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 Tatra Mountains, the highest mountains in Poland (Mount Rysy 2499 m). Zakopane is located at 48°18’ latitude and 19°57’ longitude. The centre lies at about 840 m above sea level, but some parts are even higher up to 1000 m above sea level on the slopes of Gubałówka - a hill that surrounds it from the North. Zakopane residents know that the natural beauty of the Tatra Mountains as well as their long and colourful tradition are the main attraction of their small town. Zakopane has its unique mountain climate with air, water and soil not affected by the modern industrial development and pollution. Huge part of the town is heated by gas and clean geothermal energy, which comes from hot water found 2 km underground. Gas, oil and hot geothermal water will soon completely replace the traditional coal heaters and the air over Zakopane will become crystal clear.

The appealing small mountain town of Zakopane has been a frequent resort area since the end of the 19th century, when a physician from Warsaw Tytus Chałubiński declared that the healthy Tatra Mountains air could cure tuberculosis, among the other ailments. Today it is one of Poland’s most-visited tourist spots with some two million visitors a year, in a town of just 30,000 inhabitants. Due to a number of ski trails, Zakopane is also called “winter capital of Poland”. World cup in ski jumping is organized here every year in January. As a result, the town itself has become fairly cosmopolitan. Nevertheless the old town has not quite vanished, and you will still find plenty of traditional mountain chalets with their gables and steeply sloping roofs. It is probably tourism that is keeping folk traditions and costumes alive here, but it means that you enjoy splendid sleigh rides and bonfire evenings where highlanders in white woollen trousers perform the dramatic “Zbójnicki” Robbers Dance.

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 Journal Computer Methods in Materials Science, which will be printed before the conference.

Registration
The registration fee for delegates and authors is 1200 PLN (800 PLN for students) if paid before December 10, 2010 and 1400 PLN (900 PLN for students) if paid after that date.

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

Account owner:
Fundacja Zespołu Piesni i Tanca KRAKUS,
ul. Reymonta 15; 30-059 Krakow, Poland
Bank:
Krakowski Bank Spółdzielczy
ul. Rynek Kleparski 8; 31-150 Krakow, Poland
Account:
PL31 8591 0007 0021 0046 8998 0002
with note: KomPlasTech 2011. Participant’s name
SWIFT/BIC:
GOPZPLPW via Bank Gospodarki Zynosciowej

Important Dates
- Abstract submission: June 30, 2010
- Notification of abstract acceptance: July 31, 2010
- Submitting the full paper: September 30, 2010
- Notification of paper acceptance: December 1, 2010
- Deadline for early payment: December 10, 2010

Correspondence
Danuta SZELIGA,
Department of Applied Computer Science and Modelling, AGH
al. Mickiewicza 30; 30-059 Krakow, Poland
phone +48 12 617 41 92, fax +48 12 617 29 21
e-mail: szeliga@agh.edu.pl

Conference Site
Hotel CROCUS
ul. Chałubińskiego 40; 34-500 Zakopane, Poland
phone +48 18 20 26 500, fax +48 18 20 26 502
e-mail: recepcja@crocus.pl
www.hotelicrocus.pl www.hotelicrocus.eu
Objectives

The first national conference in the series on Computer Methods in Metals Technology (KomPlasTech) was held in 1993 in Krakow, Poland. 17 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, meso, 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, heat transfer, metal forming, heat treatment, phase transformations, diffusion, etc.
- Modelling of semi-solid forming, thixoforming
- Modelling of microstructure evolution and prediction of properties of products
- 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 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

