



9TH WORLD CONGRESS ON MECHANICAL, CHEMICAL, AND MATERIAL ENGINEERING (MCM 2023)

6 - 8 August, 2023
Brunel University, London, United Kingdom

PROGRAM



HTFF 2023 10th International Conference on Heat Transfer and Fluid Flow (HTFF'23)

ICMIE 2023 12th International Conference on Mechanics and Industrial Engineering (ICMIE'23)

MMME 2023 10th International Conference on Mining, Material and Metallurgical Engineering (MMME'23)

ICCPE 2023 9th International Conference on Chemical and Polymer Engineering (ICCPE'23)

Scopus* Google Scholar Crossref PORTICO

 Dr. Huihe Qiu
The Hong Kong University of Science & Technology, Hong Kong
Congress Chair

MCM 2023 CONGRESS CHAIRS:  Dr. Yuwen Zhang
University of Missouri, USA
Congress Co-chair

 Dr. Marcello Iasiello
Università degli Studi di Napoli Federico II, Italy
Congress Local Chair

NEXT CONGRESS:
10th World Congress on Mechanical, Chemical, and Material Engineering (MCM 2024)
Berlin, Germany August, 2024

www.mcmcongress.com
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COFFEE BREAK - POSTER SESSION (CONTINUED)

ICMIE 134 - Temperature Dependent Deformation Analysis of WB-PBGA Package Assemblies Using Moiré Interferometry
Presenter: Jinwon Joo, Chungbuk National University, South Korea

MMME 104 - Development of Briquetting Technology For Fine Ore Agglomeration In Sintering Process
Presenter: Jong-in Park, Technical Research Laboratories, South Korea

MMME 123 - The Effects Of Shell Printing On The 316L Stainless Steel Fabricated By Binder Jetting
Presenter: Ming-Wei Wu, National Taipei University of Technology, Taiwan

LUNCH BREAK - 11:50 PM - 12:50 PM

ROOM 1 - MECHANICAL ENGINEERING
12:50 AM - 01:50 PM

Session Chair: Dr. Muhammad Zafar Iqbal, Arab Emirates University, UAE

12:50 - 01:05, ICMIE 110 - Study on Formability of Hood Panel by Using Single Point Incremental Forming
Presenter: Li-Wei Chen, National Formosa University, Taiwan

01:05 - 01:20, ICMIE 138 - Modelling and Analysis of Vortex-Induced Vibration for Flexible Cylinders Conveying Two-Phase Slug Flows
Presenter: Hareesh Narain Ravindran, Robert Gordon University, UK

01:20 - 01:35, ICMIE 126 - Mechanical Behavior and Fatigue Responses of Hybrid Nanocomposite Laminates with Kinked Edge Cracks
Presenter: Ming-Hwa Jen, National Sun Yat-Sen University, Taiwan

01:35 - 01:50, ICMIE 141 - Design and Testing of a Pneumatic Grain Aspirator for Efficient Separation of Impurities
Presenter: Paul Greyvensteyn, North-West University, South Africa

ROOM 2 - CFD II - 12:50 PM - 02:50 PM

Session Chair: Dr. Hassan Abdulmouti, Sharjah Men's College, Higher Colleges of Technology, UAE

12:50 - 01:05, HTFF 187 - Unsteady Wake And Dynamic Characteristics Of Flow Past Two Inline Circular Cylinders
Presenter: Shristi Singh, Indian Institute of Technology Madras, India

01:05 - 01:20, HTFF 120 - 3D simulation of the Melting of PCM within a Horizontal Shell and Tube Heat Exchanger
Presenter: Julie Frank, University of Leeds, UK

01:20 - 01:35, HTFF 212 - Unified Finite Volume Physics Informed Deep Learning to Solve Heat Transfer Problems
Presenter: Mei Di, The University of Hong Kong, Hong Kong

01:35 - 01:50, HTFF 216 - Optimizing Volumetric Efficiency by Conducting Engine Parameter Studies Using Design of Experiments
Presenter: Cho-Yu Lee, National Sun Yat-sen University, Taiwan

01:50 - 02:05, HTFF 165 - Design and CFD Analysis of Valves- Pulse Jet Engine
Presenter: Haifa El-Sadi, Wentworth Institute of Technology, USA

02:05 - 02:20, HTFF 148 - Study the Effect of the Diameter of Annular Parachute on Drag Using CFD
Presenter: Haifa El-Sadi, Wentworth Institute of Technology, USA

