

International Conference Day 1 - 20th July 2023, Thursday

Time	Programme					
08:45-09:00	<i>Orchid Main Ballroom 4204-5 & 4304-5</i>					
	Opening Address					
	<i>Session Chair: Prof Wei Zhou</i>					
09:00-09:50	The Portevin Lecture Advances in metal 3D printing Prof Paulo Bartolo					
09:50-10:30	Plenary Keynote An overview of the state-of-the-art development of welding and joining technology Dr Tomoyuki Ueyama					
10:30-11:00	Tea Break @ Melati Room					
11:00-12:30	Session 1					
	(11) Advanced Arc Welding or other welding processes	(3) Friction Stir Welding	(14) Design, Analysis and Fabrication of Welded Structure	(6) Additive Manufacturing - Wire Arc Additive Manufacturing	(8) Additive Manufacturing - Power Bed 3D Printing (9) Laser Welding	IWM SYMPOSIUM
	<i>Orchid Main Ballroom 4202</i>	<i>Orchid Main Ballroom 4302</i>	<i>Orchid Main Ballroom 4201AB</i>	<i>Orchid Main Ballroom 4301AB</i>	<i>Orchid Main Ballroom 4303</i>	<i>Orchid Main Ballroom 4203</i>
	<i>Session Chair: Mr BT Ong Session Co-chair: Mr Reddy</i>	<i>Session Chair: Professor Ke Chen Session Co-chair: Mr William Chong/Mr Yusooif</i>	<i>Session Chair: Mr Simon Wong Session Co-chair: Mr Samuel Lye</i>	<i>Session Chair: Mr Benoit Verquin Session Co-chair: Ms Aishwarya</i>	<i>Session Chair: Dr John Pang Session Co-chair: Mr Hooi Yu Koh</i>	<i>Session Chair: Stephan Egerland Session Co-chair: Wei Zhou</i>
	1100 HRS to 1115 HRS Effect of Process Parameters on Weld Bead Shape and Fatigue Behavior of GMAW Lap Joint in JSH270 And JSH590 Steel Sheets OR-11-0046 Bijoy Rajak Tata Steel	1100 HRS to 1115 HRS Evolution of microstructure, texture and mechanical properties of special friction stir welded T-joints for an 1½ titanium alloy OR-03-0148 Dr Yu Su Northwestern Polytechnical University	1100 HRS to 1115 HRS Hardness Prediction System for Entire Multi-pass Weld Including Both Weld Metal and Heat Affected Zone of Low-alloy Steel OR-14-0022 Lina Yu Graduate School of Engineering, Osaka University	1100 HRS to 1115 HRS In-situ Micro-forging Assisted Wire Arc Additive Manufacturing of Aluminum Alloy: Formability and microstructure OR-06-0119 Zhifei Xu Beijing University of Technology	1100 HRS to 1115 HRS Understanding the role of track interaction on the defect generation in electron beam powder bed fusion OR-08-0185 Dr Chaochao Wu Fuzhou University	1100 HRS to 1110 HRS Opening Addresses: YuMing Zhang University of Kentucky Stephan Egerland Fronius
	1115 HRS to 1130 HRS Influence of the current source on microstructure and degradation of the copper-steel interface during resistance spot welding OR-11-0069 Dr Sylvain Dancette CNRS	1115 HRS to 1130 HRS Microstructure analysis of T2 copper friction stir additive manufacturing OR-03-0088 HuiZhao Li Beijing Institute of Petrochemical Technology	1115 HRS to 1130 HRS Adaptive Threshold Optimization based Incremental Learning Strategy for Online Monitoring of Pipeline Weld Crack Leakage OR-14-0043 Dr Jing Huang Xi'an Jiaotong University	1115 HRS to 1130 HRS Microstructure and deposition morphology of Ti6Al4V under wire pulsed arc additive manufacture OR-06-0169 Yu Zhenyu The Hong Kong Polytechnic University	1115 HRS to 1130 HRS On critical shifts of the process window due to heat accumulation in laser powder bed fusion of metals OR-08-0034 Dr Gunther Mohr Bundesanstalt für Materialforschung und –prüfung (BAM)	1110 HRS to 1150 HRS Keynote (40mins) Hybrid Intelligence Problems in Intelligentized Welding Manufacturing Systems Shanben Chen Shanghai Jiao Tong University
