Day — Monday 27 May 2019

| Time | Mirror hall?? | |
|---|---|---|
| 9 | | |
| 12 | Registration | |
| | Opening Ceremony and Welcome address | |
| 14 | Manoj Gupta | Unravelling the Potential of Magnesium in Engineering and Biomedical Applications |
| | Dr. Srivatsan Tirumalai, Kondisetti Dheeraj and Anil Patnaik | Conjoint Influence of Composition and Processing on Microstructure and Mechanical Response of High Performance Stainless Steel |
| 15 | Subodh Kumar | Development of light alloys for aerospace and automotive applications |
| 16 | Per Nylen | Advanced coatings by thermal spray processes |
| 17 | Welcome reception and Mingle | |
| 18 | | |
| 19 | | |

| B Room 2 | | C Room 3 | |
|---|---|---|---|
| Olena Sukhova, Vladimir Polonsky, Katerina Ustinova and Marina Berun | Corrosion of quasicrystalline Al–Cu–Fe and Al–Ni–Fe alloys in acidic solutions | Mariamu Ali and Ahmed Abdel Moneim | Effect of Inorganic doping on the Thermoelectric Behavior of Polyaniline Nanocomposites |
| Baiwei Zhu and Caterina Zanella | Effect of Fe-intermetallics on surface hardness and corrosion resistance of anodised Al-Si produced by rheocasting process | Abdul Samad Mohammed, Annas Bin Ali and Nesar Merah | Tribological Performance of Organoclay reinforced UHMWPE Nanocompoistes under Water lubricated conditions |
| Tea break | | | |
| Bingqing Chen | Research on Laser Additive Manufacturing Technology of TiC Particles Reinforced Inconel 718 Composites | Ramanathan Arunachalam, Rajaraman Muraliraja, Majid Al-Maharbi and | Effect of Reinforcement Particle Size on the Properties of Aluminium Composites Produced by Squeeze Casting Process |
| Anders Jarfors, Roland Stolt and Taishi Matsushita | Spatter control in Additive Manufacturing | Arvind Singh, S. Jayalakshmi, Xizhang Chen, Sergey Konovalov, S. | ROLE OF NANO-SIZE REINFORCEMENTS IN GOVERNING THE TRIBOLOGICAL BEHAVIOR OF MAGNESIUM ALLOYS |
| Esmaeil Sadeghi, Venkataramanan Mohandass and Paria Karimi | Effect of shot peening on high temperature corrosion behaviour of Alloy 718 manufactured by EB-PBF technique | Roger Svenningsson and Ilja Belov | Experimental and Simulation Study of Mould Filling in Al MMC Gravity Casting |
| Sridhar Narayanaswamy, Zhiqian Zhang, Junyan Guo, Damodara Reddy, | Virtual Platform for Cold Spray Additive Manufacturing Process with an Integrated Multiphysics Multiscale Computational Model | R Muraliraja, Arunachalam Ramanathan and Pradeep Kumar Krishnan | SYNTHESIS, CHARACTERISATION AND TESTING OF Mg-SiC COMPOSITE USING DIFFERENT MANUFACTURING PROCESS TO ACHIEVE BEST PROPERTIES |
| Peter Nyanor, Omayma El-Kady, Atef Hamada and Mohsen Hassan | Multiscale finite element simulation of thermal conductivity and mechanical strength of reduced graphene oxide reinforced aluminium matrix composite | Ka-Ram Lim, Hyun-Jun Kwon, Jong-Woo Won and Young-Sang Na | Dual-phase high-entropy alloys for high-temperature structural applications |
| Anders Jarfors, Jinchuan Zheng and Salem Seifeddine | The route to bring design and production together | Benjamin E. MacDonald, Zhiqiang Fu, Julia Ivanisenko, Horst Hahn Hahn and | INFLUENCE OF CONSTITUENT ELEMENT CONCENTRATION ON THE MECHANICAL BEHAVIOR OF SOLID SOLUTION CoCuFeMnNi HIGH ENTROPY ALLOYS |
| Ashish Khaira and Ravi K Dwivedi | A Condition Monitoring Case Study of Compressor Located in a Heavy Industrial Setup | K.S. Tun, Manoj Gupta and Srivatsan Tirumalai | PROCESSING, MICROSTRUCTURE AND MECHANICAL CHARACTERIZATION OF MgAlLiZnCaCu HIGH ENTROPY ALLOY |
| Lunch | | | |
