

Professor Ing. Ladislav Valko, DrSc. Sixty Years Old



One of the foremost scientists and pedagogues Professor Ing. *Ladislav Valko*, DrSc., Corresponding Member of the Czechoslovak and Slovak Academy of Sciences was sixty on September 27, 1990. He was born in Košice-Poľov and after obtaining General Certificate of Education at the Secondary School in Košice he studied in the years 1950—1954 at the Faculty of Chemical Technology of the Slovak Technical University in Bratislava where he graduated. Then he got an appointment as assistant lecturer at the Department of Physical Chemistry of that faculty where he achieved all degrees corresponding to professional advancement of a university teacher. In 1962 he obtained his CSc. degree (equivalent of PhD.), three years later he habilitated for physical chemistry, in 1979 he submitted his DrSc. thesis, and in

1981 he was promoted to be a professor of physical chemistry. The excellent results of fundamental research obtained by Professor Valko in the region of physical chemistry and especially chemical physics have been highly appreciated in our country and abroad. Because of the high standard of his scientific activity, Professor Valko belongs among prominent representatives of our chemical sciences and may be, for good reasons, regarded as promoter of the Slovak school of chemical physics.

The scientific activity of Professor Valko is represented by tens of published original papers, lectures at inland and foreign scientific conferences and symposia, lots of patents, several monographs and lecture texts as well as by hundreds of citations in our and foreign professional literature. In the first years of his scientific career Professor Valko was devoted to the study of the diffusion processes taking place in polymer substances at the liquid—liquid interface. He described these processes by original differential equations and thus laid the theoretical foundation of exact treatment of given types of diffusion. This work was followed by studying the kinetics of dissolution of macromolecular substances, especially poly(vinyl chloride). These problems involve the research in the region of the thermodynamics of macromolecular oriented systems, in particular, the thermodynamic theory of deformation of chemical fibres, the conditions of chemomechanical equilibrium and the thermoelastic properties of open systems. Besides these problems, Professor Valko was intensively engaged in the field of quantum chemistry. This activity resulted in origination of the Slovak school of chemical physics owing to which Professor Valko was generally acknowledged as promoter and one of the leading organizers of the development of chemical physics in Slovakia. At present, the work of

Professor Valko is concentrated on the field of statistical thermodynamics and chemical kinetics where he has gained recognition for application of the quantum-chemical and statistical thermodynamic approach to the study of the elimination reactions of low- and high-molecular substances. The wide extent of his interest also comprises the problems of photochemistry, biophysics, laser chemistry as well as the influence of electric and magnetic fields on the course of chemical reactions.

The results of scientific work of Professor Valko were many a time appreciated in our country and abroad. In 1981 he was awarded the State Prize for the development and application of the modern theoretical methods of chemical physics. The election of Professor Valko for Corresponding Member of the Slovak Academy of Sciences in 1987 and for Corresponding Member of the Czechoslovak Academy of Sciences in 1988 was a notable recognition of his scientific work.

As university teacher, Professor Valko has gained exceptional merit for education of a new scientific generation. In this respect, it is worth to emphasize the elaboration of conception and the organization of a specialized study in the line of physical chemistry at the Faculty of Chemical Technology with modern chemicophysical orientation. The graduates in this particular branch of science are highly adaptable engineers who are successful in chief functions at universities, in research and in industrial practice in our plants and abroad. Tens of scientific workers whom he conducted as tutor are indebted to him for introduction into the problems and the methods of scientific work. The majority of them are active scientific workers and represent the Slovak physicochemical school. His cooperation in creating the conception and lecturing of the chemical physics at the Faculty of Natural Sciences of the P. J. Šafárik University in Košice should be separately acknowledged.

The activities of Professor Valko in important functions connected with the organization of science and education are meritorious. He is a member of the Scientific Board of the Slovak Academy of Sciences for chemical sciences and of the Scientific Board of Chemistry of the Czechoslovak Academy of Sciences, chairman and member of the committees for conferring DrSc. and CSc. degrees, member of various editorial and scientific boards and professional committees.

The image of Professor Valko would not be complete if his human qualities were not valued. His invention, rationality and common sense are associated with remarkable persistence, industry, devotion and fortitude of purpose as well as with readiness and disposition to cooperate with everybody who is seriously interested in scientific problems. His humane features manifest themselves in persistent readiness to help young people to orientate properly in different life situations.

Our whole public greatly appreciates the work and the universal merits of Professor Valko and on the occasion of his jubilee wishes him good health and great physical and mental power for accomplishing all his professional and personal goals in further years.

P. Kovařík