
IN MEMORIAM

Professor Alexander Grigor'evich Merzhanov

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Alexander Grigor'evich Merzhanov, Academician of the Russian Academy of Sciences and Editor-in-Chief of our Journal, passed away at the age of 81. Prof. A.G. Merzhanov was internationally recognized as one of the most prominent scientists in the field of combustion science and materials synthesis and the founding father of SHS science and technology.

Alexander Grigor'evich was born November 27, 1931, in Rostov-on-Don, Russia. In 1954, he started his life-long research in the field of combustion science at the Institute of Chemical Physics, Russian Academy of Sciences. In 1960, in the young township of Chernogolovka, Merzhanov became the head of a newly established laboratory for the research on ignition and combustion-to-detonation transition.

In 1967, Merzhanov and his coworkers discovered the phenomenon of solid-flame combustion. Alexander Grigor'evich was the first who realized the sig-

nificance and potential of this phenomenon as a basis for a new method, termed SHS, for production of inorganic compounds and composites. In 1987, Alexander Grigor'evich became the founding director of the Institute of Structural Macrokinetics (ISMAN) and Interdisciplinary R&D Complex TERMOSINTEZ.

Prof. Merzhanov contributed greatly to the thermal theory of combustion in condensed systems. Under his supervision, a number of new methods for studying the kinetics of non-isothermal processes and mechanisms of high-temperature physicochemical transformations in solid–solid and solid–gas systems were developed. Prof. Merzhanov founded a new scientific discipline, structural macrokinetics, and had formulated the basic principles of SHS technology.

Merzhanov's contribution to establishing international links and collaboration within the ever growing SHS community, as well as to popularization of SHS in Russia and abroad cannot be overestimated. He initiated the launch of the *International Journal of Self-Propagating High-Temperature Synthesis* (Allerton Press, New York) and served as its Editor-in-Chief for more than two decades. Prof. Merzhanov actively served both as a member and chairman of organizing committees for numerous international symposia, workshops and conferences, and presented a series of lectures in many countries which resulted in worldwide recognition of the new scientific discipline. He also created a strong link between research and industry in order that the techniques and methods developed in laboratories could be effectively implemented on an industrial scale.

Alexander Merzhanov was not only an outstanding scientist with the exceptional intuition but also a dedicated educator. Indeed he brought up a vast group of researchers working all over the world: in Russia, Ukraine, Belarus, Armenia, Georgia, Israel, United States of America, India, France, Italy, China, Japan and many other countries. He was especially attentive to the work of his students, creating a competitive but friendly atmosphere in laboratories. Due to his charisma and warm attitude toward the people around him, it was easy to talk with him, to discuss scientific results, and ask for advice. Many of his followers remember Merzhanov's commandments for young scientists, such as *Work hard and your results will talk for you* or *Do not miss your chance—publish the*

obtained results promptly. His out-of-town students appreciated Prof. Merzhanov's support beyond their professional activity: they were invited to Institute's social events as well as to parties at his house, and he always made sure that they were provided with comfortable housing and made time and effort to help.

Alexander Merzhanov was a person with a wide horizon of interests. He was admired not only by the scientific community. He had many friends among poets and musicians who were fascinated by his "skin-imprinted signs of talent", as Russian bard Alexander Gorodnizkii liked to say.

Such people as Alexander Merzhanov bring honor and fame to their fatherlands. His legacy and personality lives on in his works and his followers. We will do our best to ensure further development of the scientific discipline once initiated and established by Prof. Merzhanov, an outstanding scientist and a wonderful person.

Editorial Board

SELECTED PUBLICATIONS

Professor A.G. Merzhanov left a rich legacy of more than 800 publications, including monographs, reviews, scientific and technical papers, and memoirs. In addition to the fundamentals of combustion and materials synthesis, his works outline a framework for further research and development in the field. A list of his most frequently cited publications is presented below.

Monographs

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