	1130 HRS to 1145 HRS The System Of Modular Welding Machines With Full Digital Control For Advance Welding OR-11-0082 Dr Andrey Vladimirov Power Source Technology Manufacturing Ltd	1130 HRS to 1150 HRS Invited (20 mins) Development of novel double-side friction stir Z shape butt-lap welding process for dissimilar joining of medium-thick Ti/Al dissimilar plates OR-03-0165 Lei Shi Institute of Materials Joining, Shandong University	1130 HRS to 1145 HRS Reusable seismic frame design for the circular design concept OR-14-0132 Karoly Jarmai University of Miskolc	1130 HRS to 1145 HRS Interfacial characteristic and mechanical properties of Inconel-copper functional bimetallic structures fabricated by Directed Energy Deposition-Arc OR-06-0176 Kun Liu Beijing University of Technology	1130 HRS to 1145 HRS Formability improvement, cracking behavior and control of Y-modified Ti-43Al-4Nb-1Mo-0.1B alloys produced by selective laser melting OR-08-0074 Dr Piao Gao Wuhan Textile University	1150 HRS to 1210 HRS Invited (20mins) Driving Towards Flexible and Automated Robotic Multi-Pass Arc Welding Charalampos Loukas University of Strathclyde
	1145 HRS to 1200 HRS Challenges and opportunities in the arc welding of offshore steels OR-11-0211 Dr Marcell Gaspar University of Miskolc	1150 HRS to 1205 HRS Study on Microstructure and Mechanical Properties of Double-Sided and Synergistic Double-Sided FSW Joints OR-03-0228 Dr Yangfan Zou Northwestern Polytechnical University	1145 HRS to 1200 HRS Characterization by SEM EDS for Welding API 5L X-65 Cladded UNS N08825 Material Due To The Effect of Welding Repair OR-14-0261 Defi Pramesti Universitas Indonesia	1145 HRS to 1200 HRS A Novel Molten Metal Deposition Based Additive Manufacturing Technique for Aluminum Alloys OR-06-0187 Dr Angshuman Kapil KU Leuven	1145 HRS to 1200 HRS Porosity reduction and strength enhancement of selective laser melted AlSi10Mg by laser melting deposition welding OR-09-0110 Can Wang Beijing University of Technology	1210 HRS to 1230 HRS Invited (20mins) Augmented Virtuality Human-robot Interactive Welding: Principles and Applications Wenhua Jiao University of Kentucky
	1200 HRS to 1215 HRS Development, qualification and production analysis of Local Vacuum Power Beam welding in heavy fabrication for low carbon energy applications OR-11-0223 Chris Punshon Cambridge Vacuum Engineering	1205 HRS to 1220 HRS Friction stir spot welding experiments of AA6061 aluminium alloy and carbon fibre reinforced polyetheretherketone composite OR-03-0331 Hongjun Li Zhejiang Sci-Tech University	1200 HRS to 1215 HRS Weld Solidification Cracking Susceptibility in DC53 Cold Work Tool Steel (Part I: Trans -Varestraint Test Method) OR-14-0036 Jakkapan Chara King Mongkut's University of Technology Thonburi	1200 HRS to 1215 HRS Forming Performance of wire arc additive manufactured Al-Zn-Mg-Cu alloy with different positive/negative electrode ratios of CMT advance process OR-06-0197 Wang Yuwen Shandong University	1200 HRS to 1215 HRS Welding of thin sheets of S960MC steel by laser beam welding OR-09-0040 Martin Frátrik University of Žilina	
	1215 HRS to 1235 HRS Invited (20mins) Key information perception and on-line weld quality assessment under complex welding scenes OR-12-0260 Prof Huabin Chen Shanghai Jiaotong University		1215 HRS to 1230 HRS Weld Solidification Cracking Susceptibility in DC53 Cold Work Tool Steel (Part II: Evaluation of Solidification Cracking Resistance Based on High Temperature SCTR Curve) OR-14-0037 Rittichai Phaoniam Rajamangala University of Technology Krungthep	1215 HRS to 1230 HRS Process design for multi-material wire arc additive manufacturing OR-06-0199 Mr Seyed Aref Banaee KU Leuven	1215 HRS to 1230 HRS Development of variable constraint and relaxation type hot-cracking test system OR-09-0102 Yang Shaowei Hiroshima University	

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12:30-13:30

Lunch Break
Exhibition @ Melati Main Ballroom 4001A-3 & 4101A-3

