Lev Grigor'evich Aslamazov (Obituary)

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Soviet science has suffered a great loss. Professor Lev Grigor'evich Aslamazov, an outstanding research physicist and popularizer of science, died tragically on April 23, 1986.

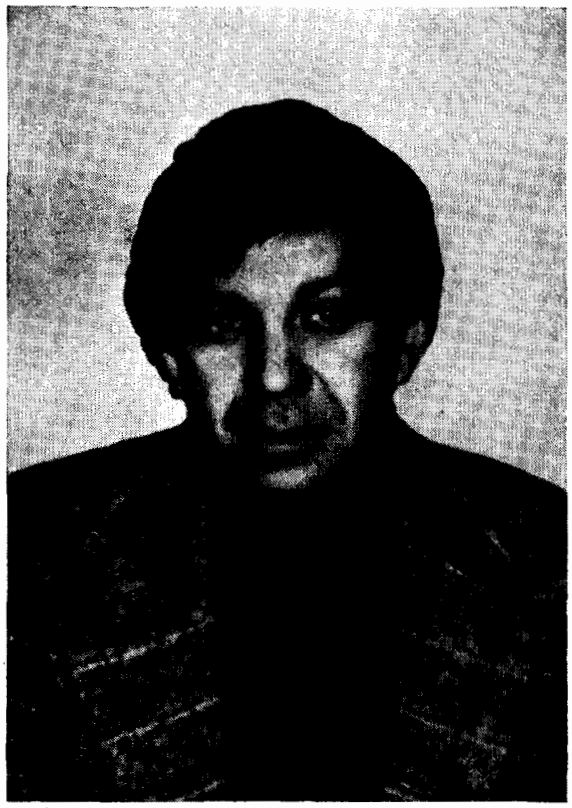
L. G. Aslamazov was born in the town of Batumi on January 6, 1944. In 1966 he graduated from the Moscow Physical-Technical Institute, where he specialized in the field of "low temperature physics." From 1966 until 1969 he was a graduate student at the L. D. Landau Institute of Theoretical Physics (ITP) of the Academy of Sciences of the USSR. After completing graduate study and defending his Candidate of Science dissertation L. G. Aslamazov served as the scientific secretary of the ITP for the next seven years. From 1976 onward he worked at the Moscow Institute of Steel and Alloys (MISA): first as a lecturer and later, after defending a Doctor of Science disseration, as a professor of theoretical physics. In addition, L. G. Aslamazov played for many years a leading role in the publication of "Kvant" and "Bibliotechka 'Kvant'" journals ("Quantum" and "'Quantum' library"), serving as deputy to the editor-in-chief on both editorial boards.

L. G. Aslamazov's scientific studies were in the field of superconductivity. His first paper, written with A. I. Larkin, addressed the effect of superconducting order parameter fluctuations on the physical properties of metals in the vicinity of the superconducting transition. The most important scientific contribution of that paper was the prediction of "paraconductivity" or the fluctuating conductivity effect. This theory was brilliantly confirmed by experiment, gained world-wide recognition and is now described in all modern texts on superconductivity.

L. G. Aslamazov subsequent research pertained mostly to Josephson junctions. He studied the physical properties of bridges—contacts with alternating metal and semiconductor layers. Results deserving of special mention include the prediction that superconductivity can be stimulated in bridges by a high-frequency field and the increase in critical current in contacts with semiconducting layers due to the so-called resonance tunneling.

In recent years L. G. Aslamazov investigated problems with significant potential for practical applications: the motion of Abrikosov and Josephson vortices in a flowing current, current behavior in composite materials with superconducting filaments and so forth.

L. G. Aslamazov's papers always attracted great interest in the world scientific community, as they combined mathematical precision with attention to the technological applications of superconductivity.



LEV GRIGOR'EVICH
ASLAMAZOV
(1944–1986)

Another aspect of L. G. Aslamazov's activity was the popularization of science. He authored several books and numerous articles in "Kvant," "Encyclopedic Dictionary of Physics," "A Young Physicist's Handbook" and other popular journals.

It is difficult to overestimate the organizational activity of L. G. Aslamazov at the theoretical physics department of MISA and at that Institute's research laboratory which, largely because of his efforts, became one of the leading centers of research and cadre preparation.

The pedagogic contribution of L. G. Aslamazov deserves special note. He was not only a brilliant lecturer, but also had the rare gift of singling out promising young students and attracting them to scientific research. Very quick-

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ly, already in their senior year, such students would publish papers and in year or two they could individually formulate and solve scientific problems. L. G. Aslamazov never begrudged the time for this activity and it bore generous fruit.

Death has robbed us of an invaluable and exceedingly multifaceted colleague, a tireless worker. Everyone who knew L. G. Aslamazov, and especially those of us who had the fortune to work with him, will always remember him and strive that his numerous undertakings continue at the same high level as when he was alive.

Translated by A. Zaslavsky