

In memory of Mikhail Veniaminovich Kazarnovskii

Mikhail Veniaminovich Kazarnovskii, a brilliant scientist and exceptional person, a well known theorist, Doctor of Physics and Mathematics, passed away on April 19, 1999 at the age of 73.

Mikhail Veniaminovich Kazarnovskii was born on November 3, 1926. After graduation from the Moscow Institute of Engineering Physics (MIFI), his work invariably concentrated on neutron physics. His mentors were IM Frank and F L Shapiro. Under their guidance, he embarked on a study that to a great extent determined his main research interests: the theory of radiation transfer, thermalization of neutrons, ultracold neutrons, and neutron time-of-moderation (TOM) spectrometry.

M V Kazarnovskii began his studies at the time when neutron physics was a young, rapidly progressing field. His publications, many of which rightly deserved the reputation of classics, had and still have enormous practical value for the design of new physical setups and for the solution of theoretical problems. M V Kazarnovskii's research into the theory of nonstationary moderation of neutrons was a valuable contribution to the development of the techniques of neutron TOM spectrometry in lead.

For the last 28 years M V Kazarnovskii worked at the Institute for Nuclear Research of the Russian Academy of Sciences, as head of the sector of the theory of radiation transfer and radiation protection physics. He was one of the creators of this scientific center.

Kazarnovskii's work played an important role in the design and construction of the most powerful high-current medium-energy linear proton accelerator in Russia — the Meson Factory. Together with his co-authors, he suggested and implemented the project of the world's first neutron TOM spectrometer with the neutron source based on the spallation reaction. The luminosity of this unit is still the highest among the lead-based neutron time-of-moderation spectrometers in the world.

An exceptional erudite with the widest span of knowledge, M V Kazarnovskii was able to apply the methods that he developed not only to nuclear physics but also to cosmology and to the physics of stellar processes. M V Kazarnovskii was a professor of the chair of fundamental interactions and cosmology at the Moscow Physicotechnical Institute (MFTI).

M V Kazarnovskii continued to do his research actively until his last day. Under his supervision, new physics plants were designed and new experiments were planned and conducted. This was a manifestation of his thirst for fresh knowledge and his focus on solving specific physics problems.

M V Kazarnovskii was a man of highest culture; this not only attracted people to him but created an atmosphere which demanded, as an unassailable norm of life, an active devotion to science, generous help to colleagues, and impeccable correctness both in scientific and ordinary relations between



Mikhail Veniaminovich Kazarnovskii
(03.11.1926 – 19.04.1999)

people. He was exemplary in his readiness to help, to share his knowledge, his ideas and findings. People greatly respected him also because he respected others' sensitivities when helping them or correcting their mistakes. The important side for him was that those he talked to could find the correct solution themselves, albeit with his help.

M V Kazarnovskii was one of those who sustained and continued the best traditions of Russian science. Many younger scientists proudly consider themselves to be his disciples. The best confirmation of these praises is found in his research, his publications, his followers, and the research teams that he assembled and led; and also in the feeling of painful loss in the hearts of all those who were fortunate to have met this wonderful man and to have worked together with him.

*L B Bezrukov, A A Bergman, A I Isakov,
L V Kravchuk, V A Kuz'min, V M Lobashev,
V A Matveev, A D Perekrstenko, I I Royzen,
V A Rubakov, Yu Ya Stavitskii, E L Feinberg*