

| Date | Session | Time | | | | | | |
|--------|----------|--|--|-------|------|---|------------|------------------------|
| 22-Jun | 1 | 11:00 - 12:20 (80 min.) | | | | | | |
| Number | Room | Topic | Session Chair | Order | ID | Title | Presenter | |
| | | | | | | | First Name | Last Name |
| 1 | Tel Aviv | AI in Manufacturing: Predictive Analytics | Farouq Halawa (Amazon) | 1 | 2968 | Automated Wood Chip Size Distribution Estimation With Deep Learning-based Object Detection in High Volume Biomass Manufacturing | Haifeng | Wang |
| | | | | 2 | 1245 | Application of Ensemble Learning to Classify Failures in Lithium-ion Batteries | Milton | Borsato |
| | | | | 3 | 4757 | Implementation of a Reinforcement Learning Application for Production Scheduling Including Practical Constraints | Michael | Groth |
| | | | | 4 | 7984 | Prediction of Machined Surface Roughness Using Cutting Load and Machining History Data | Ilhwan | Yang |
| 2 | Tokyo | Digital Twins in Manufacturing Systems | Eric Coatanea (Tampere University) | 1 | 9802 | Correlation Analysis Between Predicted MRR and Machining Load in CNC Machining | SeungKi | Kim |
| | | | | 2 | 1418 | Exploring Model-based Design for Conceptual Development of Smart Pharmaceutical Production Equipment | Roland | Wölffe |
| | | | | 3 | 2092 | Improving Environmental Sustainability in Engineer-to-order Manufacturing: A Case Study on Control Cabinets | Patrick | Bruendl |
| | | | | 4 | 4722 | Towards Sustainable Digital Transformation in SMEs: Integrating IoT, Digital Twins, and AI for Enhanced Manufacturing Efficiency | Zeina | Elrawashdeh |
| 3 | London | Cybersecurity | Albrecht Hänel (Fraunhofer Institute for Machine Tools and Forming Technology) | 1 | 4647 | Semantic Technologies and Attributed Role-based-access-control in Policy Frameworks - A Systematic Literature Review | Sandra | Starchenko |
| | | | | 2 | 0380 | Enhancing Environmental Sustainability Through Secure and Resilient IoT Software Updates | Akosua | Cobbina |
| | | | | 3 | 1733 | Enhancing Cybersecurity in Industrial IoT with Deep Hybrid Learning Models: A Comparative Study of Machine Learning and Deep Learning Approaches | Ali | Hosseinzadeh Ghobadlou |
| | | | | 4 | 3416 | Trustworthy Cross-company Collaboration in Industrial Data Spaces Through Decentralized Authentication and Blockchain Traceability | Nicolai | Maisch |
| 4 | Sydney | Resilient Manufacturing Systems | Hiromasa Ijuin (Chiba Institute of Technology) | 1 | 9163 | Individual Entities and Networks in Production Planning | Tomohiro | Nakada |
| | | | | 2 | 7702 | Method for Determining the Most Suitable Grasp TCP for Robot Part Handling | Justus | Rein |
| | | | | 3 | 8202 | The Integration of Lean Six Sigma Solutions and Emerging Technologies for Resilient Manufacturing in The Rail Transportation Sector in South Africa | Genevieve | Bakam |
| | | | | 4 | 6369 | Facilitating Interoperability in Manufacturing Systems Using Digital Twins: A Proactive Multi-asset AAS System | Basem | Elshafei |
| 5 | Toronto | Process Scheduling and On-Demand Manufacturing | George-Christopher Vosniakos (National Technical University of Athens) | 1 | 2795 | Sheet Metal Process Planning in The Age of Smart Manufacturing | Tshifhiwa | Nenzhelele |
| | | | | 2 | 3124 | Quantum Annealing for CAD-based Disassembly Sequence Optimization | Joao Paulo | Jacomini Prioli |
| | | | | 3 | 7676 | Digital Hyperconnectivity of Supply Chains with Shop Floors for Material Sustainability | Lisa | Cook |
| | | | | 4 | 4672 | Performance Evaluation of Copper Cold Plates Manufactured Via Metal Fused Filament Fabrication and Alternative Methods | Ulas | Yaman |
| 6 | Dubai | Flexible and Collaborative Manufacturing / Human-Robot Interaction | Shuho Yamada (Toyama Prefectural University) | 1 | 7023 | Modular Plc Program Development of A Robotic Work Cell Using Cee Simulation | Mohsin | Raza |
