

MEMORIAL

In Memory of RNDr. Vojtech Bílik, DrSc.

On the occasion of his unfulfilled 75th birthday and the 10th anniversary of his death we pay tribute to and remember with esteem RNDr. *Vojtech Bílik*, DrSc., the outstanding talented man and scientist endowed with the sense of responsibility and justice. We recall his humane and friendly approach to people that always aroused respect and admiration in everyone who knew him. This year we commemorated him as a significant personality of the Slovak Academy of Sciences.

All the professional career of Dr. Bílik as an organic chemist, scientist, pedagogue, and organizer of the scientific work was connected with the Institute of Chemistry of the Slovak Academy of Sciences and his considerable publication activity with our *Chemical Papers*.

Dr. Bílik was born on 16 July 1929 in Šintava (West Slovakia), he finished the university studies in the branch organic chemistry at the Faculty of Natural Sciences, Comenius University in Bratislava. Since 1961 till his retirement in 1992 he was employed at the Institute of Chemistry. During early years he worked on trimethylsilylation of saccharides. On this subject he accomplished his PhD. thesis which was successfully defended in 1967.

Shortly after the doctoral work he became interested in a new project, interaction of saccharides with metal ions. He was the first to examine transformations of saccharides in the presence of molybdate ions which, at that time, were known to form complexes with polyhydroxy compounds. This outstanding idea led to the discovery of three new reactions catalyzed by molybdate ions: 2(3)-epimerization of aldoses, stereoselective hydroxylation of glycals, and oxidative decomposition of 1-deoxy-1-nitroalditols. The first scientific paper on the epimerization of aldoses catalyzed by molybdic acid was the communication Reactions of Saccharides Catalyzed by Molybdate Ions. II. Epimerization of D-Glucose and D-Mannose (*Chem. Zvesti* (today *Chemical Papers*) 26, 183 (1972)). Of the series of 50 original scientific papers devoted to this theme the majority were published in *Chemical Papers*.

The three molybdate-catalyzed reactions represent a new concept of saccharide transformations. Dr. Bílik summarized the results in his DrSc. thesis which was defended in 1981. The discovered reactions were also recognized internationally. The epimerization reaction was named the Bílik reaction (Angyal, S., *Carbohydr. Res.* 73, 9 (1979)) which documents an outstanding achievement of a Slovak scientist. The molybdate-catalyzed transformations of saccharides are experimentally very simple and this feature predetermined them for preparative purposes. The epimerization reaction in a combination with nitromethane synthesis and oxidative decomposition of nitroalditols offers a simple route to variety of rare saccharides. Particularly suitable are the reactions for preparation of radioactively labelled saccharides. Dr. Bílik left behind more than 80 original papers and 70 patents. This heritage has been used by the Institute of Chemistry for production of saccharides for commercial purposes, rare saccharides being delivered to the whole world.

Dr. Bílik was an external pedagogue at the Department of Organic Chemistry, Faculty of Natural Sciences, Comenius University. He supervised tens of diploma works, educated 11 graduate students and 5 doctoral students. He received several honours and awards for his scientific achievements. His excellent results and scientific-organizational activities were rewarded by a series of distinctions. He was the holder of the award Merited worker of SAS, of the Golden Plaque of Dionýz Štúr, Golden Plaque – Merited inventor, and the Golden Medal of the Slovak Chemical Society. Dr. Bílik was one of the few scientific workers awarded by the title Laureate of the State Prize. To our great sorrow he died on 5 June 1994.

Vojto, you will forever remain in our memory.

K. Babor