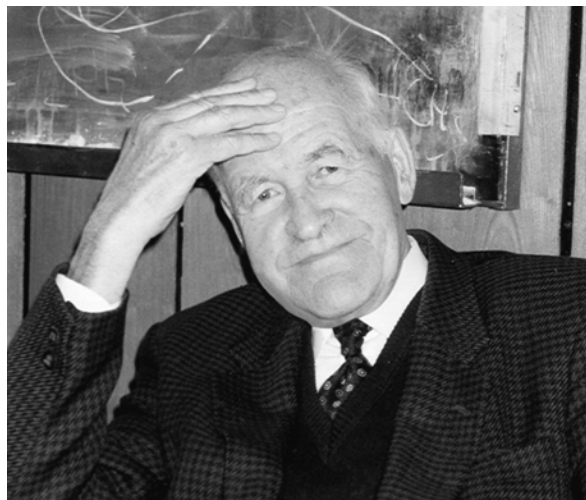


IN MEMORIAM



N. K. KOCHETKOV
(18.05.1915 – 21.12.2005)

Nikolai Konstantinovich Kochetkov, Full Member of the Russian Academy of Sciences and Corresponding Member of the Russian Academy of Medical Sciences has passed away at the age of 91. He was a prominent organic chemist, an outstanding scientific manager, and creator of one of the leading scientific schools in the chemistry of carbohydrates. As scientist N. K. Kochetkov was distinguished by the combination of a rare breadth of scientific interests with clear research aims, of strategic scientific thought with extensive experience and talent as an experimenter. Fate was not particularly kind to Nikolai Konstantinovich, but he overcame all obstacles on account of his remarkable talent, courage, perseverance, and enormous capacity for work.

After graduation in 1939 at the M. V. Lomonosov Moscow Institute of Fine Chemical Technology Kochetkov was called up to the army and spent all the years of the Second World War in the ranks. He had the good fortune to survive the war and on his return to link his destiny with Vera Sergeevna Volodina for life, to bring up with her a wonderful family, and finally to become at 30 a graduate student of A. N. Nesmeyanov at the Chemical Faculty of M. V. Lomonosov Moscow State University. Having defended in 1948 a Candidate's Thesis on "Investigation of the products from the addition of corrosive sublimate to acetylene derivatives" and having been at that time for some years with A. N. Nesmeyanov as an assistant lecturer, N. K. Kochetkov did not pursue the subject matter of his teacher. For nearly 60 years he worked extremely successfully in the field of synthetic organic chemistry and the chemistry of natural compounds.

In 1953 he had already defended with great success a doctoral thesis on "Investigation in the region of β -chlorovinyl ketones" summarizing data on the convenient synthesis that he developed for the production of these ketones and the various transformations of β -chlorovinyl ketones in the aliphatic, aromatic, and heterocyclic series that he studied. (Among compounds of the last class it is necessary to mention derivatives of isoxazole, pyrazole, pyridines, and chromylium salts.) Later on, while working in 1954-1960 at the Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences of the USSR, Nikolai Konstantinovich headed investigations into the production of a series of synthetic drugs with antihistamine, antitumor, and antituberculosis activity and also natural physiologically active compounds: the antibiotic cycloserine and pyrrolizidine alkaloids.

After training in the laboratory of A. Todd (1956-1957) the chief direction in the scientific activity of N. K. Kochetkov from 1959 became the chemistry of carbohydrates, and he also made a significant contribution to the chemistry of nucleic acids and nucleotides. A characteristic feature of his researches in this field is his broad approach, based on a brilliant knowledge and understanding of organic chemistry. Such an approach enabled N. K. Kochetkov to create together with the scientific school that he established, which enjoys well-deserved authority worldwide, original methods for the synthesis of monosaccharides, including higher sugars and oligo- and polysaccharides. A new strategy was proposed for determining the structure of carbohydrate-containing biopolymers, based on the use of modern instrumental methods (mass spectrometry and NMR) and theoretical calculations, and also methods for their biosynthesis. The two main directions in the scientific activity of N. K. Kochetkov, i.e., the chemistry of carbohydrates and organic synthesis, are represented to an equal degree in his work on the synthesis of complex natural compounds containing a large number of asymmetric centers and, in particular, the aglycones of 14-membered macrolide antibiotics from carbohydrate chiral synthons.

N. K. Kochetkov paid great attention to his scientific management work. In 1954 he created the department of organic synthesis at the Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences of the USSR, and he later became one of the organizers of the Institute of the Chemistry of Natural Compounds, Academy of Sciences of the USSR. He played a leading role in the development of the N. D. Zelinsky Institute of Organic Chemistry, Academy of Sciences of the USSR (now the Russian Academy of Sciences), of which he was Director from 1966 to 1988 and Honorary Director from 1988 to his death.

The scientific achievements of N. K. Kochetkov have been marked by high awards – the title of Hero of Socialist Labor, the Lenin Prize, the M. V. Lomonosov Russian Academy of Sciences Grand Gold Medal, the Demidov Prize.

Being the author of several monographs and hundreds of articles, Kochetkov was closely involved with editorial activity within the framework of the Editorial Council (RISO), Academy of Sciences of the USSR and as member of the editorial teams of a number of journals. In particular, for chemists of the nations of the former USSR the many years of activity of N. K. Kochetkov as regional editor of the journals *Tetrahedron*, *Tetrahedron Letters*, and *Tetrahedron: Asymmetry* are well remembered.

The death of Nikolai Konstantinovich is a particularly heavy loss for the journal *Chemistry of Heterocyclic Compounds*, of which he was a member of the Editorial Board from the time of the foundation of the journal to the end of his days, invariably showing interest in the successful activity of the journal and more than once assisting the journal in various difficult situations.

We will always retain the memory of his acute mind, his sincere love of science, his rare understanding of its problems, his courage, and his indomitable character, which to the last breath have distinguished Nikolai Konstantinovich, evoking the sincere respect and admiration of his students and colleagues.

**The Editorial Board of the Journal
Chemistry of Heterocyclic Compounds.**

THE MOST IMPORTANT PUBLICATIONS OF N. K. KOCHETKOV IN THE FIELD OF THE CHEMISTRY OF HETEROCYCLIC COMPOUNDS

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