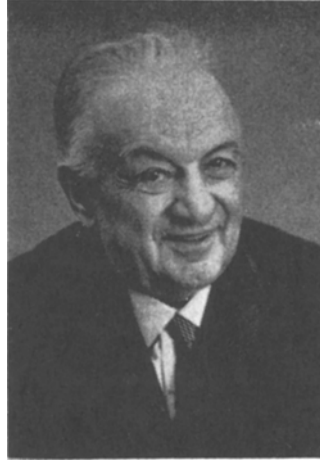


## OBITUARY

IL'YA ISAKOVICH PALEEV



Professor Paleev died on the 26th August, 1970 at the age of 70 years. He was an outstanding scientist as well as a leading pedagogue and engineer.

His researches have left a deep impression on a number of areas in heat physics. In the early period of his scientific activity, he made a very substantial contribution to the theory of drying in its engineering applications. In the 1930s he became well known for his extensive researches into drying techniques, industrial ovens, and heat-transfer apparatus. This work was summarized and extended in his doctoral dissertation, *Dynamics of Drying of Ceramic Parts* (1941), which is even now an important document in this area.

From 1932 he was the director of the section on industrial ovens at the Leningrad Heat-Engineering Institute, while he also performed much teaching work at Leningrad Polytechnical Institute, where he headed the Department of Heat Physics. At this time he set up the basic course on the theory of ovens and drying equipments. Many of the major factories for the production of refractories were designed and brought into operation in collaboration with his teams in this period. During the second world war he worked vigorously on the needs of national defence; he devoted much effort to the improvement of the heat-engineering aspects of metallurgy. He received a government prize for his work on advanced steel-making furnaces in the Ural using new fuel.

In the post-war period, his interest centered on aspects of the theory of combustion and the spraying mechanism of liquids; in recent years, he had worked extensively on the theory of the motion and heat transfer in two-phase flows. In all these scientific areas he obtained essentially new results, some of which were presented in his books, *Pump Spraying of Liquids* (1962) and *The Theory of Fuel Processes* (1966). A characteristic feature of his scientific work was his combination of theory with practice, in conjunction with extensive theoretical discussion of problems arising directly from the needs of industry. He was an outstanding engineer whose ideas and recommendations have been used in numerous heat-engineering equipments. Throughout his life he took an active part in the work of the Central Boiler and Turbine Institute, the Refractories Institute, the Ceramic Institute, and a number of factories.

Throughout his scientific and teaching activities he collaborated with many of his former students and with other colleagues in researches on major aspects of heat engineering and thermophysics; in these

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years he raised hundreds of scientific workers in such areas, many of whom have become Candidates and Doctors of Science.

He was always possessed of enormous energy, and his wide circle of acquaintances and vast interests enabled him to get to the heart of any question in a short period. He participated in the work of a number of scientific councils, seminars, editorial boards of journals, and in particular, for many years, was one of the main book reviewers for *Inzhenerno-Fizicheskii Zhurnal*.

In his lifetime he was awarded the Order of the Red Banner of Labour, and several related medals, for his services.

He was a lively, sensitive individual with a great sense of purpose. His kindness was well known, as was his love of life, and his outstanding honesty. His care in this respect extended to every question of principle. He was a lover of humanity and endeared himself to all who worked with him. A bright memory of him will remain in the hearts of all those who knew him.

Editorial Board