

## International Conference

### FRACTOGRAPHY OF ADVANCED CERAMICS, FAC 2004

The Institute of Materials Research of the Slovak Academy of Sciences, Department of Structural Ceramics organized the 2<sup>nd</sup> international conference "Fractography of Advanced Ceramics" in the ACADEMIA Congres Center, Stara Lesna, on October 3-6, 2004.

The chairmen were Prof. Ján Dusza from IMR SAS, Prof. Robert Danzer from Montanuniversität Leoben, and Dr. Roger Morrell from National Physical Laboratory, Teddington, the secretary was Ing. Emőke Rudnayová. The conference attended 84 specialists from 23 countries, including USA, Japan, and South Africa.

Over the last quarter of a century, fractography became increasingly important in characterisation and understanding of degradation processes in advanced ceramics. The aim of the conference was to contribute to the improvement of mechanical properties, reliability, and lifetime prediction methods of structural and functional ceramics by means of focused discussions and exchange of the current status of knowledge in damage mechanisms and fracture processes in these materials.

The program of the conference included eight invited lectures, 27 oral presentations and 37 poster contributions. The contributions were related to fracture and fractography of structural and electrotechnical ceramics, on the damage processes, fracture of fibre strengthened, porous, and layered composites, nanoceramics and nanocomposites, on surface effects as indentation damage and surface chipping, relationships between defect, microstructure, and fracture toughness of monolithic ceramics and ceramic composites as well as nanoceramics. Each contribution was followed by an active discussion.

The conference had a very high scientific as well as social level and confirmed the need to organize such a type of conference in Europe. The next conference on this subject is planned to be held in 2008.

The following meetings were held during the conference: 5 RP council on Structural Integrity of Ceramic Multilayers and Coatings – SICMAC and the Committee of the European Structure Integrity Society - ESIS, TC6 Ceramics.

The contributions presented during the conference will be published in the Key Engineering Materials, editor: Trans Tech Publications Ltd., Zürich, Switzerland. The Proceedings can be ordered in writing on the address: Institute of Materials Research of the SAS, FAC2004, Watsonova 47, 043 53 Košice, or by E-mail: rudnay@saske.sk.



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