Chronicle and Information



Valeriy Pavlovych Kukhar, full member of the National Academy of Sciences of Ukraine, or Life, devoted to science

On March 28, 2017, Valeriy Pavlovych Kukhar, Dr.Sci. (Chemistry), Professor, full member of the National Academy of Sciences of Ukraine, the founder and permanent director of the Institute of Bioorganic Chemistry and Petrochemistry NAS for 25 years, the founder of a novel scientific trend – chemistry of bioregulatory processes, the creator of novel methods of fine organic synthesis, passed to eternity at the age of 76.

Valeriy Kukhar was born on January 26, 1942. After the graduation from the Dnipropetrovsk Chemical Technology Institute he had his postgraduate study at the Institute of Organic Chemistry (IOC) AS Ukrainian SSR in the laboratory of O. V. Kirsanov, full member of NAS. In 1967, he defended his PhD thesis, entitled "Phosphorylation of nitriles of dicarboxylic acids"; in 1973, he defended his Dr.Sci. thesis "Alpha-chlor alkylamines and their derivatives".

In 1963–1975, he worked at the Institute of Organic Chemistry AS Ukrainian SSR, moving up the career ladder from the engineer to the head of the department in 12 years. In 1978, he was elected the corresponding member of AS Ukrainian SSR and the Academician-Secretary of the Department of chemistry and chemical technology, AS USSR. In 1988–1993, he was the first vice-president of the National Academy of Sciences of Ukraine.

Valeriy Pavlovych was remarkable for his great knowledge in chemistry, biology, and adjacent fields of science, he had an outstanding gift of experimenting, and his inherent moral human qualities promoted friendly, democratic, and yet demanding environment in the communities he directed.

In 1983, V. P. Kukhar initiated the creation and headed the Department of Bioorganic Chemistry of IOC AS USSR, reorganized into the Institute of Bioorganic Chemistry AS USSR (1987), since 1989 – the Institute of Bioorganic Chemistry and Petrochemistry AS USSR (currently NAS of Ukraine) which was and has been a great scientific center, performing the studies in the chemistry of bioregulators and bioregulatory processes.

After the Chernobyl catastrophe, on May 3, 1986 he was appointed the deputy head of the Permanent Commission of the Presidium of AS on fighting the consequences of the Chernobyl NPP accident; for many years he headed the studies, aimed at the registration of radionuclides in the 30-km zone, cleansing of the drains at the points of decontaminating people and equipment, removal of radionuclides from the underground waters of the Shelter, and migration of radionuclides in the underground waters.

In 1988–1993, he was the head of the Scientific Council on the Problems of Biosphere of NASU, the head of the National Committee of Ukraine in UNESCO's Man and the Biosphere program. In 1996, V. P. Kukhar was included into the Nuclear Safety working group at the European Bank of Reconstruction and Development, since 1998, he was a member of the international supervisory board at the European Bank of Reconstruction and Development on the issue of Chernobyl Shelter object.

In 1996–2000, he was the deputy head of the Council on the issues of science and scientific-technological policy under the President of Ukraine. In 1995–2000, he headed the Commission on the issues of nuclear policy and environmental safety under the President of Ukraine.

From 1996 till 2010, V. P. Kukhar was the President of the Junior Academy of Sciences, in July 2010 he was appointed the head of the State Fund for Fundamental Research.

Valeriy Pavlovych made a considerable contribution into the work of international organizations: in 2004–2011 he was a member of the scientific council of the Organization for the Prohibition of Chemical Weapons, in 1999–2001 – a member of the expert council of NATO on the issues of civil safety-related scientific and technological research, and since 2006 he was a member of the administrative council of the Center of Scientific Culture "Alessandro Volta".

Valeriy Pavlovych Kukhar was decorated with numerous scientific and governmental awards for his work: the Laureate of A. I. Kiprianov prize, NAS of Ukraine, the Honored Worker of Science and Technology of Ukraine, the Laureate of the State Prize of Ukraine in Science and Technology, the Laureate of the prize "Terni – San Valentino "Un anno d'Amore" of the World Federation of Scientists, the winner of UNEP's Global 500 Roll of Honor, the winner of the International Arbuzov Award in the Field of Organophosphorous Chemistry.

V. P. Kukhar was the author of over 700 scientific works, including 9 monographs and 108 authorship certificates and patents for invention, He was one of the pioneers in the field of chemistry of aminophosphonic acids – analogues of natural compounds, and a designer of novel methods of their asymmetrical synthesis. He conducted fundamental research in the field of chemistry of fluorine-containing aminoacids and other fluorine-containing bioregulators. He suggested a number of novel reagents and convenient initial compounds (synthons) for fine organic synthesis.

For many years V. P. Kukhar gave series of lectures in the chemistry of element-organic compounds, of fine organic synthesis to students of the Taras Shevchenko National University of Kyiv. He mentored 4 Dr.Sci. and over 30 PhD.

Valeriy Pavlovych was an encyclopedist, he loved literature and jazz, he painted skillfully and cherished humor in all its manifestations, but the core of his life was chemical science, into whose development he made a considerable personal contribution in the course of recent decades.