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**PROFESSOR BORIS MINAEV.  
70-YEARS JUBILEE AND 50 YEARS IN SCIENCE**

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Professor Boris Minaev, the Head of Organic Chemistry, Quality and Standardization Chair at Cherkasy National University named after Bohdan Khmelnytskyi, the Honored Scientist of Ukraine, has celebrated his 70-years jubilee and 50 years of scientific work.

Boris Minaev was born on September 21, 1943 in Sverdlovsk (now Yekatherinburg), Russia. His father was a vice-governor of the capital of Ural during the War. In 1953 the family was sent to Kazakhstan and Boris Minaev graduated the secondary school in Karaganda. In 1967 he graduated from the Physical Department of Tomsk State University and later on continued his PhD study at the same University. In the beginning of 1973 Boris Minaev defended his PhD thesis in physics on spin-orbit coupling effects in optical and EPR spectra of molecules and radicals. From 1974 till 1989 he worked in Karaganda State University as an Associated Professor and later on as the Head of Physical Chemistry Chair. In 1984 Boris Minaev presented his habilitation work "Theoretical analysis and prognostication of spin-orbit coupling effects in molecular spectroscopy and chemical kinetics" to Moscow Institute of Chemical Physics by N.N. Semenov. Since February 1989 he filled a position of the Head of Chemical Chair at the branch of Kiev Polytechnic Institute (now Cherkasy State University

of Technology). In 2007 Boris Minaev became the Head of Organic Chemistry Chair at Bohdan Khmelnytskyi National University in Cherkasy.

Professor Boris Minaev is the author of 400 original research papers, three books published by "Nauka" and five reviews. He has a high Hirsch index (22). His sphere of interests embraces various branches of photochemistry, catalysis, biochemistry, quantum nanotechnology and molecular electronics. The key point of his researches includes spin-orbit coupling (SOC) effects on magnetic and chemical properties of molecules, metal complexes and nano-clusters. Boris Minaev has made first SCF CI calculations of phosphorescence radiative lifetime for aromatic hydrocarbons, electronic  $g$ -factors and other spin-splitting parameters of EPR and ODMR spectra.

He has explained magnetic nature of atmospheric oxygen bands and their enhancement upon collisions by very specific SOC inside the  $O_2$  molecule. The main achievement concerns dioxygen activation by enzymes and the mechanisms of spin-catalysis. Minaev's ideas about the role of molecular triplet excited state in thermal chemical reactivity are developing by his apprentices. In recent years organic chemistry in Cherkasy has earned a high international reputation because of new achievements in circulenes studies, organic dyes applications in solar cells and light-emitting diodes, synthesis of humic acids and new coating for nanoparticles.

Boris Minaev pays much attention to students. His lectures on biochemistry, ecology and quantum chemistry cause a keen interest. High professionalism, profound science and tense emotions attract students. Information on atoms and quanta are accompanied by personal experience and perception acuity. Professor shares his ideas with PhD students and always help them in their difficult work on quantum calculations of molecules electronic properties.

We sincerely congratulate Professor Boris Minaev with his 70-years jubilee and wish him good health and new scientific achievements.

