

Registration

Workshop participation fee

KMM-VIN members	150 EUR
FEMS members	150 EUR
Non-members	250 EUR

To register for the Workshop please fill out this form and press Send button.

Alternatively you can fax the registration form using the fax number given below.

The KMM-VIN office will confirm your registration for the Workshop. After that you will be asked to proceed with the payment of the Workshop fee by bank transfer.

account no.: **BE42 3630 2151 6054**

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	<input type="checkbox"/> yes	<input type="checkbox"/> no
FEMS member	<input type="checkbox"/> yes	<input type="checkbox"/> no
I'd like to present a poster	<input type="checkbox"/> yes	<input type="checkbox"/> no
billing address:	<input type="checkbox"/> other, see below	<input type="checkbox"/> as above

SEND

Fax reply: (+32) 2 791 5536

E-mail registration: meetings@kmm-vin.eu

Registration fee includes: participation in all sessions, welcome reception, coffee and beverages during breaks, lunch and aperitif

Contact

For any inquiry on the workshop please contact:

Cecilia Poletti, TU Graz & KMM-VIN

e-mail: cecilia.poletti@tugraz.at

phone: +43 316 873 1676

Jerzy Rojek, KMM-VIN

e-mail: jerzy.rojek@kmm-vin.eu

phone: +48 600 202 430

Workshop venue

The workshop will take place at:

Institute of Materials Science and Welding (IWS)

Kopernikugasse 24/I

Graz University of Technology

8010 Graz, Austria

Graz is the second largest city of Austria, which was added to UNESCO's list of World Cultural Heritage sites in 1999.



Accommodation

Information about hotels and pensions can be found in:

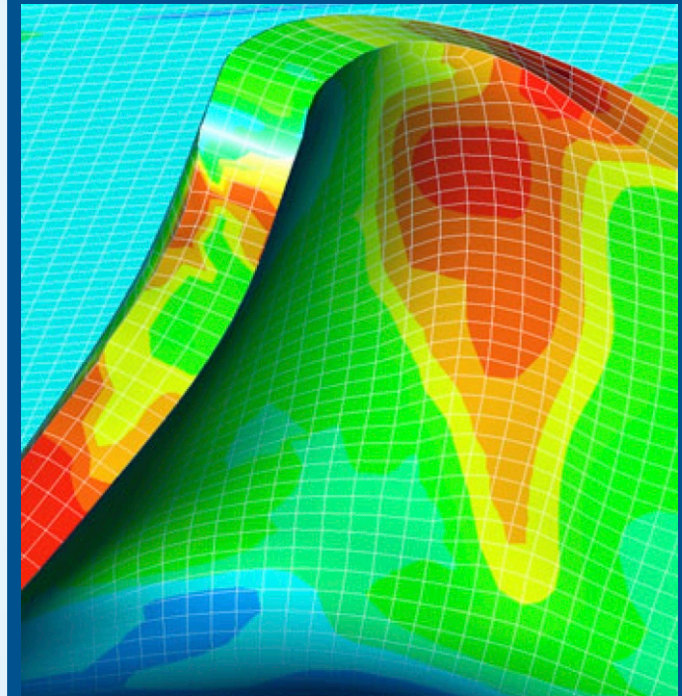
www.graztourismus.at



Institute of Materials Science and Welding, TU Graz

30th January 2015, Graz, Austria

Industrial Workshop Advanced Materials Modelling for Industrial Practice



organized by

Graz University of Technology



European Virtual Institute on Knowledge-based
Multifunctional Materials AISBL



Federation of European Materials Societies



Objectives

The workshop is the fourth in a series of industrially oriented workshops organized by KMM-VIN in collaboration with leading research centres and industry. The most recent advances in material science and technology with high industrial potential are presented. The workshops provide a unique opportunity to start and intensify the communication and cooperation between scientists and engineers.

The present workshop is a one-day joint event of KMM-VIN and FEMS aiming to present the latest developments in materials and process modelling ready-to-use in industrial practice. The scope of the workshop will cover:

Material processing technologies

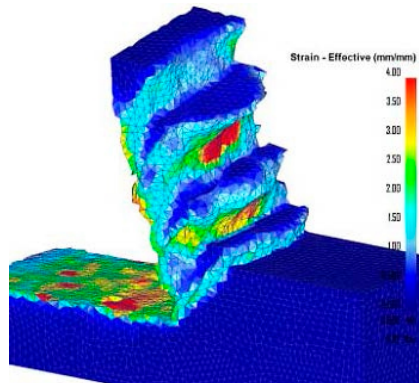
- casting processes
- sheet metal forming
- additive manufacturing
- welding

Conventional and new materials

- metals and alloys
- polymers
- nanocomposites

Modelling approaches

- finite element method
- micromechanical modelling
- atomistic modelling
- multiscale modelling



Workshop programme

29.01.2015 evening

Get together (details will be provided)

30.01.2015

8:00-8:45 **Registration**

8:45-9:00 **Opening**

Michal Basista (KMM-VIN)

9:00-9:30 **State-of-the-art in metallurgical process simulations**

Andreas Ludwig (Montan University Leoben, Austria)

9:30-10:00 **Complex sheet metal forming processes. Smart and advanced virtual solutions**

Fernando Rastellini (Quantech ATZ S.A., Barcelona Spain)

10:00-10:30 **Modelling and simulation of welding processes**

Norbert Enzinger (TU Graz, Austria)

10:30-11:00 **Coffee break**

11:00-11:30 **Heat treatment simulation of steel and Inconel alloys**

Werner Ecker (Materials Center Leoben, Austria)

11:30-12:00 **Quench induced stresses in thick AA7xxx alloys plates: neutron measurements, characterization of precipitation and modeling using Gleeble testings**

Jean-Marie Drezet (EPFL, Lausanne, Switzerland)

12:00-12:30 **Modelling and simulation of precipitation kinetics**

Piotr Warczok (TU Vienna, Austria)

12:30-13:30 **Lunch**

Workshop programme (cont.)

30.01.2015

13:30-14:00 **Numerical modelling of additive manufacturing processes**

Michele Chiumenti (Universitat Politècnica de Catalunya Barcelona, Spain)

14:00-14:30 **Hierarchical multiscale modelling by coupling the finite element method and molecular dynamics**

Manfred Ulz (TU Graz, Austria)

14:30-15:00 **Multiscale modelling of polymer-matrix nanocomposites**

Doros Theodorou (National TU of Athens, Greece)

15:00-15:30 **Coffee break**

15:30-16:00 **Modelling of the mechanical response of porous materials and shape memory alloys**

Nikolaos Michailidis (Aristotle University of Thessaloniki, Greece)

16:30-17:00 **A lab inside the computer: the unlimited possibilities of materials design at the atomic scale**

Gianaurelio Cuniberti (TU Dresden, Germany)

17:00-18:00 **KMM-VIN Open Forum, Poster Session and Aperitif**

18:00 **End of Workshop**

All participants are invited to present a poster to show and discuss their work on material modelling and process simulation.

If you plan to present a poster please send its title to the Workshop organizers (C. Poletti and J. Rojek) as soon as possible.



MM.VIN
Virtual Institute on Knowledge-based
Functional Materials AISBL

www.kmm-vin.eu

universities, R+D centres and companies
European wide access to

technology research

**Advanced
Multifunctional
Materials**

industrial
application

Branch Poland
Pawłowskiego 5 B
40-007 Warsaw, Poland
T: +48 22 6329 8130
F: +48 22 6329 8131