| | | | | 2 | 7164 | Multimodal Intention Recognition for Dynamic Tool Sharing in Anthropocentric Human-robot Collaborative Applications | Luca | Gualtieri |
| | | | | 3 | 8953 | A Fully Automated Method for Identifying Layup Molds With Minimal Robot Touchpoints | Nicholas | LaBonte |
| | | | | 4 | 6654 | Development of a Talent Management Support System for Sustaining Organizational Human Capability | Hayato | Morioka |

| Date | Session | Time | | | | | | |
|--------|----------|--|--|-------|------|--|-------------------|------------|
| 22-Jun | 2 | 13:20 - 14:40 (80 min.) | | | | | | |
| Number | Room | Topic | Session Chair | Order | ID | Title | Presenter | |
| | | | | | | | First Name | Last Name |
| 1 | Tel Aviv | Global Manufacturing | Yuki Kinoshita (UEC) | 1 | 1108 | Design of a Locally Manufactured, Efficient and Robust Multi-crop Slicer | Bede | Aririguzo |
| | | | | 2 | 6366 | Exploring The Impact of Localization on Global Manufacturing Collaboration: A System Dynamics Approach | Lucas | Khashane |
| | | | | 3 | 8391 | Global Manufacturing Collaboration: Driving Innovation and Sustainability in Rural Areas | Hluphi Constance | Mafuwane |
| | | | | 4 | 2854 | Designing Global Supply Chain Network Under Carbon Border Adjustment Mechanism for A Low-carbon Economy | Hiromasa | Ijuin |
| 2 | Tokyo | Quality Controls | Aya Ishigaki (Tokyo University of Science) | 1 | 7579 | Reliability Evaluation of A Two-unit System with Load-sharing under Dependent Degradation-shock Processes | Lei | Zhou |
| | | | | 2 | 9938 | A Comparative Wear Evaluation of Chromium-coated Tools in The Drilling of 7075-T6 Aluminum Alloy, AISI 1045 Steel and Stainless Steel AISI 304 | Gustavo | Barbosa |
| | | | | 3 | 1332 | Productivity Improvement of Transfer Systems for Automotive Stamping Processes | Raúl | Campilho |
| | | | | 4 | 4896 | Signal Synchronization and Segmentation in CNC Lathe Machines | Che-Wei | Chou |
| 3 | London | Additive Manufacturing | Torbjørn Leirimo (SINTEF) | 1 | 2366 | A Novel Real-time Defect Analysis Based on Large Language Model in Additive Manufacturing | Jinghao | Yang |
| | | | | 2 | 8842 | AI-enhanced Real-time Additive Manufacturing Defect Detection Method | Martha | Asare |
| | | | | 3 | 4651 | Development of A Process Data-based Deposition Simulation for Extrusion-based 3D Printing Processes as a Process Model for Generating Digital Twins | Albrecht | Hänel |
| | | | | 4 | 4753 | Differentially Driven Extrusion System for High Speed FDM 3D Printing | Sherwin | Salemi |
| 4 | Sydney | Resilient Manufacturing | Kyoung-Yun Kim (Wayne State University) | 1 | 5054 | Risk Mitigation in Safety-critical Bolt Torque Settings for Resilience Manufacturing Assemblies | Tshifhiwa | Nenzhelele |
| | | | | 2 | 5103 | Environmental Sustainability Assessment of Redistributed Manufacturing | Konstantinos | Salonitis |
| | | | | 3 | 8656 | Analysis of Manufacturing System Resilience through Dynamic Resource Allocation and Scheduling | Dusan | Sormaz |
| | | | | 4 | 7892 | A Transnational Case Study of Karakuri Kaizen in Modern Manufacturing Environments | Eivind | Reke |
| 5 | Toronto | Sustainable System | Andrea Trianni (UTS) | 1 | 1215 | Modeling and Optimization of Friction Stir Welding Processes Under Carbon Policy for Low-carbon Production | Yi-Chi | Wang |
| | | | | 2 | 6120 | A Decision Support Model for Efficient Garment Reprocessing for a Sustainable Circular Business Model | Gokula | Vasantha |
| | | | | 3 | 0206 | Techno-economic Analysis and Life Cycle Assessment of Waste Polypropylene Reinforced with Recovered Short Carbon Fibres for 3D-printed Automotive Panels | Paul Njeni | Mabalane |