02:20 - 02:35, HTFF 144 - Rayleigh Benard Convection of Bingham Fluid in a Square Enclosure with Sinusoidal Temperatures
Presenter: Mohammed Keddar, University of Tahri Mohamed Bechar, Algeria

02:35 - 02:50, HTFF 102 - Numerical Simulation Of Turbulent Flow In Stepped-Section Vortex Tube
Presenter: Guen Mohammed, University of Sciences and Technology of Oran Mohamed Boudiaf Algeria

ROOM 1 - EXPERIMENTAL FLUID FLOW, HEAT & MASS TRANSFER III - 01:50 PM - 02:50 PM

Session Chair: Dr. Zhanxiao Kang, The Hong Kong Polytechnic University, Hong Kong

01:50 - 02:05, HTFF 161 - A Novel Battery Thermal Management System based on Capillary Driven Evaporative Cooling
Presenter: Delika Medhara Weragoda, University of Surrey, UK

02:05 - 02:20, HTFF 156 - Experimental Investigation of Heat Pipes and Liquid Cooling Based Hybrid Battery Thermal Management System
Presenter: Arman Burkitbayev, Surrey University, UK

02:20 - 02:35, HTFF 203 - Investigation of Porous Carbon Foamed Surface under Circular Air Jet Impingement for Uniform Heat Transfer
Presenter: Ketan Yogi, Indian Institute of Technology Bombay, India

02:35 - 02:50, HTFF 168 - Influence of Slot Geometry on the Behavior of Synthetic Jets
Presenter: Kota Ishiwata, Kogakuin University, Japan

02:50 PM - 03:10 PM - COFFEE BREAK

ROOM 2 - CFD III 03:10 PM - 04:25 PM

Session Chair: Dr. Guen Mohammed, University of Sciences and Technology of Oran Mohamed Boudiaf, Algeria

03:10 - 03:25, HTFF 166 - Transient Buyoant Convection Of A Highly Thermodependant Viscous Fluid In A 3D Cylindrical Drum
Presenter: Charles Brissot, Univ Montpellier, France

03:25 - 03:40, HTFF 182 - Numerical Analysis of Newtonian Fluid Flow Through Multi-Hole Orifice Meter
Presenter: Jaber H Almutairi, College of Technological Studies (PAAET), Kuwait

03:40 - 03:55, HTFF 224 - Numerical Analysis Development of a Solar-Powered Tube Heater
Presenter: Hadi Tannous, Brunel University London, UK

03:55 - 04:10, HTFF 171 - Validation of Numerical Modelling Phase Change Material (PCM) Heat Sinks by Calculating Mushy Zone Constant
Presenter: Ahmet Koyuncu, Aselsan Inc., Turkey

04:10 - 04:25, HTFF 147 - Turbulent Heat Transfer in Elliptical tube with Dimples
Presenter: Vaibhav Sudhakar Hiwale, Indian Institute of Technology Madras, India

ROOM 2 - EXPERIMENTAL FLUID FLOW, HEAT & MASS TRANSFER IV 03:10 PM - 04:25 PM

Session Chair: Dr. Marcello Iasiello, Università degli Studi di Napoli Federico II, Italy

03:10 - 03:25, HTFF 150 - A Flexible Pulsating Heat Pipe with Multiple Heat Transfer Branches
Presenter: Zhanxiao Kang, Hong Kong Polytechnic University, China

03:25 - 03:40, HTFF 183 - Flow Characteristics of Synthetic Jet Near Curved Wall
Presenter: Takuya Okada, Tokyo City University, Japan

03:40 - 03:55, HTFF 220 - The effect of interspersed nanoparticles on long wavelength heat radiation through opaque and transparent passive skylight glass
Presenter: Gopalakrishna Gangisetty, Åbo Akademi University, Finland

03:55 - 04:10 - HTFF 140 - The Effect of Fluid Type and Volume on Concentrated Solar Sphere Power Generation
Presenter: Hassan Abdulmouti, Sharjah Men's College, Higher Colleges of Technology, UAE

07:00 PM - 09:00 PM - Gala Dinner

Accepted papers may be published in one of these journals after the 2nd peer review process:

- Journal of Fluid Flow, Heat and Mass Transfer (JFFHMT)
- International Journal of Mining, Material and Metallurgical Engineering (IJMMME)
- International Journal of Environmental Pollution and Remediation (IJEPR)

METALLURGICAL & MATERIAL ENGINEERING III (CONTINUED)