Session 2

13:30-15:00

(11) Advanced Arc Welding or other welding processes	(1) Brazing and Soldering (5) Cold Spray Technology	(13) Numerical Modeling of Welding Process	(6) Additive Manufacturing - Wire Arc Additive Manufacturing	(7) Additive Manufacturing - Laser directed Energy Deposition	Symposium on IWM
Orchid Main Ballroom 4202	Orchid Main Ballroom 4302	Orchid Main Ballroom 4201AB	Orchid Main Ballroom 4301AB	Orchid Main Ballroom 4303	Orchid Main Ballroom 4203
Session Chair: Mr BT Ong Session Co-chair: Mr Reddy	Session Chair: Prof Shuo Yin Session Co-chair: Mr Yusof/Mr William Chong	Session Chair: Prof Dean Deng Session Co-chair: Mr Simon Wong/Mr Samuel Lye	Session Chair: Mr Sze Thiam Siong Session Co-chair: Mr Subbiah Krishnan	Session Chair: Dr Guijun Bi Session Co-chair: Dr John Pang/Mr Hooi Yu Koh	Session Chair: Yonghua Shi Session Co-chair: Charalampos Loukas
1330 HRS TO 1345 HRS Weld-forming Mechanism of Flux Bands Constricting Arc Welding High-strength Steel Sandwich Panels OR-11-0250 Lei Wang Lanzhou University of Technology	1330 HRS TO 1345 HRS Online welding deviation detection and burn-through identification of yoloV5 sheet lap MIG welding based on passive vision OR-01-0107 Jie Wang School of Mechanical Engineering Xi'an Jiaotong University	1330 HRS TO 1345 HRS Micro-macro modeling of tensile behavior of hybrid welded joint of AlSi10Mg parts produced by additive manufacturing and casting OR-13-0041 Nammalvar Raja Rajan Aravindh Westphalian University of Applied Sciences, Institute of Mechanical Engineering	1330 HRS TO 1345 HRS Probing Dimensional Consistency during Gas Metal Arc Directed Energy Deposition of Automotive Aluminium Alloys OR-06-0219 Prashant Kumar Chaurasia Indian Institute of Technology Bombay	1330 HRS TO 1345 HRS Bonding strengthening through oxidation inhibition by adding TiC particles in laser directed energy deposition of 316L stainless steel OR-07-0141 Dr Li Zhang Swinburne University of Technology; Institute of Intelligent Manufacturing, GDAS	1330 HRS TO 1345 HRS Fuzzy control of backside weld width in cold metal transfer welding of X65 pipeline at the vertical-up position Zhijiang Wang Tianjin University
1345 HRS TO 1400 HRS Weld HAZ in ultra-high strength steels OR-11-0282 Dr Mohsen Amraei University of Turku	1345 HRS TO 1400 HRS Study on Microstructure and interfacial properties of Skutterudite / Half-Heusler segmented thermoelectric material joining process OR-01-0253 Yefeng Bao College of Mechanical and Electrical Engineering Hohai University	1345 HRS TO 1400 HRS Study on the arc behavior of Double wire AC-TIG cross arc OR-13-0076 Jianzhou Xu Lanzhou University of Technology	1345 HRS TO 1400 HRS Probing Build Geometry for Gas Metal Arc Directed Energy Deposition of Multiples Tracks and Layers using a Computational Model OR-06-0220 Dr Sanghamitra Das Indian Institute of Technology Bombay	1345 HRS TO 1400 HRS Heterostructure Effect at The Interface of Maraging Steel and Carbon Steel Deposited by Directed Energy Deposition OR-07-0194 Dr Durim Eo Korea Institute of Industrial Technology (KITECH)	1345 HRS TO 1400 HRS Robotizing Flexible Double-electrode GMAW Process through Machine Vision and Deep Learning YuMing Zhang University of Kentucky
