



Monday, 1 September 2025

| Time | ROHM Square (1st floor of Bldg. 63) | |
|---------------|-------------------------------------|--|
| 16:00 - 18:00 | Registration | |
| 18:00 - 20:00 | Welcome Reception | |



Tuesday, 2 September 2025

| Time | Room A (2nd floor of Bldg. 63) | Room B (2nd floor of Bldg. 63) | |
|--|---|---|--|
| 9:00 - 9:20 | Welcome Talk | | |
| 9:20 - 10:10 (45+5) | Plenary Session Chair: Shinsuke Suzuki Plenary: David Dunand Iron-Tungsten Foams for Redox Cycling at High Temperature | | |
| 10:10 - 10:20 | Break | | |
| | Fabrication Chair: Natsumi Tsuchida | | |
| 10:20 - 11:00 (35+5) | Invited: Ryosuke Suzuki Fabrication of Aluminum Foam from Sheet Materials by a Combined Roll-bonding and Extrusion | | |
| 11:00 - 11:20 (15+5) | Michal Kuris Lightweight aluminium components made by foaming assisted casting technique | | |
| 11:20 - 11:40 (15+5) | Yuji Kume Fabrication of Porous Iron using Formable Powder Mixtures and Iron Oxides Reduction Sintering | | |
| 11:40 - 13:00 | Lunch | Break | |
| | Mechanical: Invited Chair: Nihad Dukhan | | |
| 13:00 - 13:40 (35+5) | Invited: Koichi Kitazono Energy absorption capacity of Sn-Bi alloy lattice structures manufactured using vat photopolymerized resin molds | | |
| 13:40 - 13:50 | Bre | Break | |
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| | Mechanical Chair: Yuji Kume | AM, Biomedical Chair: Akihiro Takezawa | |
| 13:50 - 14:10 (15+5) | Mechanical Chair: Yuji Kume Mingfang Zhu Deformation characteristics of graded aluminum foams under high strain rates | | |
| | Chair: Yuji Kume Mingfang Zhu Deformation characteristics of graded aluminum foams under | Chair: Akihiro Takezawa David Dunand Additively Manufactured Titanium with Steel or CaCl₂ | |
| (15+5) 14:10 - 14:30 | Mingfang Zhu Deformation characteristics of graded aluminum foams under high strain rates Ningzhen Wang Effect of alloy matrix on the mechanical properties and deformation mechanisms of aluminum foams | Chair: Akihiro Takezawa David Dunand Additively Manufactured Titanium with Steel or CaCl ₂ Spaceholders for Enhanced Orthopedic Materials Ernesto Javier Delgado Pujol Porous Titanium Combined with Sustainable Bacterial | |
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| 14:10 - 14:30 (15+5) 14:30 - 14:50 14:50 - 15:30 (35+5) 15:30 - 15:40 | Mingfang Zhu Deformation characteristics of graded aluminum foams under high strain rates Ningzhen Wang Effect of alloy matrix on the mechanical properties and deformation mechanisms of aluminum foams Bree Macro/Microstructure: Invited Chair: Koichi Kitazono Invited: Paul Kamm Examining the Development of Aluminium Foams Using X-ray Tomoscopy Bree Macro/Microstructure Chair: Koichi Kitazono Yuta Kushiya Effect of TiC heterogeneous nucleation site particles on the melting behavior of Ti-6Al-4V powder by in-situ X-ray and | Chair: Akihiro Takezawa David Dunand Additively Manufactured Titanium with Steel or CaCl ₂ Spaceholders for Enhanced Orthopedic Materials Ernesto Javier Delgado Pujol Porous Titanium Combined with Sustainable Bacterial Cellulose-Chitosan Hydrogels for Osteochondral Regeneration eak | |



