International conference
Deformation and Fracture in Structural PM Materials

DF PM 2005

The international conference Deformation and Fracture in Structural PM Materials - DF PM 2005 was held in the hotel Academia Congress Centre in Stará Lesná on September 27 – October 1, 2005. The main conference organizers were the Institute of Materials Research of the Slovak Academy of Sciences (IMR SAS) in Košice and Vienna University of Technology, Institute for Chemical Technologies and Analytics. The conference took place under the auspices of the European Powder Metallurgy Association (EPMA). The main conference sponsor was Högana AB, Höganäs, Sweden, producer of metallic powders. Also MIBA Sinter Slovakia, s. r. o., Dolný Kubín contributed financially contributed. The DF PM 2005 conference was organized in the year when the Institute of Materials Research of the Slovak Academy of Sciences commemorates the 50th anniversary of its establishment. It was also the year in which a lot of PM conferences were organized. It was, in particular, the European congress “Euro PM 2005”, which took place immediately after this conference, on October 2-5, 2005 in Prague.

The conference was officially opened by Dr. I. Túnyi, a member of the SAS Presidium. The working programme of conference was divided into six sessions dealing with ferrous PM materials, non-ferrous PM materials, gradient and other new materials. The contributions were oriented to the main conference topics: Formation and Microstructure Development of Sintered Materials, Nanomaterials in PM Area, Mechanical Properties, Deformation and Failure, Relation between Microstructure, Properties and Fracture Mechanisms, Gradient and Multilayered Materials (Coatings), Application of PM Materials working under Complex Stress and Exploitation Conditions.
The oral presentations in individual sections were chaired by: A. Bergmark, G. F. Bocchini, M. Campos, H. Danninger, J. Ďurišin, S. A. Firstov, M. Actis Grande, P. Hvizdoš, P. Jurčí, H. Kuroki, A. Molinari, J. R. Moon, L. Parilák, T. Pieczonka, M. Rosso, A. Simchi, J. M. Torralba, D. Vojtěch, A. S. Wronski. Overall 33 lectures and 20 posters were presented. The official language of the conference was English.

75 specialists from 16 countries (Austria, Belarus, Bulgaria, Czech Republic, France, Great Britain, Hungary, Iran, Italy, Japan, Poland, Russia, Spain, Sweden, Ukraine and Slovak Republic) took part on the conference.

The social programme (welcome cocktail, conference dinner, a lecture of the Astronomical Institute of SAS, a visit of Belianska Cave and Pieniny, rafting on Dunajec River) enabled to establish new working contacts and contributed to the success of the conference. The participants highly appreciated the professional level and organization of the conference.

The lectures and posters were issued in the Proceedings: *Deformation and Fracture in Structural PM Materials - DF PM 2005* (edited by L. Parilák and H. Danninger) in English as a book and CD-ROM. It involves 38 lectures and 14 posters (totally 363 pages). The participants obtained the proceedings in both versions upon registration.
The following two relevant meetings took place in connection with the DF PM 2005 conference in Stará Lesná:

- The Meeting of the members of the Advisory Board (Editorial Board and International Advisory Board) and of the Editorial Office for the journal *Powder Metallurgy Progress*, held on September 28, 2005; 17 members from 8 countries took part on this meeting.

- The bi-annual meeting of the international project Höganäs Chair, held on September 30, 2005. Project partners: Höganäs AB, Höganäs, Sweden, Vienna University of Technology, Institute for Chemical Technologies and Analytics, Vienna, Austria, University of Trento, Department of Materials Engineering and Industrial Technologies, Trento, Italy, Department of Materials Science, University Carlos III. of Madrid, Madrid-Leganés, Spain and Institute of Materials Research of SAS, Košice, Slovak Republic.

I am convinced that the conference achieved its aims. I would like to express the wish that the gained scientific knowledge and contacts will be utilized pro bono of the research institutions as well as PM industry. In conclusion, I would like to express my thanks to the main conference chairmen Prof. Danninger and Prof. Parilák, the main conference sponsor Höganäs AB, the members of the International Advisory Board, and the members of the Programme Committee and Organizing Committee for their support and contribution to the success of the Conference.

Dr. Marcela Selecká, PhD.
Chairperson of the Organizing Committee
For Sale

Deformation and Fracture in Structural PM Materials
DF PM 2005

Proceedings of the International Conference held in the Congress Center Academia,
Stará Lesná, Slovak Republic, September 27-30, 2005
Edited by L. Parilák and H. Danninger

The proceedings contain contributions dealing with ferrous, non-ferrous, gradient and new
PM materials. The range of materials covered sintered carbon steels, steels alloyed with
crchromium and manganese, tool steels, tungsten, ceramics, composites. The papers are
focused on mechanical and physical properties and on deformation and fracture behaviour
of the above mentioned materials, as well as on application of PM materials.

IMR SAS Košice , 363 pages, hardcover, 2005
CD – DF PM 2005
ISBN 80-968543-4-8

Contact address:
DF PM 2005
Institute of Materials Research of SAS
Watsonova 47
043 53 Košice
Slovak Republic
Email: dfpm2005@imrnov.saske.sk
Tel: +421-55-7922 402; Fax: +421-55-7922408