

PAVEL DMITRIEVICH LUKOVTSSEV

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The untimely death of a well-known Soviet electrochemist, Deputy Director of the Institute of Electrochemistry of the Academy of Sciences of the USSR, Doctor of Chemical Sciences, Professor Pavel Dmitrievich Lukovtsev, occurred on September 23, 1971.



Pavel Dmitrievich Lukovtsev

Pavel Dmitrievich Lukovtsev was widely known for his fundamental research on the kinetics of electrode processes, chemical current sources, the electrochemistry of semiconductors, and electrochemical transformers of information. He was the author of more than 100 scientific works and 20 inventions, which have received well-deserved recognition in the USSR and abroad.

Pavel Dmitrievich Lukovtsev was born in 1914 in Novorossiisk into the family of a worker. In 1937 he was graduated from Moscow State University and entered graduate studies at L. Ya. Karpov Physicochemical Institute, where from the first he showed himself to be an extremely talented scientific researcher. While still a graduate student, Pavel Dmitrievich Lukovtsev conducted broad theoretical and experimental investigations of the process of liberation of hydrogen on nickel. The general theory of the overvoltage of hydrogen on metals that are good hydrogen adsorbers, which he developed, was confirmed in numerous subsequent studies of Soviet and foreign authors.

Serving in the ranks of the Soviet Army from 1940 to 1958, Pavel Dmitrievich Lukovtsev conducted scientific research in the field of electrochemical current sources. After successfully defending a doctoral dissertation, in 1958 he became the head of a special laboratory of current sources. The activity of Pavel Dmitrievich Lukovtsev in this field was invariably highly esteemed. In addition to solving practical problems, he was deeply interested in the mechanism of the action of oxide electrodes and proposed an original method permitting the experimental demonstration for the first time of the presence of diffusion of protons in oxides.

Recently the concepts of the role of protons in electrochemical preparations of oxides, developed in the theory of oxide electrodes proposed by P. D. Lukovtsev, have also begun to be used in the theory of corrosion and passivity of metals and in the theory of the rectifying action of oxide films on valve metals.

Since the organization of the Institute of Electrochemistry of the Academy of Sciences of the USSR, Pavel Dmitrievich Lukovtsev worked as Head of the Laboratory of Electrochemical Transformers. Under his supervision and with his direct participation, a new applied direction of electrochemistry, which in subsequent years achieved great significance for automation and measurement technology, was created and successfully developed. In a short time he became the leading specialist in the field of electrochemical transformers of information and coauthor of a number of practical proposals used in technology.

Pavel Dmitrievich was active in scientific organizational work. Together with Academician A. N. Frumkin and a small group of electrochemists of the Institute of Physical Chemistry of the Academy of

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Sciences of the USSR, P. D. Lukovtsev made a significant contribution to the organization and development of the Institute of Electrochemistry of the Academy of Sciences of the USSR, as Deputy Director of which he worked for 10 years. In this post Pavel Dmitrievich Lukovtsev showed great organizational abilities and high party principles. The work of Pavel Dmitrievich Lukovtsev greatly promoted the training of highly qualified personnel and the expansion of associations of the institute with industry.

Recently Pavel Dmitrievich Lukovtsev was a member of the section of chemistry and chemical technology of the Committee on Lenin Prizes, Deputy Chairman of the Expert Commission on Chemistry of the Supreme Certification Commission, a member of the Scientific Councils of the Institute of Electrochemistry and the Institute of Physical Chemistry of the Academy of Sciences of the USSR, as well as a member of the Editorial Board of the journal "Élektrokhiimiya."

Pavel Dmitrievich Lukovtsev was an example of exceptional modesty, discipline, and high standards for himself. He always behaved responsibly toward the performance of his numerous duties and showed great attention and delicacy in dealing with coworkers of the institute, among whom he enjoyed great respect and love.

A member of the Communist Party of the Soviet Union, who participated actively in social life, Pavel Dmitrievich was awarded the orders of the Red Star and the Red Banner of Labor and medals.

The shining memory of Pavel Dmitrievich Lukovtsev, both as a great scientist, scientific organizer, and as a highly moral and sensitive man will always remain in the hearts of those who knew him.