ASHOT TIGRANOVICH VAGRAMYAN

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Soviet science has suffered a great loss – Professor and Doctor of Technical Sciences Ashot Tigranovich Vagramyan, the well-known Soviet electrochemical scientist, scientific and engineering man of the RSFSR, laureate of the State Prize, member of the editorial board of Élektrokhimiya, and director of the Laboratory of Electrodeposition of Metals, Institute of Physical Chemistry, Academy of Sciences of the USSR, died on October 8, 1973 at the age of 66 after a severe illness.

Death cut short the life of the scientist at the height of his creative forces and energies.

Professor Vagramyan began his scientific activity in 1932 in the Colloid Electrochemical Institute, on the basis of which the Institute of Physical Chemistry was later created. All of his working activity was associated with these institutes. Here he grew from student of preliminary courses for research candidates to the director of the laboratory organized by him.

The research conducted under Professor Vagramyan's supervision encompasses a broad range of problems in the theory and practice of the electrodeposition of metals. Even in his first research efforts, he directed attention to the phenomenon of passivation of the growing surface of metal crystals and pointed out the necessity of taking into account the irregularity of the surface in investigations of the kinetics of electrode processes. The principles developed in these studies laid the foundation of all subsequent research of the Laboratory of Electrodeposition of Metals.

A new approach to the study of the effect of surface-active substances on metal electrodeposition processes and investigation of the mechanism of such technically important process as the electroreduction of chromic acid is intimately linked with the development of these concepts. In the latter, original concepts regarding the role of inorganic anion additives that made it possible to substantiate the conditions for the electrochemical codeposition of chromium with other metals were evolved.

A new high-temperature method for the investigation of the processes involved in the electrodeposition of metals from aqueous solutions that makes it possible to make a fresh approach to the complex problem of the study of the mechanism of the deposition of metals of the iron group, which was worked out by Professor Vagramyan and his co-workers, occupies a special place in his research.

Professor Vagramyan was always sensitive to the needs of our industry and did not begrudge the time and energy spent in the solution of difficult technological problems. Such important (to the national economy) research as a study of the hydrogenation of metals was conducted under his supervision, and methods for the determination of luster, cohesion, and internal stresses of electrolytic coatings, which made it possible to not only obtain the quantitative characteristics of the indicated processes but also to design methods for optimization of the processes, were developed.

Professor Vagramyan is the author of many monographs, well known both in the Soviet Union and abroad, on the theory and practice of the electrodeposition of metals.

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As a great scientist, remarkable teacher, and a man who was modest and exacting of himself but considerate and attentive to others, Ashot Tigranovich enjoyed great authority and the deep respect of numerous co-workers and students. A man of extensive education and an inquiring mind, he was also a sociable and cheerful man.

Thus he will forever remain in the memory of all who knew him, unselfishly devoted to his chosen life's work.