

| ABS ID                       | Mode of Presentation                    | Poster Title                                                                                                                        | Prefix | Full Name                        | Institution/Affiliation                                    | City        |
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| <b>Friction Stir Welding</b> |                                         |                                                                                                                                     |        |                                  |                                                            |             |
| 194                          | Poster Presentation + Flash Talk (ORAL) | Optimization of friction stir welding process parameters to enhance the flexural strength in stir casted of metal matrix composites | Mr     | G. Subhash                       | VNR Vignana Jyothi Institute of Engineering and Technology | Hyderabad   |
| 19                           | Poster Presentation + Flash Talk (ORAL) | Influence of Tool Pin Profile and Reinforcement Particles on the Corrosion Characteristics of Friction Stir Welded AA5052           | Mr     | Vishnu Venugopal                 | National Institute of Technology                           | Calicut     |
| 20                           | Poster Presentation + Flash Talk (ORAL) | Influence of FSW Tool Pin Profiles on Fatigue Life: A Computational and Experimental Approach Considering Residual Stress           | Mr     | Anoop F R                        | National Institute of Technology                           | Calicut     |
| 23                           | Poster Presentation + Flash Talk (ORAL) | A Review of Developments in Portable Friction Stir Welding (FSW) Equipment for Onsite Applications                                  | Mr     | Anantharam G S                   | National Institute of Technology                           | Calicut     |
| 30                           | Poster Presentation + Flash Talk (ORAL) | Experimental Investigation and Analysis of Friction Stir Welding of Al 65032 Plates Using a Butt Joint Configuration                | Mr     | Pawan Prakash                    | Indian Institute of Technology (Indian School of Mines)    | Dhanbad     |
| 59                           | Poster Presentation + Flash Talk (ORAL) | A REVIEW ON THE EFFECT OF MULTI-PASS FRICTION STIR WELDING (FSW)                                                                    | Mr     | Narayan Alias Amey Shivaji Gauns | Agnel Institute of Technology and Design - Assagao Bardez  | Anjuna Goa  |
| 91                           | Poster Presentation + Flash Talk (ORAL) | Exploring Sustainable Aluminum Sheet Scrap Recycling via Friction Stir Welding: A Feasibility Study Toward a Circular Economy       | Dr     | Kaushik Bandyopadhyay            | IIT Bhilai                                                 | Durg        |
| 105                          | Poster Presentation + Flash Talk (ORAL) | Fatigue crack growth rate behaviour of friction stir welded AA6061-T651 aluminium alloys and base metal: A comparison               | Mr     | Hemendra Kumar Srivastava        | Annamalai University                                       | Chidambaram |

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| 146                             | Poster Presentation + Flash Talk (ORAL) | Yield Locus Characterization of FSW AA2219-T87 Using Modified Cruciform Specimens: Comparison with TIG Welds and Base Material                       | Ms     | Priya Tiwari                | Indian Institute of Technology, Bombay   | Mumbai          |
| 236                             | Poster Presentation                     | Thermal and Microstructural Analysis of Friction Stir Welding on High Strength Aluminum alloys for Aerospace applications                            | Mr.    | Malav Chavda(Rushil Shah)   | Silveroak University, Ahemdabad          | Gujarat         |
| 238                             | Poster Presentation                     | Process-Driven Microstructural Evolution and Its Impact on Strength and Electrochemical Corrosion in Dissimilar FSW AA5052–AZ31 Joints               | Mr.    | Deepak Kumar                | Indian Institute of Petroleum and Energy | Vizag           |
| 244                             | Poster Presentation                     | Investigation on microstructure and mechanical properties of iron–nickel-based superalloy joints by using rotary friction welding                    | Mr.    | BANDARU DYVA ISAC PREMKUMAR | NIT Warangal                             | Warangal        |
| 215                             | Poster Presentation                     | Smart Tooling and Material Engineering in Friction Stir Welding: A Review of Innovations Driving High-Performance Joints                             | Mrs    | NOWSATH BEGAM MY            | SRM Institute of Science and Technology  | Tiruchirappalli |
| PO-02                           | Poster Presentation                     | Friction stir welding of aluminium using zinc strip as a filler material                                                                             | Mr     | Cheekati Abhishek           | Indian Institute of Technology           | Patna           |
| <b>Friction Stir Processing</b> |                                         |                                                                                                                                                      |        |                             |                                          |                 |
| 54                              | Poster Presentation + Flash Talk (ORAL) | Characterization of the wire produced from aluminium scrap through friction stir extrusion process                                                   | Mr     | Jaya kumar Sankar           | Vellore Institute of Technology          | Chennai         |
| 61                              | Poster Presentation + Flash Talk (ORAL) | Experimental and Statistical Analysis of Friction Stir Processing Parameters for Improved Microstructure and Mechanical Properties of Aluminum alloy | Ms     | Sujata Sahoo                | Indian Institute of Technology           | Dharwad         |

