

Organisation Committee:

Matthias Baumgart
Stefan Busse
Volker Delport
Jan-Peter Domschke
Jan Drechsel
Robby Ebert
Ralf Hartig
Saskia Langhammer
Heidemarie Rudolf
Uwe Schneider
Christian Schulz
Detlef Schulz
André Streek
Ellen Weißmantel

Languages of the Conference: german / english

Conference schedule:

October 24, 2012

10.00 am Plenary session
13.30 pm Poster session
14.00 pm Sessions and Workshops
19.00 pm Welcome reception

October 25, 2012

09.00 am Sessions and Workshops
10.00 am Career and Industrial Day
18.00 pm End of Conference

Deadlines:

June 1, 2012	Deadline for Submission of Abstracts (10 lines)
June 14, 2012	Confirmation of the presentation
August 27, 2012	Submission of papers for publication in „Scientific Reports“
September 21, 2012	Registration for the Career and Industrial Day

Registration - Organisation:

University of Applied Sciences
Conference Office SZMS e. V.
Postfach 1457
09644 Mittweida
Germany

Tel.: + 49 3727 581070, 581114
Fax: + 49 3727 581169
E-Mail: iwkm@hs-mittweida.de
Internet: www.hs-mittweida.de/tagungen

Getting there:

Airport Dresden or Leipzig
Train Chemnitz-Berlin



Accommodation:

Accommodations at Mittweida and the surrounding area can be found on: www.hs-mittweida.de/tagungen.

Registration Fees:

Participation all days:	100 Euro
Participation one day:	70 Euro
Speakers:	55 Euro
Students:	no fees




22nd ISCM 2012
Call for Paper

Laser and Manufacturing Technology,
Product and Process Development

October 24 - 25, 2012

Welcome

The University of Applied Sciences Mittweida invites you to attend on the **22nd International Scientific Conference at Mittweida (ISCM)** from **24th to 25th October 2012**.

Since 1971 this successful concept has been carried out and based on dialogs between academia and business. On the occasion of the 20th anniversary of the Faculty of Mechanical Engineering and the Faculty of Mathematics / Sciences / Computer Science of our university the conference focuses on:

Laser and Manufacturing Technology, Product and Process Development

With contributions by leading representatives from industry and science the 22nd ISCM will present the status quo of research and best practice examples as well as opportunities for technology transfer into industrial manufacturing practice.

The conference provides a good opportunity to present own new results of research and to inform oneself on latest developments.

Due to the wide-ranging group of participants, there are going to be good chances to exchange information with other scientists, technologists, and also manufacturers. The gathering of participants from both science and industry should help to promote interdisciplinary research and the formation of net-works and co-operations.

The framework programme of the 22nd ISCM provides you the opportunity to learn about the services offered by the University of Mittweida and associated facilities. The concurrent activity Mittweidaer Career and Industrial Day will be a platform for personal contacts with students, alumni, staff and professors of the university and gives you the opportunity to present your company to target groups.

We hope the 22nd ISCM will provide the venue and stimulus for participants to devise successful future research activities. The Conference Office and the Organisation Committee will make every effort to ensure that your participation will be successful and enjoyable.

Prof. Dr.-Ing. habil. Gerhard Thiem
Vice rector of research
Conference chair

Programme Committee: (inquired)

Abd El-Aziz, Ahmed - German University of Cairo, EG

Bliedtner, Jens - *Fachhochschule Jena*

Brenner, Berndt - *Fraunhofer IWS*

Dickmann, Klaus - *Laserzentrum FH Münster*

Exner, Horst - *Hochschule Mittweida*

Fischer, Andreas - *Hochschule Mittweida*

Gebhardt, Gerhard - *Hochschule Mittweida*

Goedecke, Manfred - *IHK Südwestsachsen*

Goldhahn, Leif - *Hochschule Mittweida*

Hähnel, Jens - *3D Micromac AG*

Hahn, Frank - *Hochschule Mittweida*

Hübelt, Jörn - *Hochschule Mittweida*

Hübner, Peter - *Hochschule Mittweida*

Hug, Regina - *Sinco Tec Group*

Jedynak, Mirko - *Acsys Lasertechnik GmbH*

Kammasch, Gudrun - *Beuth Hochschule Berlin*

Kimme, Thomas - *Laservorm GmbH*

Kuka, Georg - *fiberware GmbH*

Kuric, Ivan - *University of Zilina, SK*

Lewandowski, Jerzy - *Technical University of Lodz, PL*

Löschner, Udo - *Hochschule Mittweida*

Mahn, Uwe - *Hochschule Mittweida*

Mašek, Bohuslav - *University of West Bohemia, CZ*

Matthes, Jörg - *Hochschule Mittweida*

Matuszek, Józef - *University of Bielsko-Biala, PL*

Müller, Frank - *Hochschule Mittweida*

Petsch, Tino - *3D Micromac AG*

Riedel, Frank - *Fraunhofer IWU*

Schenk, Michael - *Fraunhofer IFF*

Skolud, Bozena - *Inst. Silesian University of Techn., PL*

Smyth, David - *University of the West of Scotland, UK*

Steiger, Bernhard - *Hochschule Mittweida*

Steinbach, Heidrun - *ICM e.V.*

Thiem, Gerhard - *Hochschule Mittweida*

Weidermann, Frank - *Hochschule Mittweida*

Weißmantel, Steffen - *Hochschule Mittweida*

Wißuwa, Eckhard - *Hochschule Mittweida*

Zäh, Michael - *TU München*

Zeuner, Michael - *Roth & Rau MicroSystems GmbH*

Topics:

**Laser Technologies/
Photonics** Prof. Exner, Prof. Weißmantel,
Prof. Steiger, Prof. Fischer,
Prof. Löschner, Prof. Wißuwa

- High Rate Laser Machining
- Micro and Nano Laser Technologies
- Laser-assisted Layer Deposition
- Generation and Application of Diffractive Optical Elements
- Simulation of Beam Propagation and Laser Processing
- Fiber Lasers and Applications

**Efficiency-oriented
Process Development** Prof. Goldhahn, Prof. Gebhardt,
Prof. Kretzschmar

- Digital and Virtual Engineering for Manufacturing of Parts and Assembly
- Energy-efficient Production Processes
- Human as Innovator, Industrial Engineering
- Quality Management and Metrology

**Component Testing/
Fracture Mechanics** Prof. Hübner,
Prof. Müller

- Fatigue Strength, Service Strength of Structures
- Component Testing
- Failure Assessment of Structures, Fracture Mechanics
- Case of Damage

Metal Forming Prof. Mahn, Prof. Hahn

- Issues of Material in Metal Forming
- Simulation of Metal Forming Processes

Design and Calculation Prof. Weidermann,
Prof. Matthes

- Finite Element Analysis
- Simulation and Calculation
- Light-Weight Design
- Mechanisms Theory

Noise Abatement and Noise Effects Prof. Hübelt

- Low-noise Products and Noise Reduction
- Effect of Noise on Human
- Annoyance and Sound Quality