10:20 - 10:35, MMME 124 - Properties of Alkali-Activated/Cement Paste as Coating Material
Presenter: Tanakorn Phoo-ngernkham, Rajamangala University of Technology, Thailand

10:35 - 10:50, MMME 133 - Nuclear Radiation Shielding Capabilities of Fiber-Reinforced Concrete: a case study Hybrid-Polypropylene-Steel
Presenter: Mohamed Ehab Bakr, Future University, Egypt

10:50 - 11:05, MMME 127 - Chloride Diffusion in Concrete Exposed to Wetting and Drying Cycles
Presenter: Nattapong Damrongwiriyanupap, University of Phayao, Thailand

ROOM 2 - EXPERIMENTAL FLUID FLOW, HEAT & MASS TRANSFER II 09:50 AM - 10:50 AM

Session Chair: Dr. Yuwen Zhang, University of Missouri, USA

09:50 - 10:05, HTFF 169 - Experimental Study to Enhance the Overall Cooling Capacity of Lanthanum Based Magnetic Refrigeration System
Presenter: Sudeep Shankar, Indian Institute of Technology, India

10:05 - 10:20, HTFF 109 - Condensation of R-134a inside the Vertical Smooth and Dimpled Helically Coiled Tubes
Presenter: Ravi Kumar, Indian Institute of Technology Roorkee, India

10:20 - 10:35, HTFF 201 - The Effect of Solar Sphere Thickness on the Fluid to Generate Power
Presenter: Hassan Abdulmouti, Sharjah Men's College, Higher Colleges of Technology, UAE

10:35 - 10:50, HTFF 197 - Local Flow and Concentration Evolution in Pre-mixed and In-situ Mixing Multicomponent Droplets
Presenter: Xin Ye, The Hong Kong University of Science and Technology, China

COFFEE BREAK - POSTER SESSION 11:05 AM - 11:50 AM

Session Chair: Dr. Yuwen Zhang, University of Missouri, USA & Dr. Marcello Iasiello, Università degli Studi di Napoli Federico II, Italy

HTFF 118 - Numerical Modelling of Inductor Optimization for Silicon Crystal Growth with Pedestal Method
Presenter: Kirils Surovovs, University of Latvia, Latvia

HTFF 175 - Onset And Mechanism Of The Oscillatory Flow Around Ahmed Body Of Slant Angle 31 Degrees
Presenter: Yusuke Atsumi, Tokyo City University, Japan

HTFF 177 - Investigation of Internal Flow near Return Guide Vane Using Jet and Suction Flow
Presenter: Chihiro Sugiyama, Tokyo City University, Japan

HTFF 188 - Influence of Porous Filter on Performance of Compact Axial-flow Fan with Upstream Obstacle
Presenter: Ibuki Matsumura, Tokyo City University, Japan

HTFF 176 - Performance Investigation of Axial-flow Fan with Exhaust-side Eccentric Blockage Disk
Presenter: Yuki Matsuo, Tokyo City University, Japan

HTFF 185 - Influence of Span Length on Flow Instability Downstream of Inlet Guide Vanes
Presenter: Keima Ichikawa, Tokyo City University, Japan

ICMIE 133 - A Study on Analysis of Behavior of Rubbing considering Deflection Angles of a Rotating Body
Presenter: Daijiroh Yoshimori, Aoyama Gakuin University, Japan

ICMIE 128 - The effects of flow channel configuration on the water disinfection efficiency using UV-C LEDs
Presenter: Wang Chien-Ping, National Taipei University of Technology, Taiwan

ICMIE 135 - Investigation of flexible sensors with laser-induced graphene-based interdigital electrodes for wound infection
Presenter: Tien-Li Chang, National Taiwan Normal University, Taiwan

ICMIE 113 - Emotion Expression Recognition based on Facial Image for Mechanical System Operator's Safety
Presenter: Kyuwon Jeong, Chungbuk National University, South Korea

DAY 1 (SUNDAY) - AUGUST 06, 2023

Virtual Sessions - 09:00 AM - 12:20 PM

DAY 2 (MONDAY) - AUGUST 07, 2023

Registration - 08:00 AM - 09:00 AM

OFFICIAL OPENING - 09:00 AM - 09:15 AM

Dr. Huihe Qiu, The Hong Kong University of Science & Technology, Hong Kong

PARALLEL SESSIONS

ROOM 1 KEYNOTE LECTURE 09:15 AM - 10:00 AM

ICMIE 2023 - VIRTUAL

Voxel-based Machining Simulation for Fast Process Validation
Dr. Hsi-Yung (Steve) Feng, The University of British Columbia, Canada