| Andrzej Baczmanski, Przemyslaw Kot, Elzbieta Gadalinska, Sebastian Wronski, | Neutron measurements of stresses in Al/SiCp composite during mechanical loading | Yong-Taek Hyun, Chan-Hee Park, Sang-Won Lee, Jong-Taek Yeom, Jong-Woo Won and | Microstructure and mechanical properties of Mn modified Ti-Al-Fe alloy |
| Milli Suchita Kujur, Vyasaraj Manakari, Gururaj Parande, Somasundaram Prasadh, Raymond | Rare-earth Oxide Reinforced Magnesium Nanocomposites: A Potential Candidate for Automotive and Biodegradable Implant Applications | Krzysztof Wierzbanowski, Daniel Wojtas, Marcin Wroński, Krzysztof | Mechanical properties, microstructure and texture of titanium grade 2 processed by hydrostatic extrusion |
| Neeraj Kumar Bhoi, Dr. Harpreet Singh and Dr. Saurabh Pratap | Effect of reinforcement on microstructure and mechanical behaviour of aluminum synthesized through microwave sintering | Haizea González, Amaia Calleja, Roberto Polvorosa, Octavio Pereira and Luis Norberto López | Surface integrity in the machining of heat-resistant alloy blisks |
| Satyakam Kar, Jan Bohlen and Hajo Dieringa | Effect of AlN nanoparticles added by intensive melt shearing on the microstructure and mechanical properties of an extruded AM60 magnesium alloy nanocomposite | Lluís Pérez Caro, Eva-Lis Odenberger and Mats Oldenburg | Cold and hot forming procedures for alloy 718 |
| Olena Sukhova and Yuliya Syrovatko | Formation of metal matrix composites reinforced by AlCoCu particles | Fredrik Niklasson and Anders Rosell | EVALUATION OF ANOMOLIES PRODUCED BY DRILLING IN TITANIUM-64 FORGING. |
| Gururaj Parande, Vyasaraj Manakari, Somasundaram Prasadh, Raymond Wong and Manoj | MECHANICAL, CORROSION AND CYTOTOXICITY RESPONSE OF NOVEL LIGHTWEIGHT MAGNESIUM-BASED ALLOY NANOCOMPOSITES | Saleh Abdullah Al Woahibi, Abdul Samad Mohammed, Tahar Laoui, Abbas Saeed Hakeem and | Tribological performance of micro/nano WC-9%Co cemented carbide prepared by a spark plasma sintering technique |
| F.N. Turakhodjaeva | Methods to improve the mechanical properties of biomass | Patrick Adebisi Olusegun Adegbuyi, Kasali Aderinmoye Adedeji and Ridwan Ola-Gbadamosi | Investigating the Effects of Process Parameters on Wrinkling, Fracture and Thinning of Aluminium Alloy 3004-H19 Cups in the Deep Drawing Process. |
| Lab tour | | | |
| Gala dinner | | | |

Wednesday 29 May 2019

| B Room 2 | | C Room 3 | |
|---|---|---|---|
| Chen Yuan and Stuart Blackburn | Development and Evaluation of Alumina Ceramic System towards Investment Casting Reactive Alloy | Li Lu, Linchun He and Chao Chen | Inorganic Solid Electrolyte for Solid-state Batteries |
| Henrik Borgström | Optimisation of Furan Sand Moulding and Blacking Process | Mohanad Mousa and Yu Dong | Modelling elastic modulus of PVA based bionanocomposites based on 3D interphase features |
| Tea break | | | |
| Khin Sandar Tun, Tirumalai Srivatsan and Manoj Gupta | Microstructure and Mechanical Property Enhancement in Magnesium Using Ball-milled High Entropy Alloy Reinforcement | Daniel Wojtas, Krzysztof Wierzbanowski, Magdalena Bieda, Robert Chulist, | Antibacterial coatings deposited on titanium fabricated by unconventional method of plastic deformation |
| Seetharaman Sankaranarayanan, Manoj Gupta and Srivatsan Tirumalai | CONJOINT INFLUENCE OF REINFORCEMENT AND PROCESSING ON MICROSTRUCTURAL DEVELOPMENT AND MECHANICAL RESPONSE OF MAGNESIUM-BASED | Michele Fedel and Flavio Deflorian | Effect of synthesis conditions on the controlled growth of MgAl-LDH coatings: structural and functional properties |