1400 HRS TO 1415 HRS Effects of Filler Wires on the Hot Cracking Susceptibility and Mechanical Properties of 2195-T8 Al-Li Alloy TIG-welded joint OR-11-0303 Sicong Zhang Tsinghua University	1400 HRS TO 1415 HRS Diffusion bonding of 6063Al alloys using Zn interlayer in air: dynamic behaviors of interfacial elements and oxide layers OR-01-0237 Pu Zhao Harbin Institute of Technology	1400 HRS TO 1415 HRS Quantitative Interpretation of Electrode Displacement Signal in Resistance Spot Welding. OR-13-0091 Dr Yu-Jun Xia Shanghai Jiao Tong University	1400 HRS TO 1415 HRS Study of Decarburization in Low Carbon Steel Produced by Wire Arc Additive Manufacturing OR-06-0273 Dr Aprilia Aprilia Nanyang Technological University	1400 HRS TO 1415 HRS Recent Development of Metal AM Qualification OR-07-0310 Ze Chen Nanyang Technological University	1400 HRS TO 1415 HRS A machine vision-based system for weld bead profile extraction during multi-layer multi-pass welding process OR-12-0067 Van Doi Truong Hanyang University, Korea
	1415 HRS TO 1430 HRS Braze Filler Development for Ni-base Superalloys OR-01-0207 Zhenzhen Yu Colorado School of Mines	1415 HRS TO 1435 HRS Invited (20 mins) Mechanical characterization and constitutive modeling of materials during welding process and its application in welding numerical simulation OR-13-0244 Dr Jijin Xu Shanghai Jiao Tong University	1415 HRS TO 1430 HRS Evaluation of dissimilar steel interface fabricated using wire arc additive manufacturing OR-06-0279 Wengang Zhai Nanyang Technological University	1415 HRS TO 1430 HRS The Influence of Additive Manufacturing Process Parameters on Residual Stress Of 17-4 Ph Stainless Steel Parts OR-07-0010 Gökhan Çelik Middle East Technical University	1415 HRS TO 1430 HRS Weld Localization and Defect Identification Based on Deep Learning OR-12-0086 Xiaoteng Zhu Beijing Institute of Petrochemical Technology
1430 HRS TO 1445 HRS Microstructure and Mechanical Properties of Single-Sided Resistance Element Welding Joints of Al/Steel OR-11-0095 EunBeen Gong Dong-Eui University	1430 HRS TO 1445 HRS Effect of double aging heat treatment on microstructure and tribological behaviour of cold sprayed IN718 coating OR-05-0203 Alwin B Indian Institute of Technology Madras	1435 HRS TO 1450 HRS Simulation-supported Laser Hardening of Small-diameter Holes OR-13-0256 Dr Anton Evdokimov Brandenburg University of Technology Cottbus-Senftenberg	1430 HRS TO 1445 HRS Effect of Inter-Layer Cooling on Microstructure of Low-Carbon Steel Fabricated by Wire Arc Additive Manufacturing OR-06-0339 Dr Shibo Liu A*STAR	1430 HRS TO 1445 HRS Relieving anisotropy of mechanical properties by optimization of microstructure through ultrasonic vibration assisted laser direct deposition OR-07-0298 Chun Yu Shanghai Jiao Tong University	1430 HRS TO 1445 HRS A real-time modified analytical weld pool model to measure the penetration in GTAW based on 3D weld pool surface OR-12-0349 Shaojie Wu Tianjin University
1445 HRS TO 1500 HRS A Study on joining Characteristics of Complex Vibration Based Ultrasonic Metal Welding for Electric Vehicle Batteries OR-11-0140 Park Seongbeom Dong-Eui University	1445 HRS TO 1500 HRS Microstructure and mechanical properties of cold sprayed IN718 coating deposited on IN718 substrate OR-05-0205 Aviral Bisht Indian Institute of Technology Madras	1450 HRS TO 1505 HRS Influence of structural constraint on inherent deformation of LAHS steel fillet joint OR-13-0268 Wei Liang College of Mechatronics & Automotive Engineering, Chongqing Jiao Tong University	1445 HRS TO 1500 HRS Effect of Print Features on the Mechanical Properties of thin-walled high-strength WAAM-Components for Construction OR-06-0191 Hendrik Jahns Institute of Steel Structures, TU Braunschweig	1445 HRS TO 1500 HRS Development of a Portable Laser Metal Deposition System for On-Site Development of a Portable Laser Metal Deposition System for On-Site Metal Repair Application OR-07-0002 Prof John H. L. Pang Nanyang Technological University	1445 HRS TO 1500 HRS Development of Machine Learning model for trajectory deviation detection in multi-pass TIG welding in a narrow gap. OR-12-0058 Theo Boutin University of Montpellier, France

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15:00-15:30						
