OBITUARY

ISAAK PAVLOVICH GINZBURG

On March 29, 1979 the famous scholar and aerohydrodynamicist, doctor of physicomathematical sciences, professor Isaak Pavlovich Ginzburg passed away in the seventieth year of his life.

Ginzburg was born in Monastyrshchin in the Smolensk region. His science teaching activities began in 1931 after he completed Leningrad State University. From 1945 until recently he was the head of the aerodynamics and flight dynamics department of the Leningrad Mechanics Institute, a department he himself founded.

Professor Ginzburg's creative efforts encompassed an unusually wide range, and his teaching and organizational achievements were multifaceted and most fruitful. Under his tutelage 123 students received the degree of Candidate of Sciences and he guided the preparation of 13 doctoral dissertations. The results of Ginzburg's own studies in the fields of gasdynamics, heat–mass transfer, and control and stability theory were reflected in 150 scholarly articles, 8 monographs, and textbooks. His works played a signficant role in establishing new directions in science and preparing highly qualified scientists.

Ginzburg was the founder and leader of a school of scientists dealing with gas jet parameters and their effect on obstructions. Under his guidance and with his direct participation a large number of studies were performed on gas jets, the results of which have found many practical applications.

His studies of applied hydrogasdynamics are of great theoretical and practical import. Special note should be made of his work on the decay of an arbitrary discontinuity in a gas not conforming to Clapyron's equation, his study of the propagation of a spherical explosion wave, and a series of studies on gas motion in tubes and narrow channels, on gas flow from vessels in the presence of friction and local resistance, on filling and emptying of vessels by gas, and on hydraulic collision of liquids in complex piping systems and tubes made of elastoviscous materials. Of major importance among these studies is his "Applied Hydrogasdynamics," an English language translation of which has been published in the USA.

Ginzburg's scientific efforts were most fruitful in his final years, during which he studied the theory of resistance and heat transfer. His work on the turbulent boundary layer in motion of a mixture of gases with diffusion and dissociation present is widely known. The results of those studies were generalized in his monographs "Aerogasdynamics," "Theory of Resistance and Heat Transfer," "Friction and Heat Transfer in the Motion of Gas Mixtures," and in a number of textbooks.

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The ideas put forth by Ginzburg in 1947 when he founded the Leningrad Gasdynamic Laboratory at Leningrad State University were developed by his students who created the present-day aerodynamics laboratory within the mathematical mechanics faculty of the university.

For his service to his country Ginzburg was twice awarded the Medal of Honor.

Ginzburg served as the head of the section on problems of heat and mass transfer of the Scientific Soviet on Science and Technology of the USSR State Committee. He was also an organizer and leader of All-Union seminars on gas jets, which stimulated the broad development of methods for calculating jet flows.

And thus a great scholar, outstanding teacher, and kind and sensitive man has left us. But the bright memory of Isaak Pavlovich Ginzburg will be preserved forever in the hearts of all who knew him.