

II International Symposium on Carbon in Catalysis

DOI: 10.1134/S0023158407040155

The II International Symposium on Carbon in Catalysis took place July 11–13, 2006, in St. Petersburg. It was organized by the Boreskov Institute of Catalysis (Siberian Branch, Russian Academy of Sciences) and the Institute of Hydrocarbon Processing (Siberian Branch, Russian Academy of Sciences) and was sponsored by St. Petersburg Research Center (Russian Academy of Sciences), the Swiss Federal Institute of Technology in Lausanne, and the Russian Foundation for Basic Research.

The symposium gathered 105 specialists, including 56 researchers from foreign countries (Belgium, China, Finland, France, the United Kingdom, Hungary, Italy, Germany, Poland, Netherlands, Norway, Portugal, Spain, Switzerland, Turkey, and the United States), 45 from Russia, and 4 from Ukraine.

The scientific program of the forum included 3 plenary lectures, 7 key reports, 33 oral reports, and 62 posters.

The symposium addressed problems of the design, synthesis, and use of new carbon materials. Researchers of various countries reported the use of carbon-ceramics composite membranes in multiphase membrane reactors, the role of graphite-like crystallites in the formation of the physicochemical properties of the porous structure of carbon supports, the structure and properties of natural carbon supports and catalysts, and the semiconducting properties of graphite-like systems.

Some reports were devoted to the synthesis and testing of carbon-supported noble-metal catalysts, carbon materials as individual catalytic systems for petrochemical processes, and a new synthetic method for water-purifying carbon nanotubes.

Of obvious scientific and practical interest is the new information that was presented by V.A. Likhobov, V.V. Strelko, L. Kiwi-Minsker, Z.R. Ismagilov, B.N. Kuznetsov, and some other reporters concerning the synthesis of catalytic systems based on various carbon materials and the use of new carbon modifications (nanotubes, nanofibers, nanofilaments, onionlike carbon, carbon aerogel, etc.) as catalyst supports and catalysts in a wide variety of catalytic processes. Other very significant topics of the symposium were the hydrogen energy applications of carbon materials and carbon-based catalysts, including hydrogen separation and storage and fuel cells, which were addressed by S. Perathoner, V.B. Fenelonov, M. Gangeri, L. Calvillo. E.A. Ustinov and V. Drozdov discussed original approaches to the textural investigation of carbon catalysts and adsorbents.

Considerable practical interest was attracted by the reports dealing with the use of catalysts and new carbon materials in the production of biodiesel fuel from unconventional organic feedstock, a very promising technology, and in human endoecology applications (hemosorption, enterosorption, and water purification).

The II International Symposium on Carbon in Catalysis was a success. It familiarized the scientific community with recent advances and prospects in the design, synthesis, and use of catalytic carbon materials. The next symposium is to be held in China in 2008 by invitation of the Chinese party.

Organizing Committee