ROOM 2 KEYNOTE LECTURE 09:15 AM - 10:00 AM

HTFF 2023 - VIRTUAL

Heat Transfer and Fluid Flow in Architected Open Cell Foams
Dr. Wilson Chiu, University of Connecticut, USA

ROOM 1 - METALLURGICAL & MATERIAL ENGINEERING I -
10:00 AM - 10:45 AM

Session Chair: Dr. Marcello Iasiello, Università degli Studi di Napoli Federico II, Italy

10:00 - 10:15, MMME 112 - Sputtering of Ultra-thin Cu Nanotwinned Films on Si Wafers for Application in Advanced 3D-IC Packaging
Presenter: Zi-Hong Yang, National Taiwan University, Taiwan

10:15 - 10:30, MMME 119 - Deposition of Ag Nanotwinned Films on Graphene/ Si Photoelectrochemical Cell for CO2 Reduction and Hydrogen Production
Presenter: Yen-Ting Chen, National Taiwan University, Taiwan

10:30 - 10:45, MMME 120 - Low Temperature Die Bonding of Ge (111) Chips with DBC Alumina Substrates through High-Density (111) Textured Ag Nanotwinned Films
Presenter: Tung-Han Chuang, National Taiwan University, Taiwan

ROOM 2 - MULTIPHASE FLOW & HEAT TRANSFER I
10:00 AM - 10:45 PM

Session Chair: Dr. Huihe Qiu, Hong Kong University of Science & Technology, China

10:00 - 10:15, HTFF 152 - Droplet Statistics and Vorticity Evolution Of Immiscible Rayleigh-Taylor Turbulence
Presenter: Gaojin Li, Shanghai Jiao Tong University, China

10:15 - 10:30, HTFF 126 - On the Heat Transfer in Particle-laden Turbulent Flows: the Effect of Collision in an Anisothermal Regime
Presenter: Hamid Reza Zandi Pour, Politecnico di Torino, Italy

10:30 - 10:45, HTFF 200 - Effect Of Surface Wettability On Nucleate Pool Boiling Under Low Gravity Conditions
Presenter: Abhishek Kumar Sharma, Indian Institute of Technology Madras, India

10:45 AM - 11:05 AM - COFFEE BREAK

ROOM 1 METALLURGICAL & MATERIAL ENGINEERING II
11:05 AM - 12:35 PM

Session Chair: Dr. Marcello Iasiello, Università degli Studi di Napoli Federico II, Italy

11:05 - 11:20, MMME 118 - Sputtering of Ultra-thin Ag Nanotwinned Films on Si Wafers for the Applications in TSV Interconnection of 3D-IC Advanced Packages
Presenter: Yin-Hsuan Chen, National Taiwan University, Taiwan

METALLURGICAL & MATERIAL ENGINEERING II (CONTINUED)

11:20 - 11:35, MMME 117 - Model-Based Determination Of Process Force In Multi-Axis Milling
Presenter: Patrick Ochudlo, RWTH Aachen University, Germany

11:35 - 11:50, MMME 129 - Influence Of The Stoichiometric Ratio Of Chlorination Agents On Extraction Of Trace Elements From Goethite
Presenter: Rana Ahmed, University of Leoben, Austria

11:50 - 12:05, MMME 121 - Free Vibration Analysis Of Porous FG Nanoplates Via A New Nonlocal 2D Trigonometric High-Order Shear Deformation Theory
Presenter: Mohammed Amine Kenanda, Tahri Mohamed University, Algeria

12:05 - 12:20, MMME 111 - Graphene Encapsulated Bimetallic Fe-Cu Nanoparticles: Synthesis, Purification and Characterization
Presenter: Siddika Mertdinç Ülküseven, Istanbul Technical University, Turkey

12:20 - 12:35, MMME 131 - Gallium Recovery from Bayer Liquor Using a Chelating Resin
Presenter: Ioanna Giannopoulou, National Technical University of Athens, Greece

ROOM 2 - MULTIPHASE FLOW & HEAT TRANSFER II -
11:05 AM - 12:35 PM

Session Chair: Dr. Huihe Qiu, Hong Kong University of Science & Technology, China

11:05 - 11:20, HTFF 211 - Effect of Forcing Amplitude during Lateral Sloshing At Low Liquid Depth
Presenter: Sadham Usean Ramasamy, Indian Institute of Technology Madras, India

