## MEET THE GUEST EDITOR


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**Dr. József L. Margitfalvi** received his M.S. degree in Chemical Engineering in Moscow at Mendlejeff Chemical Technological University in 1965 with a strong emphasis in petroleum chemistry and refinery technology. After 4 years of industrial practice in Hungary, he continued his study as a postgraduate student in Moscow. He investigated homogeneous catalytic epoxidation of cyclohexene and received his Ph.D. degree in 1972. Next, Dr. Margitfalvi joined the Institute of Isotopes in Budapest as a research fellow, where he studied the thermal decomposition patterns of different organometallic compounds. Based on these investigations, different supported metal catalyst were prepared. During 1978-1979, he worked at the Worchester Polytechnic Institute in Massachusetts under professor Alvin Weiss. In 1979, Dr. Margitfalvi joined the Central Research Institute for Chemistry and became a senior research associate and group leader. He conducted research in the area of preparation and modification of supported metal catalysts used in hydrocarbon reactions and developed the method of "Controlled Surface Reactions" for the preparation of supported bimetallic catalysts with direct metal-metal interaction. Since 1985, his main interest has been "catalysis in organic reactions" with the focus on catalyst design and modification for selective hydrogenations, reductive amination and carbonyl activation.

In 1985, Dr. Margitfalvi received the title of invited "Associate Professor" at the Department of Organic Chemistry at University of Szeged. In the period of 1989-1991, he joined the Swiss Institute ETH in Zürich as a guest scientist. Under Prof. Alfons Baiker he investigated asymmetric hydrogenation of ethyl pyruvate. After returning to Hungary, Dr. Margitfalvi reorganized his research group under the name "Surface Reactions and Catalysis." In 1995, this group was reorganized further into the "Department of Organic Catalysis," and he was appointed as the head of this new department. In 1996, Dr. Margitfalvi received the highest academic degree in Hungary, the title "Doctor of the Hungarian Academy of Sciences".

In 1999, he edited a special issue for Applied Catalysis on the topic, "Catalysis by anchored and encapsulated species." After reorganization of the Central Research Institute for Chemistry into the Chemical Research Center in 1999, he expressed his interest to start research in the area of combinatorial catalysis. By 2002, his group had developed a new catalyst library optimization method, the Holographic Research Strategy. By incorporating an information mining tool, this method became a fast and reliable informatics platform for catalyst library optimization and visualization of multi-dimensional experimental space. In addition to the investigation of chemo- and asymmetric hydrogenation reaction, Dr. Margitfalvi launched a new project aimed at the examination of different oxidation and oxygen transfer reactions, such as CO oxidation, PROX reaction, and oxidative sulfur removal from diesel fuel. His other new research project is the investigation of catalytic reactions for hydrogen production, such as reforming of various alcohols. He has established industrial contacts with different European and US companies in the area of fine chemistry and combinatorial catalysis and is representing Hungary in the European Federation of Catalysis Societies (EFCATS). His hobbies are electronic music (both listening and creating), traveling, sports (soccer, tennis, table tennis, etc.) and reading.

## SELECTED PUBLICATIONS


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