMI_070	Mandy Chen	Ramon Science and Technology Co., Ltd, Hunan	Research and Application of Whole-process Smart Steelmaking Platform
27.	SMI_P748	SMI_071	Moddugalla Kusuma	JSW, Vijayanagar	Optimizing Torpedo Ladle Turnaround Time Using Geofencing and Process Enhancements
28.	SMI_P749	SMI_072	Suchitra Chavani	JSW, Vijayanagar	Automation in Converter Operations: Evaluating Remote-Controlled Dart and Slag Stopper Systems for Enhanced Safety and Operational Performance
29.	SMI_P750	SMI_073	K Akshay	Tata Steel, Jamshedpur	Remote Operations of Yard Equipments at Raw Material Blending and Bedding Plant, Tata Steel Jamshedpur – First ever in India