11:20 - 11:35, HTFF 202 - The CFD Computation and Validation of Effects of Adaptive Mesh Refinement in Sloshing Simulation in A Narrow Tank
Presenter: Emre Sayak, TOBB University of Economy and Technology University, Turkey

11:35 - 11:50, HTFF 174 - Aerodynamic Drop Breakup Suppression Due To Vaporization
Presenter: Sid Becker, University of Canterbury, New Zealand

11:50 - 12:05, HTFF 205 - On Coherent Dynamic Structures of Oscillatory Thermal Convection in Liquid Bridges due to Free Surface Heat Gain under Microgravity
Presenter: Shaligram Tiwari, Indian Institute of Technology Madras, India

12:05 - 12:20, HTFF 173 - Molecular Dynamics Simulation Of Adiabatic Two-Phase Flow In Nanochannels
Presenter: Yunmin Ran, University of Liverpool, UK

12:20 - 12:35, HTFF 184 - Heat Transfer And Wall Temperature Distribution During Flow Boiling In Conventional And Mini Channels
Presenter: Arvind Kumar, Indian Institute of Technology, India

12:35 PM - 12:40 PM - GROUP PHOTO
12:40 PM - 01:40 PM - LUNCH BREAK

ROOM 1 - KEYNOTE LECTURE - 01:40 PM - 02:25 PM

HTFF 2023 VIRTUAL

Machine Learning and Automatic Mesh Optimization: Watershed Technologies for Heat Transfer and Fluid Flow Optimal Simulations
Dr. Wagdi G. Habashi, McGill University, Canada

ROOM 2 - KEYNOTE LECTURE 01:40 PM - 02:25 PM

HTFF 2023 VIRTUAL

Role of Vertical Structures on Heat Exchange within Acoustic Standing Waves
Dr. Luc Mongeau, McGill University, Canada

ROOM 1 - SOLID MECHANICS 02:25 PM - 03:25 PM

Session Chair: Dr. Yuwen Zhang, University of Missouri, USA

02:25 - 02:40, ICMIE 107 - The Importance of the Cavitation Effective Yield Stress and the Hole Slenderness Ratio for Accurate Predictions of Ballistic Limit Velocities
Presenter: Rami Masri, Braude College of Engineering, Karmiel, Israel

02:40 - 02:55, ICMIE 143 - Fracture Behavior Prediction of a High-Strength Aluminum Alloy under Multiaxial Loading
Presenter: Eray Arslan, Vienna University of Technology, Turkey

02:55 - 03:10, ICMIE 132 - Bending Stress in Worm Gear Shafts considering the Notch Effect and the Load Distribution
Presenter: Johannes Gründer, Nuremberg Institute of Technology, Germany

03:10 - 03:25, ICMIE 106 - A Spatiotemporal Nonlocal Model for Generalized Effective Conductivities of Heterogeneous Materials
Presenter: Jianxiang Wang, Peking University, China

ROOM 1 - INDUSTRIAL ENGINEERING
03:25 AM - 03:55 PM

Session Chair: Dr. Yuwen Zhang, University of Missouri, USA

03:25 - 03:40, ICMIE 131 - Application Limits of small dimensioned Sintered Journal Bearings in Grease-lubricated Planetary Gears
Presenter: Luis Huber, Nuremberg Institute of Technology, Germany

03:40 - 03:55 - ICMIE 124 - Base Anchors in Model of Global Quality Management System (G-QMS) in System of Systems (SoS)
Presenter: Noga Agmon, Ariel University, Israel

ROOM 2 - HEAT TRANSFER ENHANCEMENT I
02:25 PM - 03:55 PM

Session Chair: Dr. Shaligram Tiwari, IIT Madras, India & Dr. Thomas M Adams, Rose-Hulman Institute of Technology, USA

02:25 - 02:40, HTFF 163 - Bubble Evolution in the Cooling-Circuit of the PEM-Electrolysis
Presenter: Johannes Manthey, Technische Universität Dresden, Germany

02:40 - 02:55, HTFF 167 - Investigation Of Bubble Behaviour And Heat Transfer In The Cooling-Circuit Of The PEM-Electrolysis
Presenter: Montadhar Guesmi, Technische Universität Dresden, Germany

02:55 - 03:10, HTFF 112 - Numerical Analysis of Solar Energy Storage within a Lobed Triplex Tube Heat Exchanger Utilizing Porous Metal Foam and Y-Shaped Fins
Presenter: Abolfazl Nematpourkeshteli, Università degli Studi di Napoli Federico II, Italy

