

# Programme

Wednesday, April 22, 2026 **Icebreaking party at 19:00**

## CONFERENCE DAY ONE

Thursday, April 23, 2026

8:00	9:00	REGISTRATION
9:00	9:20	<b>Opening of the conference</b> Igor Drstvenšek, Snehashis Pal, Nataša Ihan Hren
9:20	9:50	<b>The Use of 3D Printing in Northern and Western European Armed Forces: Pathways to Greater Independence</b> Stefan Ritt, AM3D, Lübeck, Germany
9:50	10:10	<b>Integrated Topology Optimization and SLS Process Simulation for a Honeycomb Polymer Gear</b> Riad Ramadani, Faculty of Mechanical Engineering, University of Prishtina, Kosovo
10:10	10:40	COFFEE BREAK
10:40	11:00	<b>Development of an AI-Based Monitoring Strategy for the Material Extrusion 3D Printing Process: A Minimal-Data, Scalable Approach to Model Life Cycle Management</b> Karin Kloiber, Competence Center CHASE GmbH, Austria
11:00	11:20	<b>In-depth analysis of input flow parameters for output mass monitoring in extrusion-based additive manufacturing, enabling predictive anomaly detection</b> Christoph Strasser, Transfercenter für Kunststofftechnik GmbH, Austria
11:20	11:40	<b>Educational demonstrator of FLM process with online IR thermodiagnosics</b> Zdeněk Veselý, University of West Bohemia in Pilsen, Czech Republic
11:40	12:00	<b>Effect of Nozzle Geometry on Extrusion Force in Metal Fused Filament Fabrication</b> Mohammadmahdi Kamyabi, Vali-e-Asr University of Rafsanjan, Iran
12:00	14:00	LUNCH
14:00	14:20	<b>Aspects of Sensor Integration for the Monitoring of FFF Printed Structures</b> Mathias Hartmann, Faculty of Mechanical Engineering, Deggendorf Institute of Technology, Germany
14:20	14:40	<b>UV-Assisted Additive Manufacturing of Silicone Elastomers Reinforced with Fumed Silica Inks</b> Pelin Gurbuz, The University of Manchester, United Kingdom
14:40	15:00	<b>Development of Impregnated Continuous Carbon Fiber Filament for High Performance Applications</b> Muhammad Abuzar Khan, Kaunas University of Technology, Lithuania
15:00	15:30	<b>The Influence of Additive Manufacturing on Product Design Practice</b> Patrick Pradel, Loughborough University, United Kingdom
15:30	16:00	COFFEE BREAK
16:00	16:20	<b>Post-Processing of Additively Manufactured Metal Parts: An Overview with Focus on Plasma Electrolytic Polishing</b> Joško Valentinčič, Faculty of Mechanical Engineering, University of Ljubljana, Slovenia
16:20	16:40	<b>Process interruptions in PBF-LB/M: Recommendations for a suitable restart procedure</b> Martin Moser, University of the Bundeswehr Munich, Germany
16:40	17:00	<b>Descriptor-Based Framework for Predicting Degradation in Additively Manufactured Magnesium Biomaterials</b> Janez Gotlih, Faculty of Mechanical Engineering, University of Maribor, Slovenia
17:00	17:20	<b>Selective Laser Melting of High-Entropy Alloy Reinforced Aluminum Matrix Composites</b> Atanu Mondal, Indian Institute of Engineering Science and Technology, Shibpur, India
19:00	CONFERENCE DINNER	

ARMED FORCE

AM OF POLYMERS

EXTRUSION-BASED AM

AM OF METALS

# Programme

## CONFERENCE DAY TWO

Friday, April 24, 2026

8:30	9:00	GATHERING OF PARTICIPANTS AT THE RESEARCH BREAKFAST
9:00	9:10	<b>Workshop opening</b> Nataša Ihan Hren, Igor Drstvenšek
9:10	9:30	<b>Challenges and opportunities of medical additive manufacturing</b> Mika Salmi, Aalto University, Helsinki, Finland
9:30	9:50	<b>Variothermal Powder Bed Fusion of Functionalized Materials in Medical Applications</b> Dietmar Drummer, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
9:50	10:10	<b>Additive Manufacturing of Biocomposites Using PLA and Natural Fibers Impregnated with PHA</b> Tomas Simokaitis, Kaunas University of Technology, Lithuania
10:10	10:30	<b>Metallic Biomaterials in Medicine: From Metallurgy and Biocompatibility to Fatigue Failure of Implants</b> Igor Drstvenšek, Faculty of Mechanical Engineering, University of Maribor, Slovenia
10:30	11:00	COFFEE BREAK
11:00	11:20	<b>Personalized 3D-Printed Acetabular Implant: Revision 30 Years After Primary Arthroplasty with High Center of Rotation and Sacral Migration</b> Andrej Moličnik, University Medical Centre, Department of Orthopaedics, Maribor
11:20	11:40	<b>The role of 3D-printed models in preoperative planning of complex total hip arthroplasty</b> Matic Kolar, University Medical Centre, Division of Orthopaedic Surgery, Ljubljana
11:40	12:00	<b>Virtual planning and 3D printing in mandible reconstruction – a case report</b> Miha Ložar, University Medical Centre, Division of Otorhinolaryngology, Head and Neck Surgery, Maribor, Slovenia
12:00	14:00	LUNCH
14:00	16:00	<b>Demonstration of the design and manufacture of patient-specific medical devices</b> Tomaž Brajljeh
16:00	17:30	<b>Visit to the Additive Manufacturing Laboratory and demonstration of the production of patient-specific medical devices</b> Snehashis Pal, Igor Drstvenšek

AM FOR MEDICAL

WORKSHOPS