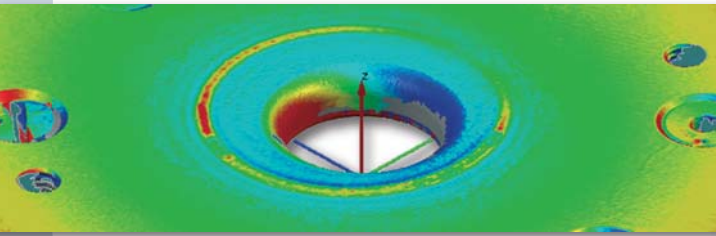


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Conference Fee

Speaker:	150.00 €
Poster / University:	350.00 €
Regular fee:	790.00 €
Exhibition booth / Sponsoring:	prices start at 1200.00 €

Contact

Collaborative Research Centre / Transregio 30

Process-integrated manufacturing of functionally graded structures

on the basis of thermo-mechanically coupled phenomena



Conference Secretary



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Keydates and Deadlines

Abstract submission deadline:	15 February 2012
Notification of acceptance:	15 March 2012
Full paper / poster submission:	30 April 2012
Notification of final acceptance:	29 June 2012
Final program announcement:	30 August 2012
Conference date:	29 – 30 October 2012

Announcement and Call for Papers

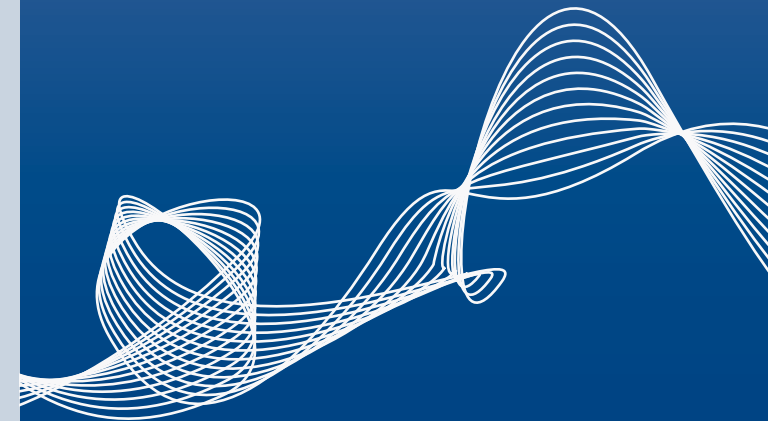
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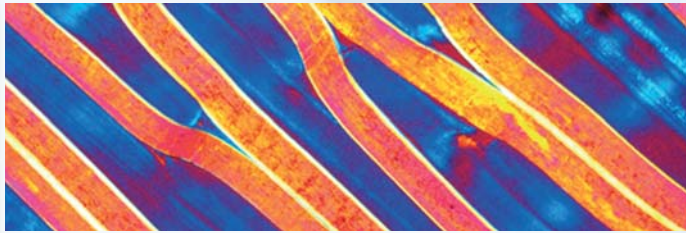
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1st International Conference on Thermo-Mechanically Graded Materials

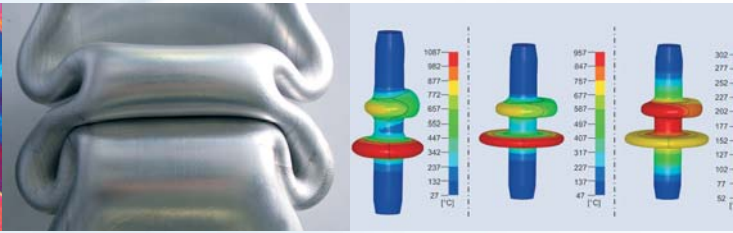
29 – 30 October 2012
Kassel, Germany



Scope



Conference Topics



Submission Instruction

Authors are invited to submit an extended abstract of no more than 400 words in English. Figures cannot be attached to the abstract. The abstract should be submitted by 15 February 2012 via email to

conference@transregio-30.com

The production of high-grade bulk goods will only have any prospect of success if there are high-level innovations which are intended to especially secure the quality and sustainability of products. The aspect of preserving resources is taking on an increasingly important role here. With a new view on thermo-mechanical processing, the manufacturing of functionally graded materials constitutes a key to fulfill actual and future demands. At the 1st International Conference on Thermo-Mechanically Graded Materials, we would like to respond to this complex challenge with sustainable solution approaches.

In the context of this new event, fundamental principles will be presented for innovative hybrid **thermo-mechanical production processes in metal forming and plastics moulding**. These innovative methods need to lead to the single-process-generation of products which possess customised properties and simultaneously have a complex geometry. This will shorten the process chain and ensure that more efficient use is made of the energy and material inputs.

The following topics will be covered, with the focus on thermo-mechanical grading:

Materials

- engineering plastics
- high-performance steel
- innovative light-weight metals

Modelling and Simulation

- microstructural modelling
- thermomechanics of materials
- prediction of component properties

Product-Process Interaction

- modelling of process chains
- exploration environment
- process monitoring

Property Characterization of Functionally Graded Materials

- multiscale material characterization
- advances in testing procedures
- methods for result evaluation

We are pleased to announce that there will also be the possibility to submit posters. While full papers must cover 4–6 pages, poster summaries must consist of 2 pages, only. Poster papers can present preliminary studies, prototype applications, or initial implementations. Poster papers are peer-reviewed in the same way as long papers and are published in the same proceedings as the long papers. When submitting an abstract, please mark whether you wish to submit for a paper or a poster. Authors of accepted abstracts are invited to submit a paper or poster summary which is reviewed. When preparing your submission, please use the Microsoft Word® template provided on the homepage. After the final acceptance, authors should integrate the reviewers' comments and re-submit the final version of the paper.

Accepted papers / posters will be printed in the proceedings on the condition that at least one author has to register for the conference. The conference proceedings will be published in printed form with an ISBN book number.