| | | | | 4 | 1617 | Exploring The Impacts of Industry 4.0 Technologies on The Triple Bottom Line of Sustainability in Industrial Companies | Ana Correia | Simões |
| 6 | Dubai | AI in Manufacturing: Intelligent Resilient Manufacturing | Marcello Pellicciari (University of Modena and Reggio Emilia) | 1 | 7976 | Prediction of Tensile Strength and Impact Strength in Fused Deposition Modeling Using A Machine Learning Pipeline | Anne | Vogler |
| | | | | 2 | 9947 | TinyML-powered Tack Weld Detection for Robotic Welding | Eric | Coatanea |
| | | | | 3 | 5484 | The Impact of the Application of Machine Learning Techniques for Dynamic Decision-making in Manufacturing. | Ragosebo Kgaugelo | Modise |
| | | | | 4 | 6164 | Towards Semantic Interoperable and Resilient Manufacturing Process Integrating Generative Artificial Intelligence and Semantic Technologies | Anderson | Szejka |
| 7 | Paris | Emerging Technologies | Kanishkan Tamararasan (Binghamton University) | 1 | 4085 | An Exploration of Design Approaches for Cutting Edge Technology Adoption | Paul Njeni | Mabalane |
| | | | | 2 | 8831 | Enhancing Digital Technology through a Comparative Analysis of Emerging Technologies Impact on Textile Manufacturing Industry | Thabo Jameson | Selowa |
| | | | | 3 | 5457 | Optimizing Procurement and Inventory Management through Metaheuristics to Minimize Waste and Scrap in Industrial Processes | Paul Eric | Dossou |
| | | | | 4 | 4254 | Microstructural Studies and Mechanical Performance Evaluation of Graded SS316-Inconel 718 Material Fabricated via Hybrid Metal Additive Manufacturing | Deepak | Mudakavi |

| Date | Session | Time | | | | | | |
|--------|----------|---|---|-------|------|---|----------------|-----------------|
| 22-Jun | 3 | 14:55 - 16:15 (80 min.) | | | | | | |
| Number | Room | Topic | Session Chair | Order | ID | Title | Presenter | |
| | | | | | | | First Name | Last Name |
| 1 | Tel Aviv | Process Scheduling and On-Demand Manufacturing | Kotomichi Matsuno (Rissho University) | 1 | 2253 | Scheduling Considering Design Engineer Skill for Engineer-to-order Manufacturing | Kotomichi | Matsuno |
| | | | | 2 | 5619 | Enhancing The Production of Toilet Paper to Increase Its Strength and Decrease The Disintegration Index | Marianna | Jędrych |
| | | | | 3 | 7127 | Automated Ai Planning for Tool Change in Intelligent Robotized Plug & Produce Manufacturing | Anders | Nilsson |
| | | | | 4 | 0989 | Production Planning Optimization Model Considering Line Availability in Semiconductor Manufacturing | Dongwoo | Go |
| 2 | Tokyo | AI in Manufacturing: Adaptive Manufacturing Processes | Chike F Oduoza (University of Wolverhampton) | 1 | 2917 | Low-temperature Sintering Study for Aerosol Jet Printed Flexible Electronics Across Diverse Substrates | Mariona | Martin |
| | | | | 2 | 9999 | Wafer Acceptance Test Based Wafer Sort Current Leakage Prediction for Semiconductor Wafer Supply Planning | Kanishkan | Tamilarasan |
| | | | | 3 | 5617 | Heuristic Procedure for Setup Planning of Features with Multiple Processing Requirements and Alternative Processes | Dusan | Sormaz |
| | | | | 4 | 0726 | Data-driven Process Planning for Machining of Additively Manufactured Components | Moritz | Goeldner |
| 3 | London | Technologies for Industry 5.0 | Paul Eric Dossou (ICAM) | 1 | 0497 | Development of a Human-robot Collaboration Framework Using Computer Vision for Collaborative Robotics in Industry 5.0 | Kokou | Lissassi |
| | | | | 2 | 1648 | Enhancing Lean Manufacturing Education with Didactic Gaming and Machine Learning: A Human-centric Approach to SMEs Training for Industry 5.0 | Enrique | Contreras Lopez |
| | | | | 3 | 5709 | On The Dynamic Capabilities of Manufacturing Companies Towards Industry 5.0 under Volatile Conditions | Zeljko | Vukelic |
