

Location

Zakopane is situated in southern Poland, about 100 km to the south of Kraków, close to the border with Slovakia. It lies in a valley at the foot of the Tatras, the highest mountains in Poland. Zakopane is a place of active recreation. First of all, in the Tatras, mountain trip lovers may satisfy their dreams on a number of trails ranging from the easiest to the most difficult ones, requiring experience and caution. Beginners are recommended to take a walk through the valleys, to go to the Morskie Oko Lake or Hala Gąsienicowa. The vicinity of Hala Gąsienicowa features peaks whose conquest will satisfy the most ambitious tourists. The most difficult tourist trail in the Tatra Mountains is Orla Perć, a route full of abysses and rocks with chains and staples, leading from Zawrat to the Krzyżne Pass. From the Morskie Oko Lake it is possible to climb the highest peak in Poland, Rysy, 2499 metres above sea level.

What is more, Zakopane is called "winter capital of Poland". Mountainous climate ensures excellent snow conditions which make skiing possible from the end of November to the beginning of May. Tourists have at their disposal ski-lifts and well prepared ski routes with varying difficulty levels; numerous ski instructors offer their experience and assistance.

For people, who want to see more in Zakopane, we recommend taking a stroll through Krupówki Street or seeing local monuments and historic places (e.g. cemetery at Pęksowy Brzyzek or the neighbouring Stary Kościółek - Old Church).

Authentic highlander folklore is a magnet attracting lovers of culture and folk art from around the world. In the evenings, regional inns are filled with highlander bands in beautiful folk attires. The music they play makes it difficult to sit behind a table – your legs just want to dance! You should also try regional delicacies: moskole (potato pancakes), oscypek with żurawina (ewe's milk cheese with cranberry) and kwaśnica (sauerkraut soup), which are served in numerous inns and restaurants dispersed all over the city.

In a word: it is worth coming to Zakopane! You are heartily welcome!

Call for papers

Prospective Authors are invited to register and to submit, through the Internet, an abstract of about 500 words in English. Abstracts should outline the main features, results and conclusions of the work. The Selection Committee will review the abstracts and all Authors will be notified about the decision. Final manuscripts have to be prepared in English. The papers will be reviewed by the members of the International Scientific Committee and, if accepted, published as a special issue of the Computer Methods in Materials Science Journal, which will be printed before the conference.

Registration

The registration fee for delegates and authors is 1750 PLN (1000 PLN for students) if paid before November 30, 2012 and 2000 PLN (1200 PLN for students) if paid after that date.

The fee includes Conference Proceedings, reception, lunches, coffee breaks, banquet and social program.

Important Dates

- ◆ Abstract submission June 15, 2012
- ◆ Notification of abstract acceptance July 15, 2012
- ◆ Submitting the full paper September 20, 2012
- ◆ Notification of paper acceptance November 15, 2012
- ◆ Deadline for early payment November 30, 2012

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Conference Site

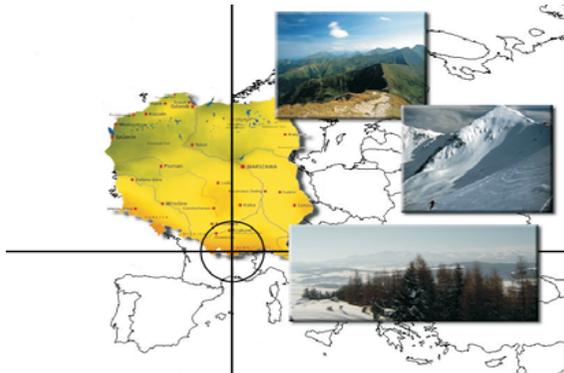
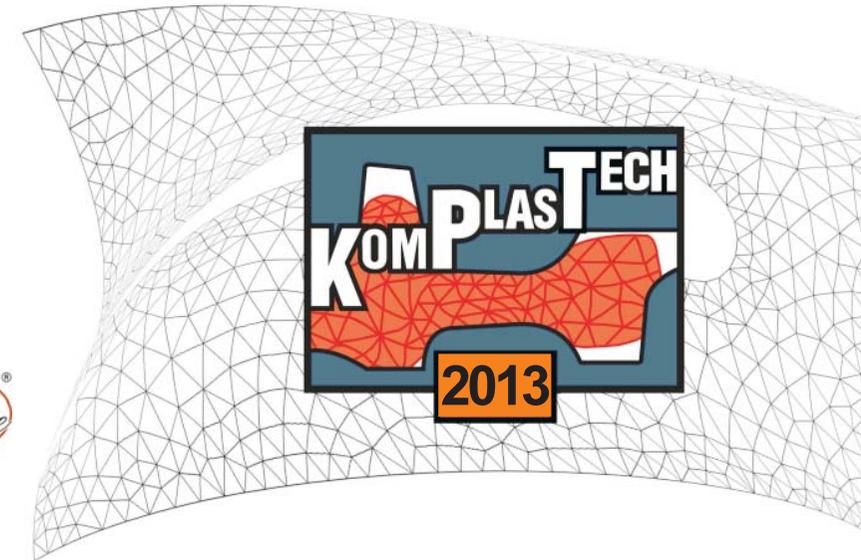
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KOMPLASTECH 2013