Tea Break @ Melati Room						
Session 3						
(10) Joining of Ceramics or Dissimilar Materials	(5) Cold Spray Technology	(16) Fatigue and Fracture of Welded Joints	(15) Non-Destructive Testing	(2) Micro and Nano Joining (4) Linear Friction Welding	Symposium on IWM	
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Session Chair: Mr BT Ong Session Co-chair: Mr Reddy	Session Chair: Prof Wenya Li Session Co-chair: Dr Chungjie Huang	Session Chair: Mr Simon Wang Session Co-chair: Mr Samuel Lye	Session Chair: Prof David Fan Session Co-chair: Mr Sze Thiam Siong/Mr Subbiah Krishnan	Session Chair: Dr John Pang Session Co-chair: Mr Hooi Yu Koh	Session Chair: Zhijiang Wang Session Co-chair: Wenhua Jiao	
1530 HRS TO 1545 HRS Study Effect of Using Block System (BS) on joint Dissimilar Weld ASTM 355 to ASTM 304L under controlled PWHT condition OR-10-0023 Sabandi Ismadi University of Indonesia	1530 HRS TO 1550 HRS Invited (20mins) Solid-state Cold Spraying Goes beyond a Coating Process with an In-depth Understanding of the Key Issues OR-05-0225 Wenya Li Northwestern Polytechnical University	1530 HRS TO 1545 HRS Effect of Residual Stress on Ratcheting of Rail Welds OR-16-0054 Yifei Li Monash University	1530 HRS TO 1545 HRS Improved UltraMARS System for Non-destructive Measurement of Residual Stresses OR-15-0215 Kleiman Jacob Structural Integrity Technologies Inc	1530 HRS TO 1545 HRS In-situ investigation on fracture mechanism of linear friction welded dissimilar Ti17(1±+P)/Ti17(P) joint during tensile deformation OR-04-0061 Dr Zhenguo Guo Northwestern Polytechnical University	1530 HRS TO 1550 HRS Invited (20 mins) ISTM: a robust and semi-supervised seam tracking model using an interactive segmentation model Yonghua Shi South China University of Technology	
1545 HRS TO 1600 HRS Interfacial Microstructure of Dissimilar Weld of Steel to Aluminum Containing Intermediate Metals and its Effect on Mechanical Properties OR-10-0064 Kiyooki Suzuki Tohoku University	1550 HRS TO 1610 HRS Invited (20mins) Mechanical alloying of cold-sprayed Ni-Nb-Si composite coating by friction stir processing: Improvement in microstructure and resistance against molten silicates corrosion OR-05-0224 Yaxin Xu Northwestern Polytechnical University	1545 HRS TO 1600 HRS Fatigue Crack Growth Limit Curves for High Strength Structural Steels and their Welded Joints Based on Two-stage Relationship OR-16-0126 Janos Lukacs University of Miskolc / Institute of Materials Science and Technology	1545 HRS TO 1600 HRS Influence of a Hole Edged Crack on Eddy-Current Testing in Aircraft Component OR-15-0033 Somchai Wonthaisong Rajamangala University of Technology Krungthep	1545 HRS TO 1600 HRS Numerical simulation of inertial friction welding of 2219 Al alloy to 304 stainless steel based on friction coefficient model OR-04-0099 Wang Hao Shandong University	1550 HRS TO 1605 HRS Monitoring the forming dimensions of arc directional energy deposited components based on the geometric characteristics of molten pool Shengfu Yu Huazhong University of Science and Technology	
1600 HRS TO 1615 HRS Injection molded direct joining of steel and polybutylene terephthalate via a hybrid surface treatment method OR-10-0137 Weiyan Chen The University of Tokyo	1610 HRS TO 1630 HRS Invited (20 mins) Cold spray refurbishment assisted by post friction stir processing OR-05-0083 Dr Chunjie Huang Helmut Schmidt University/ University of the Federal Armed Forces Hamburg	1600 HRS TO 1615 HRS Comparison of fatigue strength curves of different high strength steel categories OR-16-0130 Judit Kovacs University of Miskolc	1600 HRS TO 1615 HRS Optimization Network for Rough Labels in Small Welding Defects OR-15-0080 Dr Baoxin Zhang Beijing Institute of Technology	1600 HRS TO 1615 HRS Joining Rail with NO Heat Affected Zone, NO Fusion Line. Heat Penetration in Millimeters OR-04-0049 Paul Cheng FuseRing Inc.	1605 HRS TO 1620 HRS Synergetic effect of feedforward and feedback control for deposition height in WAAM based on visual sensing Jun Xiong Southwest Jiao Tong University	