| | | | | 4 | 7232 | Sustainable Performance in Industry 5.0: Optimizing Supply Chains with Innovative Decision Systems | Paul Eric | Dossou |
| 4 | Sydney | Digital Twins in Manufacturing Systems | Eivind Reke (SINTEF) | 1 | 0158 | Enabling Non-smart Assets Using Peripheral Digital Twins | Alexandra | Ritter |
| | | | | 2 | 2327 | Advanced 3D-printed Scaffolds for Bone Regeneration in Orthodontics: A CBCT-based Approach for Reconstruction | Giuliana | Baiamonte |
| | | | | 3 | 2675 | Enhancing Sustainability and Efficiency in Algae Cultivation through Iot and Asset Administration Shell | André | Costa |
| | | | | 4 | 3579 | An Ontology-based Ethical Framework for Green Digifacturing in The South African Energy Sector: A Case Study of Eskom | Genevieve | Bakam |
| 5 | Toronto | System Sustainability | Yi-Chi Wang (Feng Chia University) | 1 | 2414 | LSTM and Bayesian Computation in Uncertainty Quantification for Wind Energy Forecasting | Mohammed | Al-Mahmodi |
| | | | | 2 | 7725 | Assessing The Scope 3 Emissions in Manufacturing Organisations | Konstantinos | Salonitis |
| | | | | 3 | 2913 | Unlocking Energy Productivity in Australian SMEs with Industry 4.0 | Andrea | Trianni |
| | | | | 4 | 6896 | Optimising Hospital Hvac Systems Medical Heating Equipment Energy Efficiency | Olukorede | Adenuga |
| 6 | Dubai | Logistics and Operational Management | KangTing Ma (National Dong Hwa University) | 1 | 0891 | Evaluation and Optimization of Logistical Target Values for Cellular Automated Guided Vehicles | Torben | Mente |
| | | | | 2 | 2966 | Optimizing Pricing and Inventory Decisions in Vendor-buyer Supply Chains through A Multi-agent Artificial Intelligence Framework Under A Stackelberg Game Model | KangTing | Ma |
| | | | | 3 | 3598 | Framework to Mitigate Delay Factors in Construction Projects: A Case Study in Ghana | Stanley Ankrah | Twumasi |
| | | | | 4 | 9208 | Integrated Engineering Change Management Framework for Efficient Information Flow for Product Design | Adnan | Bantwal |
| 7 | Paris | Human Factor in the Manufacturing Industry | Koki Karube (UEC) | 1 | 0168 | Experimental Analysis on Composite Multi-stack Robotic Drilling Operations - Part 1 | André F. V. | Pedroso |
| | | | | 2 | 2747 | Learn Manufacturing Together: Research on Mixed Reality Group Teaching of CNC Machine Tools | Jianhao | Chen |
| | | | | 3 | 1619 | Workload Analysis of Order Pickers in Robotic Mobile Fulfillment Systems | Yurika | Ono |
| | | | | 4 | 6562 | Development for a Stable and Effective Seating Allocation Algorithm in Hot-desking with Matching Theory and Network | Fumikazu | Hoyano |

| Date | Session | Time | | | | | | |
|--------|----------|--|--|-------|------|--|------------------|--------------------|
| 22-Jun | 4 | 16:30 - 17:50 (80 min.) | | | | | | |
| Number | Room | Topic | Session Chair | Order | ID | Title | Presenter | |
| | | | | | | | First Name | Last Name |
| 1 | Tel Aviv | System Sustainability | Tomohiro Nakada (Bunkyo Gakuin Univ.) | 1 | 6440 | Use of an Orchestrator to Deploy Digital Twins for Sustainable Manufacturing Use Cases | Panagiotis | Stavropoulos |
| | | | | 2 | 7389 | Comparison of Motion Study and Data Science Methods for Proficiency in Disassembly Task Movement via Motion Capture | Taku | Hayashi |
| | | | | 3 | 3509 | Development of An Environmental Sustainability Framework for a Multi-gas Analyzer and the Impact of Emerging Technologies Using Python | Bede | Aririguzo |
| 2 | Tokyo | Digital Twins in Manufacturing Systems | Che-Wei Chou (Feng Chia Univ.) | 1 | 9187 | Digital Twins for Intelligent Production of Submarine Optical Fibers | Giuseppe | Laudani |
| | | | | 2 | 0137 | Optimizing Warehouse Intralogistics with Simulation: Combining AMRS and Container Loading Strategies | Romão | Santos |