XX. Conference on Computer Methods in Materials Technology

January 13-16, 2013
Zakopane, Poland



Objectives

The first national conference in the series on Computer Methods in Metals Technology (KomPlasTech) was held in 1993 in Krakow, Poland. 19 conferences in this series have been organized since then. Since the beginning of the 21st century the intention of the organizers was to extend the scope to all materials and to make the conference international by inviting the scientists from all over the world. Thus, several papers dealing with non-metallic materials were submitted and the name of the Conference was changed to Computer Methods in Materials Technology. The first international KomPlasTech Conference was organized in Zakopane in 2007.

There is an increasing necessity to solve complex problems in numerical modelling of materials processing. Several new techniques dedicated to description of materials behaviour have been developed. Application of the multiscale analysis to joint modelling of phenomena occurring in different scales (macro, mezo, micro and nano) became effective. Thus, the objectives of the KomPlasTech Conference are to get together scientists and researchers working in the fields of computer methods and materials science and to enable exchange of information between those two groups.

Conference Topics

- ◆ Application of new computational techniques to modelling and control
- ◆ Numerical simulations of casting, semi-solid forming, thixoforming, metal forming and heat treatment
- ◆ Numerical simulations of heat transfer, microstructure evolution, phase transformations, diffusion and prediction of products properties
- ◆ Rheological models, application of the inverse analysis to identification of models parameters
- ◆ Multiscale material models, based on cellular automata, molecular dynamic, Monte Carlo, etc.
- ◆ Boundary conditions in modelling of processes and phenomena in materials engineering
- ◆ Computer aided design of tools and technology in materials processing, new energy-saving and environment-protecting technologies
- ◆ Applications of artificial intelligence and optimization techniques in materials science
- ◆ Databases and knowledge bases in materials engineering
- ◆ Digital materials and virtual processes
- ◆ Development of computer systems for metallurgical and materials industry

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Franciszek GROSMAN, Silesian University of Techn., Poland

Mini-Symposiums

Computer aspects of modelling: mesh generation and adaptation, programming paradigms, computing efficiency and error analysis
Organizer: Krzysztof BANAS
Akademia Górniczo-Hutnicza, Poland
Multiscale modelling and homogenization methods
Organizers: Witold CECOT
Cracow University of Technology, Poland
Łukasz MADEJ
Akademia Górniczo-Hutnicza, Poland
Genetic algorithms in materials design and processing
Organizer: Nirupam CHAKRABORTI
Indian Institute of Technology, India

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Faculty of Metals Engineering and Industrial Computer Science
Akademia Górniczo-Hutnicza



Department Materials Technology
Faculty of Materials Science and Metallurgy
Silesian University of Technology

Supporting organisations



European Community on Computational Methods in Applied Sciences
ECCOMAS



Metal Forming Section
Metallurgy Committee
Polish Academy of Sciences



Centre for Computer Technology
in Metallurgy and Materials Science CEKOMAT



Polish Association for Computational Mechanics

Plenary Lectures

Data-driven multi-objective evolutionary approaches in materials design
Nirupam CHAKRABORTI, Indian Institute of Technology, India
Anisotropic adaptive meshing for computational material modeling
Thierry COUPEZ, CEMEF-MINES Paristech, France
Advancement in computational micromechanics and experimentation for studying ductile damage in free cutting steel during hot rolling
Didier FARRUGIA, Tata Steel Research, Development & Technology, UK
Hierarchical computational methods for scale bridging in composite materials
Stefan LUDING, University of Twente, The Netherlands
Micromechanical modelling of materials with irregularly shaped heterogeneities
Igor TSUKROV, University of New Hampshire, USA