1615 HRS TO 1630 HRS Significance of Tool Geometry and Double Hook Formation in Al Steel Dissimilar Friction Stir Spot Joints OR-10-0196 Pankaj Kaushik IIT Roorkee India	1630 HRS TO 1645 HRS Development of Cold Sprayed Ti64-In718 Composite Coating for Aerospace Applications OR-05-0338 Adrian Wei-Yee Tan Nanyang Technological University	1615 HRS TO 1630 HRS Applicability Study for Ni steel for Liquefied Hydrogen Storage Tank Materials by Controlling Residual Austenite OR-16-0143 Yu Hasegawa The University of Tokyo	1615 HRS TO 1630 HRS Automatic Welding Defects Detection Based on Deep Learning OR-15-0085 Xiaopeng Wang Beijing Institute of Technology	1615 HRS TO 1630 HRS Elucidation of Bonding and Formation Mechanism of Cu-rich Layer during Inertia Friction Welding of 2219 Aluminum Alloy to 304 Stainless Steel OR-04-0100 Dang Zongyu Shandong University	1620 HRS TO 1635 HRS Predicting porosity in Wire-Arc Additive Manufacturing (WAAM) using Wavelet-Scattering Networks and sparse Principal Component Analysis OR-12-0042 Joselito Yam Il Alcaraz KU Leuven	
	1645 HRS TO 1700 HRS Improving Bond Strength of Cold Sprayed Coating by Rapid Induction Heating OR-05-0057 Kaiqiang Wu Nanyang Technological University	1630 HRS TO 1645 HRS Fracture mechanism of Al/steel laser-MIG welding-brazing joints during quasi-static and dynamic fatigue tests OR-16-0038 Yunqi Liu Key Lab for Advanced Technologies of Materials of Ministry of Education, School of Materials Science and Engineering, Southwest Jiaotong University	1630 HRS TO 1645 HRS Defect Detection of X-Ray Digitized Weld Images Based on Deep Learning OR-15-0106 Jinhan Cui Beijing Institute of Technology	1630 HRS TO 1645 HRS Microstructural Analysis of Nanoparticle Assisted Diffusion Bonding of ETP Copper OR-02-0039 Dipin Kumar R Indian Institute of Technology Delhi	1635 HRS TO 1650 HRS Welding Methodologies for Autonomous Robotic Arc Welding using Computer Vision and Machine Learning OR-12-0216 Mahyar Asadi Novarc Technologies	
	1700 HRS TO 1715 HRS Isothermal Oxidation Behavior of Cold Sprayed and Heat-Treated Inconel 718 at 650 °C OR-05-0193 Milan Shahana S Indian Institute of Technology Madras	1645 HRS TO 1700 HRS Development of Korean Reduced Activation Ferritic/Martensitic Steel for Fusion Reactor and its Weldability OR-16-0055 Dr Chang-Hoon Lee Korea Institute of Materials Science	1645 HRS TO 1700 HRS Quantitative Ultrasonic Inspection of Defects in Wire Arc Additively Manufactured Parts with Surface Roughness OR-15-0178 Dr Xingfang Cai Nanyang Technological University	1645 HRS TO 1700 HRS Microstructure evolution of Liquid Forged AA 6061 after Friction Stir Welding (FSW) OR-04-0340 Bing Yang Lee Singapore Institute of Manufacturing Technology	1650 HRS TO 1705 HRS A Study on Development of Weld Penetration Estimation Method using Weld Pool Images and Deep Learning Approaches in Gas Tungsten Arc Welding OR-12-0308 Daehyun Baek Korea Institute of Industrial Technology	
	1715 HRS TO 1730 HRS Co-deposition mechanism of cold sprayed metal matrix composites: numerical modeling and experiment OR-05-0233 Prof Shuo Yin Trinity College Dublin				1705 HRS TO 1720 HRS Video Enhancement for Visual Assessment of Welding Mahyar Asadi University of British Columbia	
	1730 HRS TO 1745 HRS Effect of heat treatment on the phase transformation of the cold sprayed Ni-Al powder mixture coatings OR-05- 0198 Sivaji Tadisetty IIT Madras					

15:30-17:45