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| 82     | Poster Presentation + Flash Talk (ORAL) | Enhancement of mechanical properties of AZ31 magnesium alloy through friction stir processing                                                                                             | Mr     | Vishnukant               | NITK Surathkal                            | Mangalore  |
| 17     | Poster Presentation + Flash Talk (ORAL) | Microstructural Evolution and Enhanced Corrosion Resistance of EN24 Steel Processed by Friction stir                                                                                      | Mr     | Rajnish Mishra           | Indian Institute of Technology Patna      | Patna      |
| 28     | Poster Presentation + Flash Talk (ORAL) | Study of gradient microstructure and its mechanical characteristics by friction stir processing in Al-Mg-Sc alloy (AA5024) after thermal annealing                                        | Mr     | Praveen Kumar            | IIT Bombay                                | Mumbai     |
| 107    | Poster Presentation + Flash Talk (ORAL) | Effect of Friction Stir Processing on the Tensile, Corrosion and Wear Properties of SLM Fabricated Ti6Al4V Alloy                                                                          | Mr     | Md Parwez Alam           | Indian Institute of Technology            | Patna      |
| 71     | Poster Presentation                     | Impact of varying tool rotational speed on Elastic modulus of Zn-Mn alloys processed by friction stir processing                                                                          | Mr     | Uday Kumar V             | National Institute of Technology Warangal | Hanamkonda |
| 247    | Poster Presentation                     | Towards understanding the structure-property evolution mechanisms in wrought-to-printed and printed-to-printed linear friction welded Ti alloy near net blanks for aerospace applications | Mr     | Mohan Raj Pandiyan       | Indian Institute of Technology            | Palakkad   |
| PO-01  | Poster Presentation                     | Microstructure, mechanical properties and thermal stability of Al-Fe composite processed by friction stir processing                                                                      | Ms     | Malothu Madhu            | Indian Institute of Technology            | Patna      |
| 258    | Poster Presentation                     | Influence of Multi-Pass Friction Stir Processing on the Microstructural Evolution and Mechanical Performance of Aluminum-Based Polymer-Derived Ceramic Composites                         | Mrs    | Bindu Gutta              | IISc                                      | Bangalore  |
| 259    | Poster Presentation                     | Large strain deformation of pure magnesium using HPCRS                                                                                                                                    | Ms.    | Sanika Abhijit Paranjape | IISc                                      | Bangalore  |

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| <b>Friction Surfacing</b>                 |                                         |                                                                                                                                                                                                                |        |                         |                                                     |             |
| 4                                         | Poster Presentation + Flash Talk (ORAL) | Electrochemical Corrosion Analysis of Aluminum 6061 deposited on Steel Substrate using Friction Surfacing                                                                                                      | Mr     | Mo Rizwan Ahmad Qureshi | Indian Institute of Technology                      | Gandhinagar |
| 7                                         | Poster Presentation + Flash Talk (ORAL) | Development of the Heat Transfer and Material Flow Model for the Friction Stir Deposition of Dissimilar Alloys                                                                                                 | Ms     | Prachi Sharma           | Indian Institute of Technology                      | Gandhinagar |
| 117                                       | Poster Presentation + Flash Talk (ORAL) | Investigation of Microstructural and Mechanical Performance of Additively Manufactured Steel Structures via Multi-Layer Friction Surfacing (MLFS)                                                              | Prof   | Nirmal Kumar Singh      | IIT(ISM) Dhanbad                                    | Jharkhand   |
| <b>Solid State Additive Manufacturing</b> |                                         |                                                                                                                                                                                                                |        |                         |                                                     |             |
| 208                                       | Poster Presentation + Flash Talk (ORAL) | Mechanical and Microstructural Properties of Ceria-Stabilized Zirconia and Polymer-Derived Ceramic Reinforced AA7075 Composites Fabricated Through Friction Stir Powder Additive Manufacturing (FSPAM) Process | Mr     | Nisar Ahamad Khan       | Indian Institute of Technology Tirupati             | Tirupati    |
| 48                                        | Poster Presentation + Flash Talk (ORAL) | The effect of reheating during layer-wise addition in friction stir additive manufacturing (FSAM) of AA2024 on microstructure and mechanical properties                                                        | Mr     | Pilli Jaya Teja         | Indian Institute of Technology Bhilai               | Bhilai      |
| 187                                       | Poster Presentation + Flash Talk (ORAL) | The Current State of Materials Used in Friction-Based Additive Manufacturing for Dental Crowns: Limitations, Opportunities, and Future Trends                                                                  | Mr     | Ratnakar Lande          | G. H. Raisoni College of Engineering and Management | Nagpur      |
| 200                                       | Poster Presentation + Flash Talk (ORAL) | Abnormal grain growth in Inconel 718 alloy fabricated by friction surfacing deposition additive manufacturing                                                                                                  | Mr     | Tej Prakash             | Indian Institute of Technology Madras               | Chennai     |

