

Preface

International Conference on Chemical Reactors has been held every 2 years since its foundation in the 1960s. The XVII International Conference on Chemical Reactors (CHEMREACTOR-17) took place on 15–19 May 2006 in Athens, Greece. Post-symposium “Catalytic Processing of Renewable Sources: Fuel, Energy, Chemicals” followed the conference and took place in Crete. The conference and post-symposium were devoted to the fundamental aspects and practical application of the catalytic processes and chemical reactors, as well as to the development of the novel modern technologies.

The conference and post-symposium brought together about 250 researchers from 41 countries all over the world. Boreskov Institute of Catalysis SB RAS, European Federation on Chemical Technologies, Ministry of Education and Science of the Russian Federation, General Secretariat for Research and Technology of the Ministry of Development of Greece, Russian Center of International Scientific and Cultural Cooperation under RF Government were the main organizers of the conference.

Scientific program of the conference included eight plenary lectures:

Prof. Gilbert Froment

Texas A&M University, USA

Fundamental kinetic modeling for reactor design and simulation

Prof. Bair Balzhinimaev

Boreskov Institute of Catalysis SB RAS, Russia

Woven fiber glass materials as a new generation of structured catalysts

Prof. Dmitry Murzin

Åbo Akademi University, Turku, Finland

Is it worth doing kinetic modelling in asymmetric heterogeneous catalysis of fine chemicals?

Prof. Jiří Hanika, V. Jiricny, J. Kolena, J. Lederer, V. Stanek, V. Tukac

Institute of Chemical Process Fundamentals, Czech Academy of Sciences, Czech Republic

Trickle bed reactor operation under forced liquid feed rate modulation

Prof. Constantinos G. Vayenas

University of Patras, Greece

Monolithic electropromoted reactors: from fundamentals to practical devices

Prof. Vladimir Sobyenin, Prof. Valerii Kirillov

Boreskov Institute of Catalysis SB RAS, Russia

Hydrogen production for fuel cells

Prof. Angeliki Lemonidou

Aristotle University of Thessaloniki, Greece

Alternative catalytic processes for light olefins production: from lab to practice

Prof. Jean-Claude Charpentier

CNRS, Paris, France

In the frame of globalisation and sustainability, some tracks for the future of chemical and catalytic process engineering

Two plenary lectures were presented at the post-symposium:

Prof. Boris Kuznetsov

Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia

Present trends in catalytic processing of renewable plant biomass into valuable products

Grassi G., Dr. Norbert Vasen*, Conti L. , S. Mascia****

European Biomass Association (EUBIA), Brussels, Belgium

**ETA-Renewable Energies, Florence, Italy*

***University of Sassari, Sassari, Italy*

Low cost production of bio-hydrogen from agri-pellets

Presented at the conference 61 oral contributions and 130 posters covered the following subjects:

- kinetics of catalytic reactions;
- physico-chemical and mathematical bases of the processes in chemical reactors;
- catalytic processes and reactors development: modeling, optimization and catalyst design;
- catalytic technologies in fuel and energy production:
 - hydrogen production;
 - production of environmentally safe fuel;
 - environmentally friendly energetics.

Nineteen oral contributions were given at the post-symposium “Catalytic Processing of Renewable Sources: Fuel, Energy, Chemicals”.

The interest to CHEMREACTOR conference is permanently raising, the amount of the presented for the publication in CEJ papers confirms that. After the strong reviewing the most interesting papers are presented in the current issue. It is a hope that the papers reflect the latest achievements and understandings in the field of chemical engineering. The next CHEMREACTOR conference is planned to be in 2008 in Spain, the organizers are looking forward to new fruitful interaction and exchange of ideas.

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