| Sravya Tekumalla, Ayush Rai, Gururaj Parande, Vyasaraj Manakari and Manoj Gupta | Synergistic effects of alloying elements and nano-reinforcement on the mechanical and ignition response of magnesium | Ramsingh Meena, Jaswant Hirwani, Neha Singh, Jayant Jain and Sujeet Sinha | Deposition and tribological study of epoxy-25 wt% ultra-high molecular weight polyethylene- 4 wt% $MoS_2$ composite coating on Mg-5Al substrate |
| Torgom Akopyan, Nikolay Belov and Nikolay Letyagin | New nanostructured metal matrix composites based on Al, with a high fraction of aluminides Al(Ca, La, Ni, Zr, Sc) | Kirti Teja Pasupuleti, Parvati Ramaswamy, Narayana Murthy S.V.S, Souvik | Thermo-Mechanical Characteristics of Rare Earth (La, La-Ce) Zirconate Pyrochlore Thermal Barrier Coatings |
| Seetharaman Sankaranarayanan, Manoj Gupta and Srivatsan Tirumalai | ON THE INFLUENCE OF PROCESSING ON MICROSTRUCTURE AND MECHANICAL RESPONSE OF MAGNESIUM-BASED NANOCOMPOSITES | Donya Ahmadkhaniha and Caterina Zanella | Heat treatment optimization of hard and protective nanocomposite NiP/SiC electrodeposited coatings |
| Srinivasan Murugan, Parande Gururaj, Kamaraj M and Gupta Manoj | Dry Sliding Wear Behaviour of Egg Shell Reinforced Mg-2.5Zn Magnesium Matrix Eco-Composite | Kenji Amiya | Preparation of Ni-Mo-B amorphous coatings with high corrosion resistance by thermal spray method |
| Parvati Ramaswamy, Sylvester Gomes and Souvik Ghosh | Refractory from Aluminum Dross: Transformation from Industrial Waste and Value Addition | Young-Sang Na, Ka-Ram Lim and Yong-Hak Kim | Gas pressure molding of metallic glass sheet by employing rapid heating method |
| Lunch | | | |
| Guangyu Yang, Lei Xiao and Wanqi Jie | Microstructures and mechanical properties of extruded Mg-4.58Zn-2.6Gd-0.16Zr alloy | Kumud Burman, Aditya Gokhale, Jayant Jain and Sujeet Kumar Sinha | Effect of ageing on mechanical behaviour and tribology of Mg-8Gd-2Dy alloy |
| Vyasaraj Manakari, Gururaj Parande, Abhishek Mangipudi and Manoj Gupta | Development of Multifunctional Mg-Li alloy syntactic foams | Jernej Klemenc, Domen Šeruga and Marko Nagode | Plastic and total energy as the basis of durability prediction for magnesium alloy AZ31 |
| Umang Pawar, Anil Patnaik and Srivatsan Tirumalai | INFLUENCE OF ENVIRONMENT AND NATURE OF LOADING ON RESIDUAL STRENGTH OF A HIGH STRENGTH LOW ALLOY STEEL | Dr.V.K.Bupesh Raja, Arja Sri Sai, Bandi Vedaraj Goud, Alok Kumar, Joydeep Bhattacharjee, | EFFECT OF GRAIN SIZE ON TENSILE AND IMPACT RESPONSE OF PURE MAGNESIUM |
| Domen Šeruga, Marko Nagode and Jernej Klemenc | Measurement of stress-strain response during cyclic tests | Sanjay Mohan Sharma, Rahul Sethi, R. Arvind Singh, S. Jayalakshmi and Srivatsan Tirumalai | SYNTHESIS AND CHARACTERIZATION OF Fe-Mo-$BaF_2$ SELF-LUBRICATING COMPOSITES PREPARED BY POWDER METALLURGY |
| Susil Putatunda and Saranya Paneerselvam | Plastic Deformation Induced Phase Transformation in Austempered Ductile Cast Iron | Anders Jarfors and Jakob Olofsson | A reassement of the Quality Index for aluminium castings |
| Manoj K. Singh and Sunny Zafar | Effect of environment on mechanical characteristics of microwave processed kenaf/HDPE composites | Sunil Sinhmar and Dheerendra Kumar Dwivedi | Mechanical and corrosion behavior of pure aluminium added friction stir weld joint of aluminium alloy |
| | | Ebad Bagherpour, Yan Huang and Zhongyun Fan | Microstructural investigation of high strength self-piercing riveted joints of different car body aluminum alloys |
| | | Dr.V.K.Bupesh Raja, Arja Sri Sai, Bandi Vedaraj Goud, Alok Kumar, Joydeep Bhattacharjee, | MICROSTRUCTURAL INVESTIGATION ON FSW OF CAST PURE MAGNESIUM |