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| <b>Wear and Surface Engineering</b> |                                         |                                                                                                                                                                                                   |        |                     |                                                            |           |
| 197                                 | Poster Presentation + Flash Talk (ORAL) | Surface Finishing of Biodegradable Magnesium Alloy (ZE41A) using Viscoelastic Polymer Abrasive Tool : Effect of Interfacial Friction and Abrasion                                                 | Mr     | Shanmuka Srinivas M | Indian Institute of Technology Tirupati                    | Tirupati  |
| 41                                  | Poster Presentation + Flash Talk (ORAL) | Evaluation of spray deposited water based friction modifiers for altering friction and wear at rail-wheel interface                                                                               | Mr     | Shreedhar Sahoo     | Indian Institute of Technology                             | Kharagpur |
| 70                                  | Poster Presentation + Flash Talk (ORAL) | Complementary Role of Solid Lubricants in Sintered Copper-Based Brake Composite Friction Material                                                                                                 | Dr     | Raja P              | IIT Madras                                                 | Chennai   |
| 104                                 | Poster Presentation + Flash Talk (ORAL) | Microstructure, tensile, and wear properties evaluation of friction stir processed CNT-reinforced SLM fabricated AlSi10Mg                                                                         | Mr     | Mani Thakur         | Indian Institute of Technology                             | Patna     |
| 163                                 | Poster Presentation + Flash Talk (ORAL) | Microstructure tailoring through shot peening for improved surface performance of WAAM-deposited mild steel                                                                                       | Mr     | Prashant Veer       | Indian Institute of Technology                             | Dharwad   |
| 172                                 | Poster Presentation + Flash Talk (ORAL) | Effect of Surface Roughness on Corrosion Behavior                                                                                                                                                 | Mr     | Syed Mahammad Shafi | Indian Institute of Technology Madras                      | Chennai   |
| 195                                 | Poster Presentation + Flash Talk (ORAL) | Tribo-Microstructural Evaluation of Titanium Grade 2 sheet under Polymeric and Carbon Based Nano-Solid Lubricants and its Influence on SPIF-Induced Surface Roughness for Biomedical Applications | Mr     | Kundan Kumar Mehra  | Dr B R Ambedkar National Institute of Technology Jalandhar | Jalandhar |
| 204                                 | Poster Presentation + Flash Talk (ORAL) | Comparative study on Hot Air Jet Erosion Behavior of HVOF-Sprayed WC-Base Coatings on Boiler Tube Steel                                                                                           | Mr     | Elango D            | National Institute of Technology, Tiruchirappalli          | Trichy    |

