geneous catalytic systems based on metal complexes, and N. P. Keier and N. N. Kundo gave a paper on the catalytic properties of chelate complexes and polymers. Detailed studies of the catalytic properties and the mechanism of the action of these compounds appear particularly important in view of the fact that some vitally important biocatalysts, metalloenzymes, contain a metal bound to a ligand.

The results of the above-mentioned investigations suggest that the information already available can be used to effect redox reactions, the hydrogenation of unsaturated bonds, and polymerisation reactions.

C. Z. Roginskii and M. M. Sakharov's paper on "The Catalytic Properties of Organic Semiconductors" considered the main classes of organic catalysts (condensed aromatic compounds, dyes, polymers, heteroatomic polymers, etc.), and discussed the significance of the degree of polymerisation and the presence of metal in organic solids for catalytic properties. In some processes such catalysts exhibit higher specific activity and greater selectivity than the organic ones.

The Session of the "Scientific and Technical Council on Industrial Catalysis" adopted a resolution summarising the results obtained and mapping out further research. The resolutions of the Session as well as some of the papers given are to be published in the first few issues of "Zhurnal Fizicheskoi Khimii" in 1968.

The excellent working conditions in the splendidly equipped Institute and the attention lavished by the Institute's administration did much to help the success of the meetings of the "Scientific and Technical Council on Industrial Catalysis".

G. N. Fadeev

OBITUARY



V. V. VOEVODSKII

Academician Vladislav Vladislavovich Voevodskii, one of the most eminent of Soviet workers in the field of chemical physics, died suddenly on 20th February 1967.

V. V. Voevodskii was born on 25th July 1917 in Leningrad. On graduating in 1940 from the Leningrad Polytechnic Institute he joined the Institute of Chemical Physics of the USSR Academy of Sciences. Voevodskii was one of the most gifted students of Academicians N. N. Semenov and V. N. Kondrat'ev, under whose guidance he developed his scientific outlook. Voevodskii's earliest research was concerned with the theoretical aspects of branched chain reactions. He established important details of the reaction mechanism of the oxidation of hydrogen, and introduced the concept of the role of heterogeneous factors into the theory of the cracking of alkanes. Investigation of the structure and properties of free radicals led him to the discovery of a new type of radical reaction—the transfer of the active centre—used in the first quantitative theory of the cracking of alkenes. While studying the processes of recombination of atomic hydrogen on the surface of catalytically active substances, Voevodskii discovered two types of stationary processes—a low-temperature one and a high-temperature one—and determined the efficiency of recombination on metallic and oxide catalysts. These results and a series of theoretical generalisations led to the formulation of radical-chain concepts of the nature of heterogeneous catalytic processes.

V. V. Voevodskii was one of the first in the Soviet Union to use radiospectroscopic methods, in particular the techniques of electron spin resonance and nuclear magnetic resonance, in chemical investigations. From 1955 the main direction of his research lay in the field of the structure, properties, and chemical transformations of free radicals in various chemical processes, using radiospectroscopy for these investigations. These led to the founding of the Soviet school of chemical radiospectroscopy, which has won world renown.

In 1957 V. V. Voevodskii became one of the organisers and founders of the Institute of Chemical Kinetics and Combustion of the Siberian Division of the USSR Academy of Sciences, where he was Director of the Laboratory and Deputy Scientific Director until the last days of his life.

Voevodskii's gifts as scientist, teacher, and administrator flourished at the Novosibirsk scientific centre. The researches into the mechanism of the formation of radicals under the influence of light and radiation, and into weak intermolecular interactions and their role in the course of the elementary stages of complex chemical reactions in the condensed phase, carried out under his direction, gained world-wide scientific recognition.

Voevodskii devoted much effort and energy to the training of scientists. For several years he taught in the Chemical Faculty of Moscow State University. From 1953 he worked at the Moscow Physicotechnical Institute, where he played an active part in the creation of the Faculty of Molecular and Chemical Physics, and was Dean of this Faculty for a number of years. At the Novosibirsk scientific centre he was one of the founders of the Faculty of Natural Sciences of Novosibirsk State University, Dean of the Faculty, and Head of the Department of Physical Chemistry.

He had supervised the work of many Candidates and Doctors of Science, who are carrying on research into the most fundamental theoretical problems in chemistry.

The range of V. V. Voevodskii's scientific interests was amazingly wide—from reaction mechanisms in the gas phase to problems of the chemistry of condensed systems, and recently also some questions of biology—and he had a marvellous ability to see into the heart of a problem in the most varied branches of chemistry. Thanks to his energetic character, Voevodskii was always the initiator of and

participant in scientific discussions at seminars and meetings of scientific councils, in which he took part.

His wide erudition allowed Voevodskii to generalise on an enormous number of diverse investigations, ideas, and theories. He was the author of numerous review papers, monographs, and original scientific publications. Vladislav Vladislavovich never abused his authority, never insisted on unconditional acceptance of his ideas. One of his characteristic traits was that he encouraged his students not only to continue and develop his ideas, but to put forward and verify their own ideas, to pose new problems, and to work on them. This was, in his view, the most effective way of training real scientists.

Apart from his scientific work, Voevodskii was very active in administrative fields. He was a Member of the Praesidium of the Siberian Division of the USSR Academy of Sciences, Chairman of the Scientific Council on Scientific Instruments Production of the Siberian Division, Deputy Chairman of the Joint Scientific Council on Chemical Sciences of the Siberian Division, Editor-in-Chief of the journal "Strukturnaya Khimiya", Chairman of the Scientific Council on Physicochemical Research Methods and Appropriate Instruments of the OOTKh of the USSR Academy of Sciences, and Chairman of the similarly named Section of the Scientific Council on Scientific Instruments Production at the State Committee of the Council of Ministers of the USSR, dealing with science and technology.

All who knew Vladislav Vladislavovich will always remember this gifted, sociable, and charming man, always full of energy and enthusiasm, who knew how to impart this enthusiasm to his students and colleagues, and gave all his abilities, knowledge, strength, and experience to the flowering of Soviet science.

N.M.Bazhan, V.V.Boldyrev, A.I.Burshtein, V.K.Ermolaev, G.M.Zhidomirov, A.A.Koval'skii, Yu.N.Molin, V.N.Panfilov, A.G.Semenov, N.K.Serdyuk, V.A.Tolkachev, and *Yu.D.Tsvetkov*