| | | | | 3 | 6593 | Developing a Methodology for Human-Robot Interaction: From Dataset Creation to Mobile Robot Control in Industrial Environments | Zeina | Elrawashdeh |
| 3 | London | Manufacturing Technologies | Seunghoon Lee (Dong-A Univ.) | 1 | 5591 | Constructing Transformation Equations for Modeling 4D Printing Re-entrant Honeycomb Structures with Shape Memory Polymers | Kyoung-Yun | Kim |
| | | | | 2 | 6525 | Towards a Sustainable Aerospace Industry: A Concept for a standardized Life Cycle Assessment Data Exchange in the Aviation Supply Chain | Joanna | Steiner |
| | | | | 3 | 4241 | Method for Determining The Stiffness of Milling Robots In-process Using Internal Sensor Data | Jannik | Huellemann |
| | | | | 4 | 5559 | Feasibility Assessment of a PLA/PHBV Bioplastic Blend for an Industrial Thermoforming Process: Thermoforming Window and Mechanical Strength Evaluation | Sanaz | Afshariantorghabeh |
| 4 | Sydney | Computer Vision in Manufacturing Systems | Jinghao Yang (UTRGV) | 1 | 3907 | Deep Learning-based Object Detection for Automated Disassembly of Control Cabinets | Albert | Scheck |
| | | | | 2 | 2798 | Enhancing False Call Detection in Automated Optical Inspection Using XGBoost Classifier and XAI Algorithms | Jenan | Albayari |
| | | | | 3 | 2777 | Real-time Computer Vision System for Monitoring Conveying Systems | Farouq | Halawa |
| | | | | 4 | 9480 | Integrating 3D Object Detection with Ontologies for Accurate Digital Twin Creation in Manufacturing Systems | Tina | Boroukhian |
| 5 | Toronto | Flexible and Collaborative Manufacturing / Human-Robot Interaction | Luca Gualtieri (UNIBZ) | 1 | 4544 | The Performance of Force Compliance Solutions in Cobot-driven Sheet Metal Deburring | Tarek | Algeddawy |
| | | | | 2 | 7291 | Design and Implementation of An Automated Conveying System for Control Cable Terminal Production in The Automotive Industry | Raúl | Campilho |
| | | | | 3 | 0507 | A Framework for Integrated Design of Human-robot Collaborative Assembly Workstations | Marcello | Pellicciari |
| 6 | Dubai | AI in Manufacturing: Intelligent Process Control | Michele Cali (Univ. of Catania) | 1 | 1666 | Machine Learning-enhanced Optimization of PI Controllers for Multivariable Distillation Column | Vinayambika | S Bhat |
| | | | | 2 | 2308 | Multimodal Sensory-Textual Fusion for Context-Aware Decision-Making in Railcar Assembly Robots | Olukorede Tijani | Adenuga |
| | | | | 3 | 8528 | Robust Parameter Derivation for Lpbfm Process Monitoring: Insights From Melt Pool Analysis of Ti64V Single Layer Tracks | Joshua | Simon |
| | | | | 4 | 7196 | PhyVit-GAN: Physics-guided MobileVit-GAN for Precise Self-alignment Image Generation | Manav | Barot |
| 7 | Paris | Smart Manufacturing | Sara Kohtz (Binghamton Univ.) | 1 | 4698 | Digital Twin for Automated Post-processing Chain in Additive Manufacturing | Sissy-Linh | Nguyen |
| | | | | 2 | 2613 | Enhancing Manufacturing Performance and Precision with Computer Vision and Human-centric Innovations | Anderson | Szejka |
| | | | | 3 | 9911 | Effective Strategy Development and Implementation in SMEs using Hoshin Kanri Method | Munir | Ahmad |
| | | | | 4 | 2295 | Measurement of The Barrier Properties of Multilayer Plastic Sealing Joints Used in Packaging Applications | Sami | Matthews |

| Date | Session | Time | | | | | | |
|--------|----------|---|--|-------|------|--|-------------------|-----------|
| 23-Jun | 1 | 10:30 - 11:50 (80 min.) | | | | | | |
| Number | Room | Topic | Session Chair | Order | ID | Title | Presenter | |
| | | | | | | | First Name | Last Name |
| 1 | Tel Aviv | AI in Manufacturing: Manufacturing Intelligence | Abdelrahman Farrag (Binghamton Univ.) | 1 | 8491 | BURGAL: An Iterative Guided Active Learning Sampling Approach for Smart Manufacturing Systems | Abdelrahman | Farrag |
