



FRAUNHOFER-INSTITUT FÜR WERKSTOFF- UND STRAHLTECHNIK IWS

INTERNATIONAL SYMPOSIUM ON ADDITIVE MANUFACTURING

FEBRUARY 25 - 26, 2015 IN DRESDEN

PROGRAM



WWW.IWS.FRAUNHOFER.DE/ISAM



Ladies and Gentlemen,

Additive manufacturing is currently paving its way into industrial applications. With an overwhelming potential to overcome some of the limits of conventional manufacturing technologies, additive manufacturing is not only able to fulfil the end users' increasing demand for high complexity parts but also opens exciting possibilities to integrate new functionalities, to combine different materials and to apply revolutionary component designs.

The symposium brings together the world leading experts in additive manufacturing and newcomers interested in this fascinating and vibrant field. Ample time for discussion and networking is making this event a great marketplace for new ideas and business in additive manufacturing.

Do not miss this opportunity!

Eckhard Beyer
Executive Director
Fraunhofer IWS Dresden

Christoph Leyens Head of Department Thermal Coating and Additive Manufacturing

February 25, 2015

08:30 Registration

Opening Day 1

- 09:00 Opening
 Eckhard Beyer, Christoph Leyens,
 Fraunhofer IWS, Dresden, Germany
- 09:20 The future of additive manufacturing in industry a GE perspective James Sears, General Electric, USA
- 09:50 Additive manufacturing in Airbus Group: state of the art and challenges Claudio Dalle Donne, Airbus, Germany
- 10:20 Coffee break with technical exhibition

Materials and testing

- 11:00 Material property improvement through interpass cold work in titanium and aluminium Stewart Williams,
 Cranfield University, United Kingdom
- 11:20 Study of selective laser melting of non-weldable Ni-base supperalloy on a single crystal Ni-base superalloy Jeroen Risse, Fraunhofer ILT, Germany
- 11:40 Potential new multimaterial systems for aircraft engines

 Björn Ulrichsohn,

 Rolls-Royce, Germany
- 12:00 Materials and applications of additive manufacturing in the aerospace industry

 Malte Fröbel,

 INTA, Instituto Nacional de Tecnica Aeroespacial,

 Spain
- 12:20 Industrial production of micro metal parts Joachim Göbner, 3D MicroPrint, Germany
- 12:40 Lunch break with technical exhibition



Advanced processing and technologies I

- 13:30 Light engineering by bionic additive manufacturing

 Claus Emmelmann,

 Laser Zentrum Nord GmbH, Hamburg, Germany
- 13:50 A European Space Agency perspective on additive manufacturing for space applications

 Tomasso Ghidini,

 European Space Agency, The Netherlands
- 14:10 Process development for additive series manufacturing

 Michael Zaeh,

 Technical University of Munich, Germany
- 14:30 Additive manufacturing in finished part quality by means of hybrid processing Friedemann Lell, SAUER DMG Mori, Germany
- 14:50 Coffee break with technical exhibition





Advanced Processing and Technologies II

- 15:30 Additive manufacturing with EBM from process to production Patrik Ohldin, Arcam, Sweden
- 15:50 Challenges & best practices to implement additive manufacturing for production Güngör Kara, EOS GmbH, Germany
- 16:10 Additive manufacturing of electrical functionalities Ines Dani, Fraunhofer IWS, Germany
- 16:30 High-precission dispensing: an alternative technology to screen printing Daniela Pfab, SITEC, Germany
- 19:00 Symposium dinner and come together at the Dresden Transport Museum



February 26, 2015

Opening Day 2

09:00 The future of additive manufacturing in Australia Milan Brandt, RMIT University, Australia

Process Control and Quality

- 09:30 Less residual stresses in laser beam melting by investigating on supports, powder layer proper ties, powder preheating and scanning strategies *Gerd Witt, RTC Duisburg, Germany*
- 09:50 Strategy towards tailored high-performance metal materials for additive manufacturing *Michael Schmidt, Bayrisches Laserzentrum, Germany*
- 10:10 Additive manufacturing for large gas turbine applications: opportunities and challenges Sebastian Piegert, Siemens, Germany
- 10:30 Development of additive manufacturing in Thales mechanical characterizations on aluminium and titanium specimens Yannick Cadoret, Thales, France
- 10:50 Coffee break with technical exhibition

Applications

- 11:20 Industrialization of additive manufacturing for space parts hurdles and challenges Steffen Beyer,
 Astrium, Germany
- 11:40 Additive manufacturing potentials and limits Frank Brückner, Fraunhofer IWS, Germany
- 12:00 Additive manufacturing and law: copyright, patent and liability

 Jürgen Ensthaler,

 Technical University of Berlin, Germany
- 12:20 Additive manufacturing in manufacturing and serial production

 Zeljko Pazin,

 EFFRA, European Factories of the Future Research
 Association, Belgium
- 12:40 Lunch break with technical exhibition
- 13:45 Panel discussion: additive manufacturing possibilities beyond imagination?!
- 16:00 Closing remarks
 Christoph Leyens,
 Fraunhofer IWS, Dresden, Germany



ORGANIZATION

Venue

Fraunhofer IWS Dresden 01277 Dresden, Winterbergstr. 28 www.iws.fraunhofer.de

Language: English

Fee: Industry 390 €

Academia **300 €**

(payable on receipt of the invoice)

The fee includes conference documents and refreshments, as well as the participation in the evening reception.

Registration deadline: February 13, 2015

(Cancellation of registration is possible by February 13, 2015. After this date the full costs will be charged.)

Accomodation

We have arranged call allocations in a few hotels. Please visit www.iws.fraunhofer.de/isam/hotels.

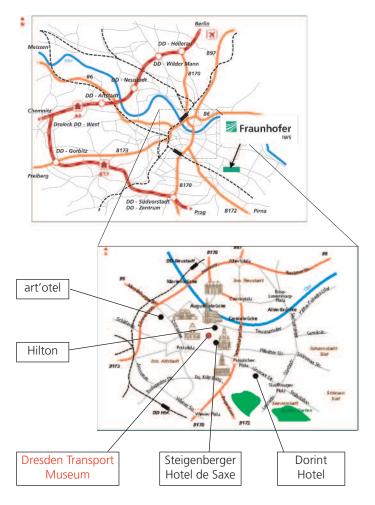
Contact

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www.iws.fraunhofer.de/isam

ORGANIZATION

Directions



»Additive Manufacturing«		Fraunhofer IWS Dresden, Winterbergstr. 28, 01277 Dresden, Germany
International Symposium »Additive Manufacturing«	February 25 - 26, 2015	Fraunhofer IWS Dresden, Wir

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photographs taken during the event and with the electronic storage of my address (incl. the use of my address tor tuture invitations). With my registration I agree with the potential publication of 0 0 o yes

Registration (in block letters)	
Registration	Last name

Company / Institution First name (payable on receipt of invoice) 300€ Academia

Billing address

Phone / Fax

Place / Date Participation in the evening reception on February 25

Firm stamp

Signature E-mail

International Symposium »Additive Manufacturing«

Fraunhofer

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February 25 - 26, 2015

Fraunhofer-Institut für Werkstoff- und Strahltechnik IWS

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