
OBITUARY

Aleksandr Georgievich Pshenichnikov

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A famous electrochemist, the principal researcher of the Frumkin Institute of Physical Chemistry and Electrochemistry of the Russian Academy of Sciences, the member of Editorial Board of Journal *Elektrokhimiya*, Doctor of Chemistry, Professor Aleksandr Georgievich Pshenichnikov passed away April 10, 2009.

Aleksandr Georgievich came to the Department of Electrochemistry of the Institute of Physical Chemistry of the Academy of Sciences of the USSR in 1956 immediately after graduating from the Moscow Power Engineering Institute, and his whole life proceeded within the walls of Institute of Physical Chemistry–Institute of Electrochemistry–Frumkin Institute of Physical Chemistry and Electrochemistry.

The first studies by Pshenichnikov already revealed his bright talent, nonstandard way of thinking, and wide erudition. In these studies, Pshenichnikov formulated a fruitful idea of the biporous hydrophilic gas-diffusion electrode for fuel cells. All his later studies were closely related with the elaboration of the scientific basis for

fuel cells and, in wider sense, the electrochemical power production.

The doctoral dissertation of Pshenichnikov was devoted to studying porous gas-diffusion electrodes of fuel cells and also to the processes of chemisorption and anodic oxidation of simple organic substances. It is much later, based on the results of his dissertation, that the highly active electrodes for methanol-oxygen fuel cells were developed to find their application in several space programs.

In the late 70s, Pshenichnikov focused attention on the detailed study of the nickel electrode electrochemistry. Numeral studies that employed a complex of electrochemical, optical, and vacuum porosimetry measurements allowed him to characterize the surface of compact and disperse nickel with the same degree of accuracy as this was done earlier for platinum group metals.

His great achievement was associated with the development of the generalized theory of gas-diffusion electrodes to be used for both power sources and electrolyzers.

Many fundamental studies started by Pshenichnikov were later continued in practical works of various designing organizations.

All life of A.G. Pshenichnikov was marked by intense scientific and organizing activities. He was the head of the laboratory for many years, the member of scientific, coordination, and dissertation councils, took

part in organizing committees of numerous scientific forums.

His scientific legacy includes nearly 4 hundred scientific publications and inventions. He trained about 20 candidates of sciences.

In our memory and in the memory of all his friends, colleagues, and pupils, Aleksandr Georgievich will always remain as a charming and kind person of widely diverse interests and lambent humor.

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