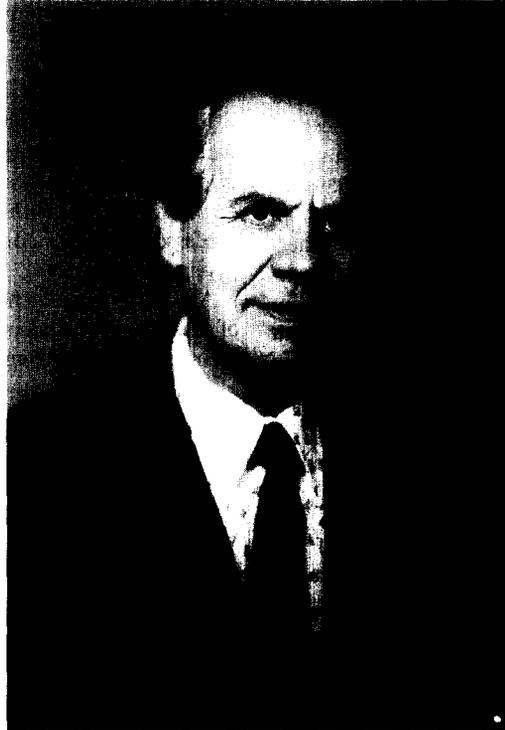




Alexander I. Leontiev on his 70th birthday



Twenty-fourth May 1997 was the 70th birthday of Academician Alexander Ivanovich Leontiev, a famous scientist in the field of thermophysics. In 1950 Alexander Leontiev graduated from Moscow Aviation Institute, and in 1963 he became a Doctor of Technical Sciences. A few years later, in 1965, he became a Full Professor. He was elected as a corresponding member of the Academy of Sciences of the USSR in 1987 and in 1991 he was elected an Academician of the Russian Academy of Sciences (RAS).

Alexander Leontiev started his career, in 1950, as a researcher in the Institute of Power Engineering, named after G.M. Krzhizhanovsky. In 1959, he moved to Novosibirsk Institute of Thermophysics, Siberian Branch, Russian Academy of Sciences, where he worked as the Head of the Thermal Gas Dynamics Laboratory. From 1968 until 1975, Professor Leontiev was the head of the laboratory in the Institute of High Temperatures of Russian Academy of Sciences. From 1979 to the present day, he is the head of the Chair of Turbine Manufacture in Moscow State Technical University named after N.E. Bauman.

Professor Leontiev was one of the founders and one of the first researchers of the Institute of Thermophysics. This 'Siberian stage' of his career was very

productive and fruitful. During this period he worked closely with Academician S.S. Kutateladze and together they created the well-known asymptotic theory of the turbulent boundary layer. This unique experimental foundation for the study of aerodynamics and heat and mass transfer in turbulent flows was developed under their leadership in the Institute of Thermophysics. Students of Alexander I. Leontiev have continued wide-ranging fundamental investigations of complex turbulent flows, confirming many conclusions of the asymptotic theory.

Professor Leontiev is one of the world-leading specialists in the field of the heat and mass transfer theory on permeable surfaces. For the first time, he predicted and described in theory, and then confirmed experimentally, the repulsion (i.e. blow-off) regimes of the boundary layer on permeable surfaces. This was the background for the development of new scientific directions in different fields of heat and mass transfer theory. His formulations are widely used for calculating porous cooling, burning of thermal insulation, cooling system of gas turbines, and other power installations. For his outstanding contribution to film cooling Professor Leontiev was awarded the State Prize of the Russian Federation in the field of science and technique in 1988. Monographs of S.S. Kut-

ateladze and Professor Leontiev on the theory of the turbulent boundary layer were very popular in the USSR. They were published in U.K. and U.S.A. and received world-wide recognition.

Professor Leontiev successfully used the methods of the theory of the boundary layer for the analysis of heat and mass transfer processes in channels of MHD-installations and vapor-generating atomic and fossil energy plants, in gas turbine installations, in survival systems, and in the design of new apparatus for the microbiological synthesis. In 1987, he was awarded the Polzunov Price of the Academy of Sciences of USSR for the development of basic principles used in the design of two-phase heat removal systems in vapor-generating channels.

Professor Leontiev has created a large thermophysical school in the field of new power technology. Many of his students are working in different cities and countries of the former U.S.S.R. He is an outstanding lecturer. For more than 40 years he has delivered lectures in the Moscow Forestry Engineering Institute, Novosibirsk State University and Moscow State Technical University named after N.E. Bauman.

In addition to this outstanding teaching and research, Academician Leontiev has made other significant contributions to his profession. He is the Chairman of the National Committee on Heat and

Mass Transfer of the Russian Academy of Sciences, the deputy academician-secretary of the Department of the Physical-Technical Problems of Power Engineering of the RAS, the Chairman of Heat and Mass Transfers section of Scientific Council of the RAS, a member of several scientific and technical councils, a member of the Executive Committee of the International Center of Heat and Mass Transfer, a member of the editorial board of some Russian and International thermophysical journals including the 'International Journal of Heat and Mass Transfer'.

From the afore-mentioned it is clear that Alexander Ivanovich is highly intelligent. He also has a cheerful disposition and a love of life. As a result of these qualities and his enthusiasm for scientific research Professor Leontiev continues to attract outstanding young students.

Alexander Ivanovich meets his 70th anniversary full of plans and new ideas. We wish him good luck in their realization, strong health and continued success.

V. E. NAKORYAKOV
S. V. ALEKSEENKO
N. V. MEDVETSKAYA
I. L. MOSTINSKI
M. I. OSIPOV
E. P. VOLCHKOV
JU. A. ZEIGAVNIK
J. P. HARTNETT