| | | | | 2 | 9789 | Resilient Optimal Sensor Placement and Fault Diagnosis of Permanent Magnet Synchronous Motors within Industrial Manufacturing Applications | Sara | Kohtz |
| | | | | 3 | 9320 | Quality Assessment and Fast Geometry Prediction in Paperboard Forming | Klara | Liesegang |
| | | | | 4 | 9031 | AI-driven Risk Estimation: a GPT-based Approach to News Monitoring for Manufacturing Resilience | Adrian | Jacob |
| 2 | Tokyo | Digital Twins and Manufacturing Systems | Haifeng Wang (Mississippi State Univ.) | 1 | 9751 | Modeling Hardness Surface of 3D Selective Laser Melting Metal Materials | Michele | Call |
| | | | | 2 | 8565 | Developing a Thermal Deformation Compensation Mechanism for CNC Lathe Machines | Xuan Rong | Chen |
| | | | | 3 | 5230 | Automated Machining Time Identification and Signal Segmentation for CNC Lathe Machines Utilizing G-code Interpreter and CNN Model | Yu Chieh | Chen |
| | | | | 4 | 9225 | Modeling Flexible Configuration of Cell Finishing for Future Battery Production Research | Sicong | Deng |
| 3 | London | AI in Manufacturing: Advanced Predictive Optimization | F. Frank Chen (UTSA) | 1 | 9057 | Advanced Forecasting Techniques for Strategic Decision-making in Manufacturing: Analyzing Financial Market Predictive Models | F. Frank | Chen |
| | | | | 2 | 9371 | Assembly Line Coordination for Fault Tolerance in Railcar Manufacturing Using MADDPG Approach | Ragosebo Kgaugelo | Modise |
| | | | | 3 | 5611 | A Convolutional-neural-network-based Mounter Defect Diagnostic Module for Multiple Issues Detection and Simulation in Pick-and-Place Process | Zhenxuan | Zhang |
| | | | | 4 | 5220 | Enhancing SMT Assembly Quality through Mounter Parameter Optimization with A Novel Energy Minimization Logic Simulator and Machine Learning | Jaewoo | Kim |
| 4 | Sydney | Systems Automation | Amit Lopes (UTEP) | 1 | 1697 | Wireless Networks-in-network for Automation in Manufacturing | Jan | Mertes |
| | | | | 2 | 8251 | Concave Geometric Wear Compensation in Automated Flap Wheel Grinding | Falko | Kähler |
| | | | | 3 | 1222 | Automated Conformal Coating Coverage Defect Detection in Smart Manufacturing Using Faster R-CNN | Hemi | Patel |
| | | | | 4 | 3231 | Design of a Cruise Control Vibration Deactivation Management System | Thabo Jameson | Selowa |
| 5 | Toronto | Human-Robot Collaboration | Raul Campilho (ISEP) | 1 | 3247 | Gesture Recognition through Object Detection for Efficient Human-Robot Collaboration | Akosua | Cobbina |
| | | | | 2 | 3403 | Unleashing the Future of Manufacturing: A Journey Into Industry 5.0's Human-machine Synergy for Enhanced Railway | Patience | Mofokeng |
| | | | | 3 | 3487 | Impact of Human-Robot Collaboration on Production Resources: An Assessment Framework in Manufacturing | Andrea | Trianni |
| | | | | 4 | 8669 | Robotic Grasp Planning for Unknown Objects Using Real-time Digital Twin Integration | Chen Yang | Cheng |
| 6 | Dubai | Emerging Technologies / New Product Design | Marisa Oliveria (INEGI) | 1 | 5642 | A Hybrid Strategy for Paint Oven Optimization in Aerospace Manufacturing: Lean Principles and Mathematical Modelling | Marisa | Oliveira |
| | | | | 2 | 5961 | Emerging Technologies and Performing Materials in Manufacturing Dental Prostheses: The Role of Chewing Simulators | Giuliana | Baiamonte |
| | | | | 3 | 3538 | Online 3D-reconstruction of Weld Morphology Using a Structured-light Welding Camera | Eric | Coatanea |
| | | | | 4 | 4126 | Intelligent Mixed Reality Platform for CNC Machine and 3D Printer Operation and Management | Jennifer | Remus |

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|--------|----------|--|--|-------|------|--|-----------------------|------------------------|
