
CHRONICLE

In Memory of L. A. Zalmanzon

Late Lev Abramovich Zalmanzon (Feb 3, 1916–July 5, 1989), a professor, doctor of technical sciences, and staff member of the Institute of Control Sciences, was well known for his works in different fields of control theory and practice, specially in hydro-pneumatic automation. The devices he designed were widely used in diverse areas from aircraft control to irrigation systems.

He authored seven monographs. Some of his works are translated into foreign languages. For example, his book “Regulation of Gasturbine and Ramjet Engines” (Moscow: Oborongiz, 1956) written in collaboration with B.A. Cherkasov in 1956 is translated and used as a textbook in China for aviation engineers. The English translation of his monograph “Flow Elements of Pneumatic Verification and Control Instruments” (Moscow: Nauka, 1961) was published by Pergamon Press in 1965 and his book “Theory of Pneumatic Elements” (Moscow: Nauka, 1969) was published in Poland and Czechoslovakia in 1971 and 1974, respectively.

His educational and popularization activities are diverse. He had published more than a hundred popular science books, brochures, and articles on different topics in science and technology.

His multifacted talent found application in informatics and cybernetics. His well-known book “Talks on Automation and Cybernetics” was published by Nauka in 1981 and republished in 1985.

His last work “Fourier, Walsh, and Haar Transformations and Their Application in Control, Communication, and Other Fields” (Moscow: Nauka, 1989) is a slight digression from his interests. It describes a wide circle of spectral signal and data processing methods. This monograph overviews control in technical systems, use of spectral transformation in processing voice signals and images, and describes microelectronic and optical devices for digital and analog signal processing. He does not restrict to a mere classification of well-known methods, but presents entirely different approaches.

This monograph is a result of his titanic work on the study, analysis, and systematization of vast literature devoted to spectral transformations and their application in different fields of science and technology. He cites over 1000 sources. Although several authoritative works on spectral methods have appeared in recent years, his monograph remains unexcelled and exhaustive in detailed exposition of the state-of-the-art.

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