



Fraunhofer

IFAM



**TECHNISCHE
UNIVERSITÄT
DRESDEN**

ifw **W**
Institut für Werkstoffwissenschaft
materials science

**EUROPEAN
SUMMER UNIVERSITY
ADDITIVE MANUFACTURING**

22-25 AUGUST 2017



EUROPEAN SUMMER UNIVERSITY ADDITIVE MANUFACTURING

DRESDEN, 22-25 AUGUST 2017

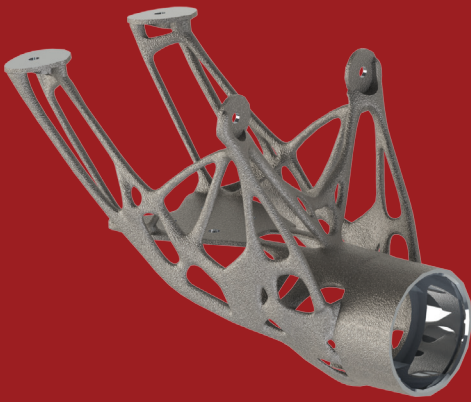
The Chair of Powder Metallurgy and Composite Materials of the Technical University of Dresden in cooperation with the Fraunhofer Institute for Manufacturing Technology and Advanced Materials is staging the first issue of the European Summer University Additive Manufacturing. This 4-day event provides profound insights into the topic of Additive Manufacturing with a focus on metal parts. In addition to lectures given by prominent experts, it includes plant and institute visits as well as practical hands-on exercises. Upon passing a short final written exam, a certificate of successful participation will be issued to the participants.

Participation both from industry and academia is encouraged. The Summer University will be held in English and is suited for participants with no or limited knowledge of Additive Manufacturing who wish to gain quick and thorough insights into the topic. The number of participants is limited, and a few slots will be provided for outstanding bachelor or master students at no fee based on a short application. For all other participants, a fee of € 1,395,- will apply (including coffee breaks, lunches and a social evening).

We would be delighted to welcome you in Dresden for this unique event. Please register with the registration form included. Also for student applications or further information, you are welcome to contact us under the contact details given.

Prof. Dr.-Ing. Bernd Kieback

Dr.-Ing. Olaf Andersen



PROGRAM

TUESDAY, 22 AUGUST 2017

- 08:30 **General introduction to Additive Manufacturing of metals, ceramics, and polymers**
Prof. Dr.-Ing. Bernd Kieback, TU Dresden/Fraunhofer IFAM
- 10:00 Coffee break
- 10:15 **Design principles: from CAD to process**
Dipl.-Ing. Michael Süß, TU Dresden
- 11:45 Lunch break
- 12:45 **Electron Beam Melting (EBM)**
Dr.-Ing. Thomas Weißgärber, Fraunhofer IFAM
- 14:15 Coffee break
- 14:45 **Plant / institute visit**
- 19:00 **Self-study**

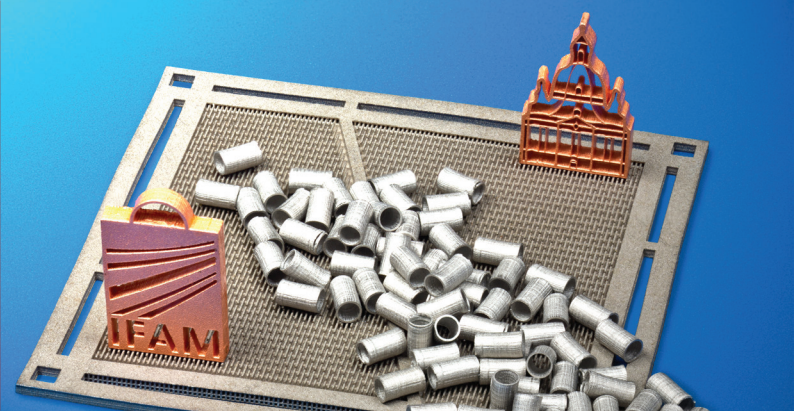
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PROGRAM