| 23-Jun | 2 | 12:50 - 14:10 (80 min.) | | | | | | |
| Number | Room | Topic | Session Chair | Order | ID | Title | Presenter | |
| | | | | | | | First Name | Last Name |
| 1 | Tel Aviv | Sustainability in the Manufacturing and Energy Systems | Tetsuo Yamada (UEC) | 1 | 4393 | Demand and Capacity Sharing Decisions and Protocols in Multi-microgrid Using Deep Learning | Kotaro | Akino |
| | | | | 2 | 4530 | Decision Support System to Promote Cloud Computing Adoption; Case Study of The Upstream Oil and Gas Sector | Chike | Oduoza |
| | | | | 3 | 6716 | Disassembly System Design with Cybersecurity Risk in Remanufactured Products to Maximizing Recovery Rate and Profit | Yuki | Kinoshita |
| | | | | 4 | 5620 | IoT-driven Real-time Indoor Air Quality Monitoring System for Enhanced Environmental Safety | Amit | Lopes |
| 2 | Tokyo | Human Factor | Fatemeh Davoudi (Santa Clara Univ.) | 1 | 2633 | Humans and AI in Harmony? Hybrid Decision Architectures As The Key to Industry 5.0 | Thorben | Krokowski |
| | | | | 2 | 5206 | Evaluating Impact of Occupational Exoskeletons on Physical Fatigue Using Wearable Sensors and Deep Learning | Fatemeh | Davoudi Kakhki |
| | | | | 3 | 6992 | Extended Reality for The Inclusion of Disabled Operators: A Systematic Literature Review | Marco | Lanzone |
| | | | | 4 | 8430 | Human-centric Digitalization - Digital Triplet | Hiroto | Narumiya |
| 3 | London | Digital Twins | Michele Cali (Univ. of Catania) | 1 | 4065 | Generative Machine Learning Technique for Wire Electrical Discharge Machining Optimization of Inconel 718 - A Predictive Maintenance Approach | Pramod S | Kataraki |
| | | | | 2 | 5844 | Enhancing Picking-by-line Operations: A Simulation-based Approach | Romão | Santos |
| | | | | 3 | 6488 | An Accurate Manufacturing Methodology for Automotive Hinges with Close-range Bushings | Michele | Cali |
| | | | | 4 | 7645 | Cyber-Physically Controlled Smart Machine Tool Systems - Standardisation Efforts in ISO/TC 184 Versus Controller Implementation in Dynamically Evolving Environments | Albrecht | Hänel |
| 4 | Sydney | AI in Manufacturing: Process Improvement | Marcel Wagner (RPTU) | 1 | 1850 | Multi-stage Predictive Framework for Early Anomaly Detection and Real-time Alerts in Data Center Thermal Systems | Rushil Kaushikkumar | Patel |
| | | | | 2 | 9015 | Digital Twin-enabled Quality Assurance Analysis of Metal Manufactured Parts Based on Neural Networks Applied to 3D Meshes | João Vítor | Arantes Cabral |
| | | | | 3 | 6644 | Graph Topology-guided Manufacturing Knowledge Representation and Knowledge Integration for Manufacturing Process Selection | Kyoung-Yun | Kim |
| | | | | 4 | 0344 | Optimizing Paperboard Press Forming with LSTMs: Unveiling Process Dynamics through Latent Space Representations | Sami | Matthews |
| 5 | Toronto | Systems Optimization | Maria Teresa Pereira (Polytechnic of Porto) | 1 | 0747 | Comparative Analysis through Experimentation On The Precision and Accuracy of A Collaborative Robot vs. Human Operators in Pick and Place Operations | Christopher | Greene |
| | | | | 2 | 2394 | A Novel Approach for Monocular Rgb-based Ergonomics Monitoring in Industrial Workspaces Employing Synthetic Datasets to Train A Deep Learning Model | Thomas | Agostinelli |
| | | | | 3 | 7832 | Optimization of Metal Sheet Cutting Processes Using Integer Linear Programming: Reducing Waste and Enhancing Production Efficiency | Maria Teresa | Pereira |
| | | | | 4 | 9895 | Towards A Roadmap From Topological Optimisation to Laser Powder Bed Fusion for Structural Machine Parts | Georgios Christoforos | Vosniakos |
| 6 | Dubai | Smart Systems | Panorios Benardos (National Technical Univ. of Athens) | 1 | 9299 | Effectiveness Evaluation of a Virtual Reality Environment for CNC Machine Tool Training | Panorios | Benardos |
