ECCOMAS European Community on Computational Methods in Applied Sciences

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 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 warmly welcome!



Call for papers

Prospective Authors are invited to register and to submit, through the Internet, a two-page extended abstract in English. Abstracts should outline the main features, results and conclusions of the work. All abstracts will be reviewed by the members of the Scientific Committee and Authors will be notified about the decision. Authors of abstracts will be invited to submit a full manuscript, which if accepted according to the journal procedure, will be published in the Journal of Computer Methods in Materials Science.

Registration

The registration fee for delegates and authors is 2400 PLN (1700 PLN for students) if paid before December 14, 2018 a n d 2700 PLN (2000 PLN for students) if paid after that date. For Eccomas members 10% discount.

The fee includes conference proceedings, reception, lunches, coffee breaks, banquet and social program.

Important Dates

- Extended abstract submission October 12, 2018
- Notification of abstract acceptance October 26, 2018
- Submitting the full paper November 12, 2018
- Notification of paper acceptance December 7, 2018
- Deadline for early payment
 December 14, 2018

Correspondence

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Conference Site

Aries Hotel & SPA ul. Mariusza Zaruskiego 5 34-500 Zakopane, Poland phone: +48 185 44 44 44 e-mail: <u>recepcja@hotelaries.pl</u> website: <u>www.hotelaries.pl/</u>



Thematic Conference

KOMPLASTECH 2019

XXVI. Conference on Computer Methods in Materials Technology

January 13-16, 2019 Zakopane, Poland



EA

www.komplastech.agh.edu.pl

2019

Objectives

The first national conference in the series on Computer Methods in Metals Technology (KomPlasTech) was held in 1993 in Kraków, Poland. At 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 nonmetalic 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 in researchers working in the fields of computer methods in materials science and to enable exchange of knowledge and exerience.

Conference Topics

- New computational techniques for modelling in 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 dynamics, 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
- Artificial intelligence and optimization techniques in materials science
- Databases and knowledge bases in materials engineering
- Digital materials and virtual processes
- ٠ Development of computer systems for metallurgical and materials industries.

Committees

Scientific Committee

Markus BAMBACH, Brandenburg University of Technology, Cottbus, Germany Thierry BARRIÈRE, FEMTO-ST Institute, Besancon, France Marc BERNACKI, CEMEF - MINES ParisTech, Sophia-Antipolis, France Wolfgang BLECK, RWTH Aachen University, Germany Rvszard BUCZKOWSKI, Maritime University of Szczecin, Poland Tadeusz BURCZYNSKI, IPPT PAN, Warszawa, Poland Witold CECOT, Cracow University of Technology, Poland Jose CESAR de SA, University of Porto, Portugal Francesco CHINESTA. Ecole Centrale of Nantes. France Zbigniew GRONOSTAJSKI, Wroclaw University of Technology, Poland Anne-Marie HABRAKEN, University of Liege, Belgium Rudolf KAWALLA, TU-Bergakademie Freiberg, Germany Michał KLEIBER, IPPT PAN, Warszawa, Poland Ernst KOZESCHNIK, TU Wien, Austria Jan KUSIAK, AGH University of Science and Technology, Kraków, Poland Wacław KUŚ, Silesian University of Technology, Gliwice, Poland Jari LARKIOLA, University of Oulu, Finland Maciej PASZYŃSKI, AGH University of Science and Technology, Kraków, Poland Pavel PETROV, Moscow State Technical University, Russia Ulrich PRAHL, TU-Bergakademie Freiberg, Germany Stefanie REESE, RWTH Aachen University, Germany Jerzy ROJEK, IPPT PAN, Warszawa, Poland Norbert SCZYGIOL, Czestochowa University of Technology, Poland Jan SLADEK, Slovak Academy of Sciences, Bratislava, Slovakia Christof SOMMITSCH, Graz University of Technology, Austria Vasisht VENKATESH, Pratt & Whitney, East Hartford, USA Bartłomiej WIERZBA, Rzeszow University of Technology, Poland Bradley WYNNE, The University of Sheffield, United Kingdom

Conference Chairs

Danuta SZELIGA. Łukasz RAUCH AGH University of Science and Technology, Kraków, Poland

Steering Committee

Maciei PIETRZYK AGH University of Science and Technology, Kraków, Poland Franciszek GROSMAN Silesian University of Technology, Katowice, Poland

Plenary Lectures

Multiscale Computation of Dual Phase Steels using Statistically Similar RVEs Dominik BRANDS, Lisa SCHEUNEMANN, Jörg SCHRÖDER The University of Duisburg-Essen, Germany

DFT Computation of Materials Properties with WIEN2k Zbigniew KAKOL, Waldemar TOKARZ AGH University of Science and Technology, Kraków, Poland

Modeling metamorphic rocks and complex fluids using phase fields VM CALO, SP CLAVIJO, LRF ESPATH, E FRIED, A PUTNIS, A SARMIENTO, P. VIGNAL Curtin University, Perth, Australia

Organizers

Local organizer



Partners

AGH isim

Department of Applied Computer Science and Modelling Faculty of Metals Engineering and Industrial

Computer Science AGH University of Science and Technology



Institute of Metals Technology Faculty of Materials Science and Metallurgy Silesian University of Technology

Supporting organisations



European Community on Computational COMAS 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 **Cm** Mechanics

Minisymposia

Higher order finite elements methods Maciei PASZYŃSKI AGH University of Science and Technology, Kraków, Poland

Evolutionary Algorithms and Artificial Intelligence in Metallurgy and Materials Science - in honour of Professor Nirupam Chakraborti

Shubhabrata DATTA SRM Institute of Science and Technology, Chennai, India

Danuta SZELIGA

AGH University of Science and Technology, Kraków, Poland

Distribution functions for the description of heterogeneous metallic microstructures

Maciej PIETRZYK AGH University of Science and Technology, Kraków, Poland

Wolfgang BLECK,

RWTH Aachen University, Germany