30th International Conference of the Slovak Society of Chemical Engineering, 26—30 May 2003, Tatranské Matliare

The traditional annual conference of the Slovak Society of Chemical Engineering was held for another consecutive time in the premises of Hotel Hutník in Tatranské Matliare in the beautiful environment of eastern part of the High Tatras. The conference was attended by about 250 participants from Slovakia, Czech Republic, Poland, Hungary, the United Kingdom, Belgium, Spain, Portugal, Serbia and Montenegro, Croatia, Macedonia, Romania, Canada, the United States of America, the Republic of South Africa, and Thailand. The active participants presented 8 plenary lectures, 64 lectures, and 124 posters in 13 sessions.

The introductory plenary lecture was devoted to the 50th anniversary of the Department of Chemical Machines and Equipment of the Faculty of Mechanical Engineering of the Slovak University of Technology. All other plenary lectures were scientific and were presented by the prominent participants of the conference. Professor David Bogle from the University College London presented the lecture entitled "Analyzing the controllability of nonlinear process systems". He documented recent approaches to the analysis and design of a range of process systems (distillation, fermentation, simple reactions and separations) for assessing a good dynamic performance. The improved performance and faster development of new processes was also a subject of the lecture presented by Professor Guy Marin from the Ghent University entitled "Steam cracking: from molecule to furnace". The importance of combination of accurate kinetic description of the reaction chemistry and carefully chosen reactor models was presented at the example of thermal cracking of ethane.

The results of a large European project that involved several industrial partners were presented in a plenary lecture named "Intelligent column internals for reactive separations". Dr. Andrzej Kołodziej from the Institute of Chemical Engineering of the Polish Academy of Sciences in Gliwice presented a novel approach in this lecture to the design of catalytic column internals where the key idea is to enable process optimization based on the development of new, process-specific, tailor-made column internals that would be subsequently produced by the manufacturer. Professor Juan R. González-Velasco from the University of the Basque Country in Bilbao presented a review on the catalytic technology for automative exhaust emission control in his lecture entitled "Automobile exhaust gases control: actual and future trends".

"The dynamic interfacial tension" was the title of the lecture read by the Emeritus Professor Vladimir Hornof from the University of Ottawa. It treated the problem of dynamic and spatial changes of interfacial tension and their effect on system behaviour with the reference to the recent research in oil recovery. Two final plenary lectures were from the area of biotechnology. Professor Dušan Bakoš from the Slovak University of Technology presented the lecture "Bioreactors and bioprocessing for tissue engineering". He explained his ideas how the bioreactor design should contribute to the improved structure and function of engineered tissues. "Biocatalysis as a method for green processing" was the title of the lecture of Professor Durda Vasic-Racki from the University of Zagreb. She spoke about recent developments in the use of biocatalysts in development of more environmentally compatible production processes.

Professor *Hornof* from the University of Ottawa also gave an introductory lecture to a very successful evening round table session named "Chemical engineering for every day". The participants of the discussion tried to give their ideas how the chemical engineers should use their knowledge, expertise, and technical insight for a more effective communication with the society so that "chemical engineering would not be one of the world's least understood professions". Another special event was the TBA/MTBE Remediation Seminar organized and moderated by Dr. *Richard E. Woodward* from Sierra Environmental Services Inc. in Houston, Texas. It was focused on the solving of environmental problems caused by the important fuel additive, methyl-tert-butyl ether (MTBE) and by the intermediate of its biodegradation, tert-butyl alcohol (TBA).

The regular lectures were held in two parallel sessions and during the three and half days the following topics of the sessions could be heard: Ecology, Membrane Processes, Heat Transfer, Gas-Liquid-Solid Reactors, Separation Processes, Industrial Equipment and Processes, Heat and Mass Transfer, Bioprocess Engineering, Reaction Engineering, and Safety Engineering. The same topics were divided into three evening poster sessions.

The abstracts of conference contributions were published in the printed form and the submitted full texts were recorded on CD-ROMs. The loans are available through the library of the Faculty of the Chemical and Food Technology (*Proceedings of the 30th International Conference of the Slovak Society of Chemical Engineering*, Tatranské Matliare, May 26—30, 2003 (Markoš, J. and Štefuca, V., Editors), Slovak University of Technology, Bratislava, 2003, ISBN 1 80-227-1889-0).

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