BORIS NIKOLAEVICH KABANOV

(70th Birthday Anniversary)

A. N. Frumkin, N. S. Lidorenko,
K. M. Gorbunova, and Yu. V. Pleskov

On January 15, 1974, the prominent Soviet electrochemist, Professor Boris Nikolaevich Kabanov, celebrated his 70th birthday. Some important trends in modern theoretical and applied electrochemistry are linked to him. During his scientific career, Kabanov investigated the structure of the boundary between metal and electrolyte and the kinetics of reactions taking place at this boundary, mainly anodic dissolution and passivation of metals, and also hydrogen evolution. These investigations started with a study of the wetting of metals by electrolytes. The revealing of relationships between adsorption processes on one hand and anodic dissolution and passivation on the other hand lead Kabanov to the development of the adsorption theory of passivation. This work, which is of great importance for the electrochemical theory of corrosion, was published in his monograph on "The Flectrochemistry of Metals and Adsorption."

Another line in Kabanov's work is the study of processes in chemical current sources. The result of this work is the development of the modern electrochemical theory of lead batteries. The electrochemistry of the zinc–silver battery was studied later under Kabanov's leadership and led to valuable practical results which are applied in modern technology. Characteristic for Kabanov's laboratory is the creation of original scientific thought. They worked on the electrochemistry of semiconductors, processes at high current densities, and, during the last decade, the introduction of alkali and other metals to solid electrodes. The results of the latter work are of great importance for the understanding of the mechanism of cathode processes.

B. N. Kabanov has been decorated with the Order of the Red Banner of Labor, two Badges of Honor, and two medals, and has been given the title of an Honored Promoter of Science and Technology of the RSFSR.

Kabanov devotes a large effort to scientific organization. He is the organizer and chairman of the Commission for Flectrochemical Instrumentation of the Academy of Sciences of the USSR, to which we owe the development of various modern instruments. Kabanov is also a member of the editorial board of the journal "Élektrokhimiya."

Kabanov's pupils and colleagues and all those who have turned to him for advice and assistance point out his readiness to help, his simple and direct way of communication. These traits of his character have certainly contributed to his fruitful teaching activities. Under Kabanov's supervision or with this counsel more than 40 candidate's and 5 doctoral dissertations have been completed.

Boris Nikolaevich's friends and pupils and the editorial board of "Élektrokhimiya" wish him good health and further creative successes.

Translated from Élektrokhimiya, Vol. 10, No. 4, p. 668, April, 1974.