

PROGRAM*

3rd International Symposium Additive Manufacturing (ISAM 2019)

JANUARY 29–31, 2019

JANUARY 29

Business Forum

Venue: Fraunhofer IWS Dresden

- 16:30 Welcome & Introduction
Christoph Leyens / Frank Brückner, Fraunhofer IWS Dresden
- 16:45 Business Presentation 1
Reinhold Achatz, thyssenkrupp AG
- 17:00 Digital Factory @FIT – Industrial Additive Manufacturing
Carl Fruth, FIT Prototyping GmbH
- 17:15 3D-printing view from a logistic provider
Jens Happe, Kühne + Nagel (AG & Co.) KG
- 17:30 We print to drive: AM for mobility
Stefanie Brickwede, Mobility goes Additive
- 17:45 Corporate management in additive manufacturing: Is an ‚Additive Manufacturer‘ certification the way to go?
Christoph Blanc, TÜV Süd
- 18:00 Metal additive manufacturing process technology of medical applications in South Korea
Chang-Woo Lee, KITECH, Korea
- 18:15 Refreshment break
- 18:30 Panel discussion
Moderation: Stefanie Brickwede, Mobility goes Additive

- 19:30 Open Lab & Networking
at the Additive Manufacturing Center Dresden

JANUARY 30

Symposium

Venue: International Congress Center Dresden

Opening Day 1

- 09:00 Opening
Christoph Leyens, Fraunhofer IWS Dresden
- 09:20 Keynote: Laser-material interactions in metal additive manufacturing
Ibo Matthews, Lawrence Livermore National Laboratory, USA
- 09:50 Keynote: I AM SIEMENS – Industrialized Additive Manufacturing by Siemens
Ingomar Kelbassa, Siemens AG
- 10:20 Coffee break with technical exhibition

Advanced processing and technologies

- 11:00 Wire-feed Additive Manufacturing of Ti 6Al-4V Components by Rapid Plasma Deposition (RPD™) at High Deposition Rate
Pedro Almeida, Norsk Titanium, Norway
- 11:20 Design and Manufacture of Lattice Structures using Renishaw AM machines
Kenneth Nai, Renishaw PLC, UK
- 11:40 Combination of Dispense and AM Technologies for increased functionality
Lukas Stepien, Fraunhofer IWS Dresden
- 12:00 Open Source Electron Beam Powder Bed Fusion for Materials R&D
Patrick Ohldin, Freemelt, Sweden
- 12:20 Lunch break with technical exhibition
- 13:30 ISAM elevator pitch content
- 14:15 Poster session with coffee

Materials and testing

- 15:20 Opportunities and Chances of AM with new kind of automotive-approach based on a hood-hinge
Eric Klemp, Voestalpine Additive Manufacturing Center GmbH
- 15:40 X-Ray and CT as a tool for quality assurance and process optimization in 3D printing
Philip Sperling, Yxlon International GmbH
- 16:00 Non-destructive Investigation of strain by neutron diffraction
Helmut Schober, ILL Grenoble, France
- 16:20 SLM system characterization using ultrasonic examinations
Sebastian Rott, MTU Aeroengines
- 16:40 Microstructure and mechanical properties of LBM-printed Ti/Nb/(Ta) biomedical alloys
Markus Weinmann, H.C. Starck Tantalum and Niobium GmbH

Evening reception

Start: 18:30
 Venue: Kasematten – Historic Casemate Vault Dresden
 Bruehlscher Garten 4 (direction by car: Hasenberg 1), 01067 Dresden
 Opening talk: Powderbased 3D food printing technologies
Martijn Noort, Wageningen University

Take the opportunity for professional discussions in a relaxing atmosphere.

JANUARY 31

Symposium

Venue: International Congress Center Dresden

Opening Day 2

- 09:00 Best poster and elevator pitch awards
- 09:10 Keynote: Materials for Additive Manufacturing
David Bourell, The University of Texas, Austin, USA
- 09:40 Keynote: Laser Additive Manufacturing of Metals - Opportunity to Promote High-End Manufacturing Ability in China
Xiaoyan Zeng, HUST, China
- 10:10 Keynote: Process Development, Alloy Development and Qualification in Selective Laser Melting Process
Xinhua Wu, Monash University, Australia
- 10:40 Coffee break with technical exhibition

Pre- and post-processing

- 11:10 Structural optimization - Releasing the potential of AM in the Design Process
Anthony McLoughlin, Altair
- 11:30 Powder for Additive manufacturing
Sven Bengtsson, Höganäs AB
- 11:50 Co-sintering of Zirconia/Steel Material Hybrids - Requirements, Processing, and Characterization
Tassilo Moritz, Fraunhofer IKTS
- 12:10 CFD modelling advances in Additive Manufacturing
Amir Isfahani, Flow Science, USA
- 12:30 Lunch break with technical exhibition

Process control and quality

- 13:40 Laser Metal Deposition and 3D Printing – New Sensor Concepts for LMD and Innovative System Technology for Additive Processes with Wire
Precitec GmbH & Co. KG
- 14:00 Digital Additive Manufacturing
Mirko Riede, Fraunhofer IWS Dresden
- 14:20 Prediction of metal powder evolution in AM production and its impact on the potential for confident reuse of material
Neil Harrison, LPW Technology Ltd, UK
- 14:40 Process- and Condition Monitoring in Additive Manufacturing based on Laser Deposition Welding
Holger Perfahl, DMG Mori
- 15:00 Coffee break with technical exhibition

Applications

- 15:30 Implementation of conformal cooling in additive manufactured injection mould inserts - A case study
Chen-Nan Sun, Singapore Institute of Manufacturing Technology (SIMTech)
- 15:50 Micro Sully jet Erosion assessment for Additive Manufacturing Products
Masahiro Onoi, Metal Technology Co. Ltd., Japan
- 16:10 Qualification route of SLM additive manufacturing for aerospace applications
Katja Schmidtke, Airbus
- 16:30 The build-up welding method with extremely low distortion for the steam turbine blade
Takeshi Ishikawa, Sumitomo Heavy Industries Himatex Co., Ltd., Japan
- 16:50 *requested*
- 17:10 Concluding remarks and farewell
Christoph Leyens, Fraunhofer IWS Dresden