

Registration

Workshop Details

Workshop participation fee

KMM-VIN members	150 EUR
Non-members	250 EUR

For registration of participants, please fill out this form and fax or use the e-mail link below.

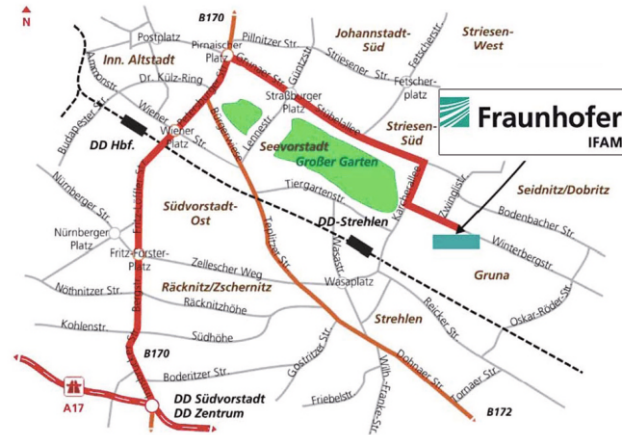
Please complete one form per participant.

Last Name
First Name(s)
Position
Company/Institution
Address
Zip code, City
Country
Phone
E-mail

KMM-VIN member yes no
billing address: as above other, see below
.....
.....

Venue

Fraunhofer Institute Center Dresden
Winterbergstrasse 28
01277 Dresden
Germany



Recommended Hotels

Hotel an der Rennbahn
Winterbergstr. 96, 01237 Dresden, Germany
Phone: +49 351 21 25 00, Fax: +49 351 21 25 050
<http://www.hotel-an-der-rennbahn-dresden.de/en/>

Hotel Dormero Königshof
Kreischauer Straße 2, 01219 Dresden, Germany
Phone: +49 351 87 31 0, Fax: +49 351 87 31 499
<http://www.dormero-hotel-dresden.de/en/hotel/>

KMM-VIN 3rd Industrial Workshop

Current Research on Materials and Technologies for Transport Applications



3-4 November 2014, Dresden, Germany

Registration

Fax reply: +49 351 2537-399

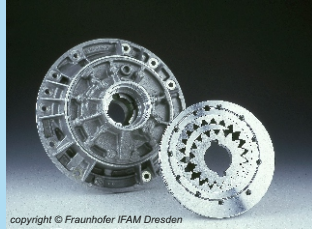
E-mail registration: info@ifam-dd.fraunhofer.de

For questions concerning the workshop, please contact:

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<http://www.ifam-dd.fraunhofer.de>

The Workshop



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The transport industries demand lighter, safer vehicles with a smaller environmental footprint both in their manufacture and in use. New materials are critical to sustainable transport and, therefore, crucial to achieving the ambitious objectives being set by national and international regulatory authorities. The Materials

Community is working with the transport sectors aerospace, automotive, marine and rail to help address the key technology drivers of reduced emissions and reduced contribution to climate change, end of life – disposal, recycling and re-use, reduced maintenance and through - life costs, efficient use of materials, alternative energy vectors, integrated transport strategy, safety as well as cost reduction.

This workshop mainly focuses on the aerospace and automotive sector. Speakers from industry will display the current development trends and needs for the future. Additionally, members from the European Virtual Institute on Knowledge Based Multifunctional Materials



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(KMM-VIN) will present their recent research results on materials and technologies. The focus is on lightweight materials, materials for energy efficiency as well as joining of dissimilar materials. The second day will focus on material technologies like powder metallurgy, additive manufacturing and casting displaying the potential for cost efficiency, design flexibility and functionality.



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The two-day workshop is co-organised by the European Virtual Institute on Knowledge-Based Multifunctional Materials and the Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM, Branch Lab Dresden, and will take

place from 3 - 4 November 2014 in Dresden, Germany.

Monday, 3 November 2014

13.00 **Welcome, Introduction to KMM VIN**
Prof. Michal Basista, CEO of KMM-VIN

13.15 **Introduction to Fraunhofer IFAM Dresden**
*Dr. Thomas Weißgärber
(Fraunhofer IFAM Dresden, Germany)*

Topic 1 Materials

Keynote

13.30 **Materials in Automotive Application; State of the Art and Prospects**
Dr. Daniele Pullini (Manager of Strategic Research on Materials, Technology, and Processing of Group Materials Labs, Centro Ricerche FIAT, Italy)

Keynote

14.00 **Materials in Aerospace Applications; State of the Art and Prospects**
Dr. Martin Schloffer (MTU Aero Engines AG, Germany)

Keynote

14.30 **Lightweight materials challenges for rail vehicle construction**
Dr. George Kotsikos (NewRail Centre for Railway Research at Newcastle University, UK)

15.00 Coffee Break

15.30 **Catalytic oxidation of C-C aircraft brakes**
Prof. Andreas Chrysanthou (University of Hertfordshire, UK)

15.50 **ZrB₂-SiC ceramic composites for air and space applications**
Jakob Kübler (EMPA, Switzerland)

16.10 **Advanced composite materials in automotive industry**
*Dr. Andrzej Czulak
(University of Technology Dresden, Germany)*

16.30 **The development of a monolithic thermoplastic storage vessel for high pressure hydrogen in automotive applications**
Dr. Peter Hansen (Element, UK)

16.50 **Development of thermoelectric materials for waste heat recovery in transportation industries**
Dr. Vicente Pacheco (Fraunhofer IFAM Dresden, Germany)

17.10 **Sustainable composite materials based on the revalorization of industrial wastes: applications in transport sector**
Dr. Eduardo Fages (AITEX; Spain)

17:30 **Fraunhofer IFAM Dresden / KMM-VIN Open Forum/Poster Session /Fraunhofer IFAM Dresden Lab Tour (optional)**
Scientific discussions, networking and collaboration opportunities

19:00 Dinner

Tuesday, 4 November 2014

Topic 2 Technologies

Keynote

9.00 **Joining of Dissimilar Materials**
Prof. Monica Ferraris (Politecnico Torino, Italy)

9.30 **Innovative strategies for joining of metals and plastics in lightweight constructions**
Prof. Peter Mayr (TU Chemnitz, Germany)

9.50 **Advanced joining technologies for aerospace applications**
*Andreas Schmidt
(Fraunhofer IFAM Dresden, Germany)*

10.10 Coffee Break

10.40 **Innovative casting technologies for transport applications**
Dr. Pedro Egizabal Luzuriaga (Tecnalia, Spain)

11.00 **Electron Beam Melting – an additive manufacturing technology for metallic parts for transport applications**
Dr. Burghardt Klöden (Fraunhofer IFAM Dresden, Germany)

11.20 **Selective Laser Melting - opportunities and challenges for complex-shaped parts for transport applications**
Dr. Claus Aumund Kopp (Fraunhofer IFAM Bremen)

11.40 **Powder Metallurgy – an innovative technology for Automotive**
Dr. Lars Wimbirt (GKN Sinter Metals, Germany)

12.00 **Metal Injection Moulding – an innovative technology for complex shaped parts for transport applications**
Dr. Philipp Imgrund (Fraunhofer IFAM Bremen, Germany)

12.20 **Final Discussion and Feedback**

12.30 Lunch

13.00 End of Workshop