WEDNESDAY, 23 AUGUST 2017

- 08:30 **Selective Laser Melting (SLM)**
Dr.-Ing. Bernhard Müller, Fraunhofer IWU
- 10:00 Coffee break
- 10:15 **Solid-state Additive Manufacturing methods**
Dr.-Ing. Kay Reuter, Fraunhofer IFAM
- 11:45 Lunch break
- 12:45 **Case studies for hands-on workshops**
Dr. rer. nat. Burghardt Klöden, Fraunhofer IFAM
Dipl.-Ing. Sebastian Riecker, Fraunhofer IFAM
- 14:15 Coffee break
- 14:45 **Hands-on workshop Electron Beam Melting &
Fused Filament Fabrication**
- 19:00 **Social event in the city of Dresden**



PROGRAM

THURSDAY, 24 AUGUST 2017

- 08:30 **Hybrid Technologies in Additive Manufacturing**
Prof. Dr.-Ing. Frank Brückner, Fraunhofer IWS
- 10:00 Coffee break
- 10:15 **Metal powders for AM – Properties and characterization**
Dr.-Ing. Silvia Vock, Fraunhofer IFAM
- 11:45 Lunch break
- 12:45 **Industrial case studies**
- 14:15 Coffee break
- 14:45 **Lab work: powder characterization**
- 19:00 **Self-study**

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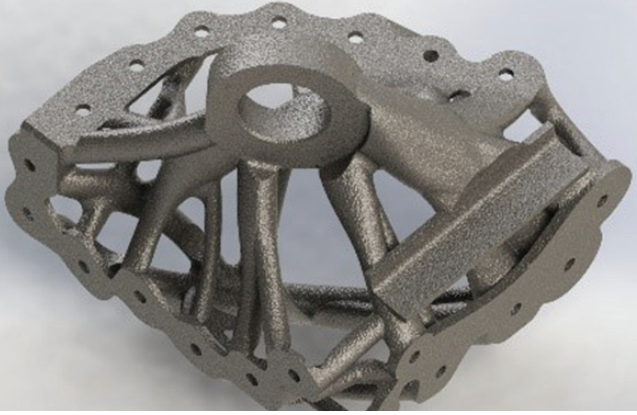
PROGRAM

FRIDAY, 25 AUGUST 2017

- 08:30 **Economics, social and legal aspects of Additive Manufacturing**
 Dr.-Ing. Olaf Andersen, Fraunhofer IFAM
- 10:00 Coffee break
- 10:15 **Exam (60 min)**
- 11:45 Lunch break
- 12:45 **Certificates and farewell**
 Prof. Dr.-Ing. Bernd Kieback, TU Dresden/Fraunhofer IFAM

CONDITIONS OF PARTICIPATION

The participation fee of 1,395.00 € includes coffee breaks, lunches as well as a social evening. With the confirmation of registration you will receive an invoice. Upon passing a short final written exam, you will receive a certificate of successful participation.



**Registration
European Summer University
Additive Manufacturing**

22-25 August 2017

at

**Fraunhofer IFAM Dresden
Winterbergstrasse 28 | 01277 Dresden | Germany**

Title, Surname, First Name

Company/Organisation.....

Address.....

Phone.....

Fax.....

E-Mail.....

Date, Signature.....

Please register until 7 August 2017.

Fax: +49 (0)351 2537 399

E-Mail: Cornelia.Mueller@ifam-dd.fraunhofer.de

With my registration I agree with the electronic storage of my data (incl. the use for future invitations and information).

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DRESDEN, 22-25 AUGUST 2017

ORGANISER

Fraunhofer Institute for Manufacturing Technology
and Advanced Materials IFAM, Branch Lab Dresden

Technische Universität Dresden,
Institute of Materials Science IfWW

CONTACT & VENUE

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