03:10 - 03:25, HTFF 162 - Numerical Investigation of Electrode Configuration in Heat Transfer Enhancement Caused by Onsager-Wien Effect in a Minichannel
Presenter: Vishnu Rajasekaran, Indian Institute of Technology, India

03:25 - 03:40, HTFF 198 - Effects of the Gap on Microchannel Heat Sink Cooling Performance
Presenter: Mohammed W.I Sulaiman, National Yang Chiao Tung University, Taiwan

03:40 - 03:55, HTFF 214 - Experimental Investigation of Wettability Characteristics with Low Surface Tension Fluids Using the Wilhelmy Plate Technique
Presenter: Damiano Menegon, University of Padova, Italy

03:55 PM - 04:15 PM - COFFEE BREAK

ROOM 1 - CHEMICAL & POLYMER ENGINEERING
04:15 PM - 05:15 PM

Session Chair: Dr. Shaligram Tiwari, IIT Madras, India

04:15 - 04:30, ICCPE 104 - Fabrication of Cartilage/Natural Rubber Latex Biocomposites Derived from Human Mesenchymal Stem Cells
Presenter: Masami Okamoto, Toyota Technological Institute, Japan

04:30 - 04:45, ICCPE 103 - Bubbles, Drops, and Particles in Nonlinear Flows
Presenter: Moshe Favelukis, Shenkar College, Israel

04:45 - 05:00, ICCPE 111 - Polymer Processing
Presenter: Dr. Muhammad Zafar Iqbal, United Arab Emirates University, UAE

05:00 - 05:15, ICCPE 109 - Effects of CBD Oil Incorporation on Emulsion Stability
Presenter: Phanida Saikhwan, Thammasat University, Thailand

ROOM 2 - HEAT TRANSFER ENHANCEMENT II
04:15 PM - 05:45 PM

Session Chair: Dr. Abolfazl Nematpourkeshteli, University of Naples Federico II, Netherlands

04:15 - 04:30, HTFF 204 - Effect of Pulsation in Relative Vortex Strength on the Evolution of Material Line in a Pair of Pisco Vortices
Presenter: Shaligram Tiwari, Indian Institute of Technology Madras, India

04:30 - 04:45, HTFF 107 - Heat Loss Reduction Technologies for Torpedo Ladle Car
Presenter: Jongwoo You, Process and Engineering Research Lab/POSCO, South Korea

04:45 - 05:00, HTFF 154 - Alternate Formulation for Entropy Minimization in Forced Internal Convection
Presenter: Thomas Adams, Rose-Hulman Institute of Technology, USA

05:00 - 05:15, HTFF 116 - The Effect Of The Thermal Boundary Layer Over The Organic Fluid Chemical Integrity In Micro-Scale ORC-Evaporators
Presenter: João S. Pereira, Univ Coimbra, ADAI, Portugal

05:15 - 05:30, HTFF 218 - Numerical Investigation of Heat Transfer and Fluid Flow Characteristics of Al2O3 Nanofluid in a Double Tube Heat Exchanger with Turbulator Insertion
Presenter: Ebrahim Tavousi, Birmingham City University, UK

5:30 - 5:45, HTFF 127 - Heat Transfer And Fluid Flow Characterisation Of A Direct Evaporation Micro-Scale ORC-Evaporator To Identify Guidelines For An Improved Design
Presenter: Joel Morgado, Univ Coimbra, Portugal

DAY 3 (TUESDAY) - AUGUST 08, 2023

PLENARY LECTURE - 09:00 AM - 9:50 AM

HTFF 2023 PHYSICAL

Fundamental Challenges of Building Digital Twins
Dr. Perumal Nithiarasu, Swansea University, UK

ROOM 1 - METALLURGICAL & MATERIAL ENGINEERING III
09:50 AM - 11:05 AM

Session Chair: Dr. Marcello Iasiello, Università degli Studi di Napoli Federico II, Italy

09:50 - 10:05, MMME 106 - New Parameters for Casting: The Rheology and Density of Metal Alloys
Presenter: Daniela Schwarz, Anton Paar GmbH, Austria

10:05 - 10:20, MMME 122 - Experimental Study on Compressive and Flexural Strengths of High-Strength Pervious Concrete Using Various Binding Materials
Presenter: Ridengaoqier E, Tokyo University of Science, Japan