Scientific Committee

Olivier ALLIX, L.M.T. Cachan, France
Dorel BANABIC, University of Cluj-Napoca, Romania
Bruno BUCHMAYR, University of Leoben, Austria
Tadeusz BURCZYŃSKI, Silesian University of Techn., Poland
Jose CESAR de SA, University of Porto, Portugal
Yvan CHASTEL, CEMEF - MINES ParisTech, France
Jean-Loup CHENOT, CEMEF - MINES ParisTech, France
Krzysztof JÓZIWIK, Technical University of Łódź, Poland
Rudolf KAWALLA, TU-Bergakademie Freiberg, Germany
Michal KLEIBER, IPPT PAN, Warszawa, Poland
Andrzej KOCANDA, Warsaw University of Technology, Poland
Reiner KOPP, TU-RWTH Aachen, Germany
Antti KORHONEN, Helsinki University of Technology, Finland
Michal KRZYZANOWSKIS, The University of Sheffield, UK
Jan KUSIACK, Akademia Górniczo-Hutnicza, Poland
Wojciech MISIOLEK, Lehigh University, Bethlehem, USA
Edward NAWARECKI, Akademia Górniczo-Hutnicza, Poland
Pavel PETROV, Moscow State Technical University, Russia
Jerzy ROJEK, IPPT PAN, Warszawa, Poland
Ivo SCHINDLER, VSB, Ostrava, Czech Republic
Norbert SCZYGIOL, Częstochowa University of Techn., Poland
Jan SLADEK, Slovak Academy of Sciences, Bratislava, Slovakia
Jurica SORIC, University of Zagreb, Croatia
Christoph SOMMITSCHE, Graz University of Techn., Austria

Organizing Committee

Chair: Danuta SZELIGA
Łukasz RAUCH, Barbara BARABASZ, Łukasz SZTANGRET
Akademia Górniczo-Hutnicza, Poland

Steering Committee

Maciej PIETRZYSK, Akademia Górniczo-Hutnicza, Poland
Franciszek GROSMAN, Silesian University of Techn., Poland

Mini-Symposiums

The following Mini-symposia will be organized during the 18th KomPlasTech Conference:
- Methods of modelling of polymer materials processing
  Organizer: Krzysztof PIELICHOWSKI
  Politechnika Krakowska, Kraków, Poland
- Modelling of granular, non-crystalline and composite materials
  Organizer: Jerzy ROJEK
  IPPT PAN, Warszawa, Poland

Supporting organisations

- European Community on Computational Methods in Applied Sciences ECCOMAS
- Metal Forming Section
- Polish Academy of Sciences
- Centre for Computer Technology in Metallurgy and Materials Science CEKOMAT
- Polish Association for Computational Mechanics

Organizers

- Department of Applied Computer Science and Modelling
  Faculty of Metals Engineering and Industrial Computer Science
  Akademia Górniczo-Hutnicza
- Department Materials Technology
  Faculty of Materials Science and Metallurgy
  Silesian University of Technology

Plenary Lectures

- Numerical modelling of fracture
  Jose CESAR de SA, University of Porto, Portugal
- A combined effect of texture, grain shape and grain size on plastic anisotropy
  Laurent DELANNAY, Université Catholique de Louvain, Belgium
- Computer modelling and analysis of effective properties of composites
  Piotr FEDELŃSKI, Radoslaw GÓRSKI, Grzegorz DZIATKIEWICZ, Jacek PTASZNY, Silesian University of Technology, Poland
- Fast simulation of hot sheet rolling for optimization and control - industrial requirements and a simple approach
  Felix HAGEMANN, Jan OREND, Gunnar T. LINKE, Thomas EVERTZ
- Fast simulation of hot sheet rolling for optimization and control - industrial requirements and a simple approach
  Felix HAGEMANN, Jan OREND, Gunnar T. LINKE, Thomas EVERTZ
- Fast simulation of hot sheet rolling for optimization and control - industrial requirements and a simple approach
  Felix HAGEMANN, Jan OREND, Gunnar T. LINKE, Thomas EVERTZ
- Fast simulation of hot sheet rolling for optimization and control - industrial requirements and a simple approach
  Felix HAGEMANN, Jan OREND, Gunnar T. LINKE, Thomas EVERTZ
- Fast simulation of hot sheet rolling for optimization and control - industrial requirements and a simple approach
  Felix HAGEMANN, Jan OREND, Gunnar T. LINKE, Thomas EVERTZ