Wednesday, 3 September 2025

| Time | Room A (2nd floor of Bldg. 63) | Room B (2nd floor of Bldg. 63) |
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| | Plenary Session | |
| | Chair: David Dunand | |
| 9:30 - 10:20 (45+5) | Plenary: Hideo Nakajima Fabrication of Aluminum Alloys with Open-channel and Columnar Structure through Ceramic Fiber Template Method and Wire-extraction Method | |
| 10:20 - 10:40 | Break | |
| | Mechanical, Fabrication Chair: Francisco García-Moreno | |
| 10:40 - 11:00 (15+5) | Shungo Yano Formation of deformation bands caused by changes in the pore arrangement of directional porous metals | |
| 11:00 - 11:20 (15+5) | Jiwoon Lee Pore refinement of lotus-type porous Cu fabricated by continuous casting | |
| 11:20 - 13:00 | Lunch | Break |
| | Fabrication: Invited Chair: Paul Kamm | |
| 13:00 - 13:40 (35+5) | Invited: Satomi Takamatsu Particles on inner surface of pores in aluminum alloy foam fabricated by semi-solid route | |
| 13:40 - 13:50 | Bre | eak |
| | AM Chair: Norbert Babcsan | Mechanical Chair: Fero Simancik |
| 13:50 - 14:10 (15+5) | Yuki Wakai In-situ observation of periodic melting behavior in pure titanium powder during laser powder bed fusion | Hidenori Yoshimura Effect of Cell Wall Thickness of Lattice-type Metallic Cellular Structure on Mechanical Properties |
| 14:10 - 14:30 (15+5) | Kazuki Sakae Application of porous metal created by metal laser powder bed fusion to Powder damper and study on the damping phenomena | Masataka Hakamada Strong Electrodeposition Joining of Aluminum Alloy Sheets by Interfacial Composites of Nanoporous Anodic Aluminum Oxides and Metals |
| 14:30 - 14:40 | Bre | eak |
| | Fabrication Chair: Ryosuke Suzuki | Fabrication, Properties Chair: Masataka Hakamada |
| 14:40 - 15:00 (15+5) | Natsumi Tsuchida In-situ observation of melting behavior with spherical primary crystals of Al-6.4mass%Si for semi-solid foaming | Thomas Moore Fabrication of Uniform Copper Foams via Polystyrene Foam Templates |
| 15:00 - 15:20 (15+5) | Norbert Babcsan Smart Aluminum Foams: Functional Integration in Lightweight Engineering | Ellis Hancox Production of low density, pure metal foams with uniform pore size made by electroless plating of latex beads |
| 15:20 - 15:40 (15+5) | | Masanori Shiomi Frictional properties of porous metals fabricated by space holder technique |
| 15:40 - 17:00 | (Transfer to Dinner Site) | |
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Thursday, 4 September 2025

| Time | Room A (2nd floor of Bldg. 63) | Room B (2nd floor of Bldg. 63) |
|-------------------------|--|--------------------------------|
| | Application Chair: Masanori Shiomi | |
| 9:30 - 9:50 (15+5) | Norbert Babcsan From Space to Drones: Advanced Aluminium Foams for Lightweight UAV Components | |
| 9:50 - 10:10 (15+5) | Sara Matsumura Visualization of Powder Behavior in Powder Dampers with Varying Particle Sizes and Clearances | |
| 10:10 - 10:30 (15+5) | Juliane Hüttl Properties of a Porous Metallic Transport Layer Based on Paper Technology | |
| 10:30 - 10:40 | Break | |
| | Thermofluidic Chair: Hidenori Yoshimura | |
| 10:40 - 11:00 (15+5) | Nihad Dukhan Enhancing Free Convection in Open-Cell Metal-Foam Hat Sink Using Holes | |
| 11:00 - 11:20 (15+5) | Fero Simancik Heat battery made of aluminium foam filled with PCM | |
| 11:20 - 11:40 (15+5) | Patricia Fernandez Morales Comparative Study of the Thermal Behavior of Porous and Solid A356 Aluminum Alloy Using Temperature Rise Tests and CFD Simulations | |
| 11:40 - 12:00 | Closing Remark | |
| 12:00 - 13:00 | Lunch | Break |
| 13:00 - 17:00 | Confere | nce Tour |



Poster Session

| # | Presenter / Title |
|---|--|
| 1 | Seungmin Cho Bonding Characteristics and Thermal Shock Behavior of Active Metal Brazed Substrates Using Lotus-Type Porous Cu |
| 2 | Minseo Kim Fabrication and Application of Nanoporous Silver Based on Ag-Al-Mn Alloy |
| 3 | Rusheng Zhao Negative Strain Rate Sensitivity of Al-Mg-Sc Alloy Lattice Structures |
| 4 | Mao Kosaka Mechanical Properties of Flexible and Rigid Aluminum Alloy Lattice Structures |
| 5 | Takuya Hiranuma Evaluation of spatter generation and compositional changes of Hastelloy X during laser powder bed fusion using in-situ X-ray imaging and EPMA |
| 6 | Ernesto J. Delgado-Pujol Improving Fatigue Life and Corrosion Resistance of Additively Manufactured Ti6Al4V Dental Implants through Porous/Hybrid Designs and β-Ti HiPIMS Coating |
| 7 | Kanta Hada Feature Extraction and Dimensionality Reduction of Architected Materials Using Variational Autoencoders |