| | | | | 2 | 3447 | A Novel Approach to Recognition and Embedding of The Machining Feature for Mechanical Parts | Zirui | Li |
| | | | | 3 | 2786 | Ensemble Learning Approaches for Automated Defect Detection: Integrating Computer Vision and Machine Learning Techniques | Ali | Hosseinzadeh Ghobadlou |
| | | | | 4 | 8944 | Data-driven Lean Six Sigma: Enhancing Agility and Productivity in Die Maintenance Process | Rasoul | Rashidifar |

| Date | Session | Time | | | | | | |
|--------|----------|--|---|-------|------|---|-----------------------|----------------------|
| 23-Jun | 3 | 14:25 - 15:45 (80 min.) | | | | | | |
| Number | Room | Topic | Session Chair | Order | ID | Title | Presenter | |
| | | | | | | | First Name | Last Name |
| 1 | Tel Aviv | Emerging Technologies | Seiichi Takamatsu (Binghamton Univ.) | 1 | 3439 | Fabrication Process of Wearable Electronic Packaging for VR and Biomedical Applications | Seiichi | Takamatsu |
| | | | | 2 | 5956 | A Sustainability-centric Assessment Framework for Digital Solutions Across Industries | Svenja Nicole | Schulte |
| | | | | 3 | 7696 | The Impact of Emerging Technologies in Metal-additive Manufacturing | Taoreed | Adegbola |
| | | | | 4 | 8088 | A Framework for Mapping Industry 5.0 Technologies for SMEs | Torbjørn | Leirmo |
| 2 | Tokyo | Flexible and Collaborative Manufacturing / Human-Robot Interaction | Ana Correia Simoes (INESC TEC) | 1 | 2579 | Development of a Robotic Additive Manufacturing Cell Based on The LMD-wire Process | Brayan Stiven | Figueroa Betancourth |
| | | | | 2 | 7954 | Simulation-driven Approach for Dimensioning Amr Fleets in Distribution Centre Logistics | Henrique | Piqueiro |
| | | | | 3 | 9892 | Intelligent Automatic Storage and Retrieval Systems for Flexible Manufacturing | Georgios Christoforos | Vosniakos |
| | | | | 4 | 2074 | Skill-based Adaptation through Intuitive Interfaces: Multi-modal Guidance Systems for Industrial Environments | Johann | Mitteramskogler |
| 3 | London | AI in Manufacturing: Process Optimization and Diagnostics | Chao-Lung Yang (National Taiwan University of Science and Technology) | 1 | 3724 | Investigating The Influence of Prompt Design in The Generation of Failure Mode and Effects Analysis for Manufacturing Processes Using Large Language Models | Marcel | Wagner |
| | | | | 2 | 7170 | Incorporating Process Quality Capability Into Process Parameter Tuning for High-voltage Power Cable Manufacturing | Chao-Lung | Yang |
| | | | | 3 | 5136 | Intelligent Battery Design Method Based on Deep Learning Algorithm | Jinghao | Yang |
| | | | | 4 | 8127 | Large Language Models for High-level Computer-aided Process Planning in a Distributed Manufacturing Paradigm | Panorios | Benardos |
| 4 | Sydney | Digital Twins in Manufacturing Systems | Olukorede Adenuga (Tshwane Univ. of Technology) | 1 | 9040 | Simulation-driven Decision-making for Process Optimization for Gate Valve Value Stream Production Line | Anush Kumar | Gunalan |
| | | | | 2 | 5587 | Gathering Personalized Design Requirements via Digital Twin | Garrett | Robison |
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| | | | | 4 | 4948 | A High Throughput Experimental System for The Continuous Casting of Glass-coated Microwires | Ahmed | Alajlouni |
| 5 | Toronto | Green Manufacturing Systems | Taoreed Adegbola (Tshwane University of Technology) | 1 | 5621 | Development of an Energy Consumption Monitoring and Prediction Model for CNC Machine Tools Using The Taguchi Method Integrated with Machine Learning | Chir-Jang | Tsai |
| | | | | 2 | 4356 | Research of Image-based Layer Geometry Monitoring System Combining with ROS2 Platform for WAAM Process | Di | Wu |
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