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| 198                               | Poster Presentation + Flash Talk (ORAL) | Effect of Heat Treatment on Microstructure and Wear behaviour of Al <sub>x</sub> CoCrFeNi High Entropy Alloy                          | Mr     | Sandeep K. Yadav     | Defence Institute of Advanced Technology | Pune        |
| 27                                | Poster Presentation                     | Microwave Hybrid Heating of Nickel-Based Alloys for Steel Cladding: A Review                                                          | Mr     | Kuna Venkateswararao | IIT ISM Dhanbad                          | Dhanbad     |
| 201                               | Poster Presentation                     | Effect of Calcium Addition on the Microstructural, Mechanical Properties and Wear Resistance of Zn-Al-Cu-Mg alloy via squeeze casting | Mr     | Thiyagesan G         | National Institute of Technology         | Trichy      |
| 242                               | Poster Presentation                     | Smart Monitoring and Prediction of Lubricant Degradation                                                                              | Mr     | Pavansudhan H        | Indian Institute of Technology Madras    | Chennai     |
| 243                               | Poster Presentation                     | Experimental Study of Bearing Life Reduction under Combined Electrical and Mechanical Loads                                           | Mr     | Raghvendra Lodhi     | Indian Institute of Technology Madras    | Chennai     |
| 97                                | Poster Presentation + Flash Talk (ORAL) | Wear and surface characteristics of additively manufactured and naturally aged blocks of SS-316                                       | Mr     | Vikas Kumar Singh    | Indian Institute of Science (IISc)       | Bengaluru   |
| PO-03                             | Poster Presentation                     | Influence of WC reinforcement on the Wear Characteristics of AISI 316L WAAM Cladding on Medium Carbon Steel                           | Mr     | Saptarshi Saha       | Jadavpur University                      | West Bengal |
| AI/ML in Friction Based Processes |                                         |                                                                                                                                       |        |                      |                                          |             |
| 69                                | Poster Presentation + Flash Talk (ORAL) | Hybrid Physics-based Machine Learning Framework for Friction Stir Welding: Predicting UTS in AISI 321+Al 65032 Welds                  | Mrs    | Ankita Mistri        | IIT(ISM) Dhanbad                         | Dhanbad     |

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| 154                      | Poster Presentation + Flash Talk (ORAL) | Machine Learning-Based Prediction and Optimization of Friction Stir Processing in casted Aluminum Plates                                                | Mr     | Vinayaka E Bodur  | IIT Dharwad                                     | Dharwad   |
| Soft Material Processing |                                         |                                                                                                                                                         |        |                   |                                                 |           |
| 176                      | Poster Presentation + Flash Talk (ORAL) | Mechanism and Control of a Strength-Boosting Wearable Device                                                                                            | Mrs    | Drush Subbaiah    | Ramaiah Institute of Technology                 | Bengaluru |
| 184                      | Poster Presentation + Flash Talk (ORAL) | Dynamic Mechanical Analysis of Acacia Nilotica Filler Blended PLA Based Bio Composite Using Bio/Medical Application                                     | Dr     | Sadhishkumar S    | Mahendra Institute of Technology                | Namakkal  |
| 241                      | Poster Presentation                     | Effect of Infill Geometry and Density on the Tensile Performance of PLA–Carbon Fiber Composites Processed by Fused Filament Fabrication Technique (FFF) | Dr     | Satyabodh Raichur | Visvesvaraya Technological University, Belagavi | Bangalore |
| Solid State Processing   |                                         |                                                                                                                                                         |        |                   |                                                 |           |
| 81                       | Poster Presentation + Flash Talk (ORAL) | Development of High Pressure Compressive Reverse Shearing, a new severe plastic deformation process                                                     | Mr     | Govind Kumar      | Indian Institute of Science                     | Karnataka |
| 6                        | Poster Presentation + Flash Talk (ORAL) | Spheroidization trend of secondary thermo-mechanically processed Ti-6Al-2Mo-4Sn-2Zr (Ti-6242) alloy                                                     | Ms     | Saumya Gupta      | IIT Kharagpur                                   | Kharagpur |
| 217                      | Poster Presentation                     | Solid-state joining of copper and stainless steel by electromagnetic force                                                                              | Mr     | Amit Bhargav      | MANIT Bhopal                                    | Bhopal    |

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| 88     | Poster Presentation  | "Friction Riveting: A Critical Analysis of Process Parameters, Material Compatibility and Performance"                         | Dr     | Akshay Ganpat Tajane | VIT,PUNE                               | Nashik    |
| 227    | Poster Presentation  | The process of microstructural evolution during linear friction welding of Ti6Al4V alloy                                       | Dr     | Prashant Huilgol     | Indian Institute of Science, Bangalore | Bangalore |
| 223    | Poster Presentation  | Microstructural engineering and its role on strain gradient plasticity during V-bending of magnesium sheets                    | Dr     | Sourav Mishra        | Indian Institute of Technology, Madras | Chennai   |
| 222    | Poster Presentation  | Fatigue Life Prediction of Laminated Bi-layered (Mg/Al) and Tri-layered (Al/Mg/Al) Clad Sheets                                 | Mr     | Rahul Srivastava     | IIT Madras                             | Chennai   |
| 226    | Poster Presentation  | Microstructure, texture, and mechanical properties of Al sheets, produced by room temperature consolidation of powder by HPCRS | Dr     | Nikhil T G           | IISc                                   | Bangalore |