

## 18<sup>th</sup> annual ESAFORM

Conference on Material Forming

Graz - Austria, 15 - 17 April 2015

[www.esaform2015.at](http://www.esaform2015.at)



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Virtual Vehicle Research Center

### Welcome to ESAFORM 2015!

ESAFORM is a European association with the mission to stimulate applied and fundamental research in the field of material forming. It was founded in January 1997 with the aim to propagate interest for all types of materials and all topics connected to material forming.

The 18<sup>th</sup> annual ESAFORM Conference on Material Forming will be held for the first time in its history in Austria and will take place at Graz University of Technology. The conference aims to cover a multitude of disciplines related to material forming including metals, polymers, ceramics and composites as well as unconventional materials, as for example biomaterials. All traditional and innovative plastic forming processes are considered relevant. It is then expected that a variety of techniques and formulation, including theoretical analyses, experimental testing and numerical simulations, etc. will be covered and discussed. A good combination of fundamental approaches and applied science should be achieved.

We are very much looking forward to welcoming you in Graz at the ESAFORM Conference 2015, taking place on April 15 - 17!

For more information, please visit:

[www.esaform2015.at](http://www.esaform2015.at)

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### Scientific Contact

Please direct your questions regarding scientific matters to the attention of:



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### Conference Contact

Please direct your questions regarding organisation, sponsoring and exhibition to the attention of:



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### Welcome in Graz!

2003 European Cultural Capital, UNESCO World Heritage Site and an insider tip for connoisseurs – those who visit Graz love the Mediterranean flair, the world heritage of the picturesque historic quarter, spacious parks and architectural highlights.

Graz is an enjoyment capital – the regional Styrian specialties (with world-famous wines and dark pumpkin seed oil leading the way) are the ambassadors of this culinary identity.

The Mediterranean flair is omnipresent: in the charming pub gardens, the quaint farmer's markets, the narrow alleys, lively squares and in dreamy courtyards.

For further information see [www.graztourismus.at](http://www.graztourismus.at)



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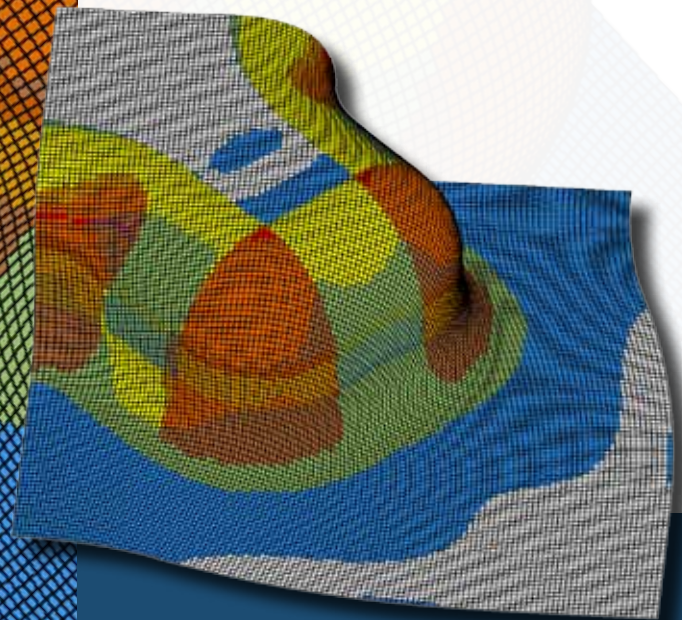
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# Announcement and Invitation





## Conference Format

The conference is structured into several mini-symposia, following the format of parallel sessions. Plenary lectures will be given by outstanding researchers from both scientific and industrial fields followed by oral presentations by the participants.

## Mini Symposia

- Formability of metallic material - Materials behavior and formability
- Composites forming processes
- Semi-solid processes
- Extrusion and drawing
- Incremental and sheet metal forming
- Inverse analysis optimization and stochastic
- Heat transfer modeling
- Structures, properties and processing of polymers
- Non-conventional processes
- Machining and cutting
- Forging and rolling
- Innovative joining by forming technologies
- New and advanced numerical strategies for material forming
- Multiscale & continuum constitutive modelling
- High & medium temperature sheet forming
- Light weight design and energy efficiency in metal forming
- Nano-structured materials and microforming
- Virtual development
- Smart production

## Paper Submission and Registration

Paper submission and registration have to be made through the conference website. You will find all further information there:

## Pre-Conference Workshop:

### „Advanced physical simulation for metals forming“

This two days course is planned from 13 - 14 April 2015. Topics will include Thermomechanical simulation of multipass processes, correlation with the flow evolution, microstructure evolution and geometrical changes with FEM.

The first day will be related to experiments to be carried out at the Gleeble. Factors to be taken into account before starting: geometry and material of the sample, texture of the material, heating/cooling rates, thermocouples. Then, experiments will be carried out: use of external heating, shut down during high strain rates, temperature measurement, control of heating PI, quenching, special solutions, strain and strain rate control.

On the second day, data obtained will be treated and interpreted. Flow modelling and FEM simulation will be carried out. Examples will be shown and discussed.

## Important Dates

Abstract submission:	15 September 2014
Notification of acceptance:	31 October 2014
Final paper submission:	1 December 2014
Notification of final paper acceptance:	16 January 2015
Camera ready final paper:	31 January 2015

## Sponsoring & Exhibition

You are also invited to be sponsor or exhibitor at the 18<sup>th</sup> ESAFORM 2015. We offer you the possibility to present your company and your complementary solutions to the participants at the accompanying exhibition within an attractive environment.



## Organization:



The congress is organised by

- Graz University of Technology
- Virtual Vehicle Research Center

## Venue:

Graz University of Technology  
Rechbauerstraße 12, 8010 Graz - Austria

## Conference Fees:

Early bird rate until 1<sup>st</sup> of February, 2015

- Full delegate fee: € 660
- Student delegate fee: € 550 (excl. conference dinner)

Registration fee after 1<sup>st</sup> of February, 2015

- Full delegate fee: € 770
- Student delegate fee: € 660 (excl. conference dinner)

## Information & Contact: