

ALEKSANDR IVANOVICH LEONT'EV (ON HIS FIFTIETH BIRTHDAY)

Aleksandr Ivanovich Leont'ev, the noted Soviet scientist, professor, doctor of technical sciences, just celebrated his fiftieth birthday.

Leont'ev's scientific activity started in 1950 when he, a graduate of Moscow Aviation Institute, became a fellow at G. M. Krzhizhanovskii Power Institute. Here in a short time he prepared and defended a dissertation for a university degree of the Candidate of Technical Sciences. In 1959, he transferred to the Thermophysics Institute of the Siberian Branch of the Academy of Sciences of the USSR [SO AN SSSR], where he was chosen to direct the gas thermodynamics laboratory, and in 1962 defended the doctoral dissertation. In 1968, Leont'ev was named manager of the laboratory of analytical methods for mass exchange calculations at the High-Temperature Institute of the Academy of Sciences of the USSR. He has been a professor with the thermodynamics and heat-transfer department of the N. É. Bauman Moscow Technical College (MVTU) since 1975.

The numerous studies of Mr. Leont'ev in various divisions of heat- and mass-transfer science have brought him a deserved reputation in the Soviet Union and abroad. He was first to discover the substantial heat emission intensification in the region of the packing discontinuity interaction with the boundary layer, to obtain data on the effect of pulsation on heat emission in the region of gas curtain and film cooling, to study the effects of laminarization on the turbulent boundary layer in the region of the critical nozzle cross section.

Leont'ev (together with S. S. Kutateladze) established the asymptotic theory of turbulent boundary layer, on the basis of which they worked out effective methods for calculating turbulent heat exchange, which were subsequently confirmed experimentally. In addition, Leont'ev extended the boundary-layer theory methods to the analysis of heat exchange process in the passages of MHD installations, in the steam generating channels, in the condensers of the nuclear-power installations, and in the heat-transfer devices.

The results obtained by Leont'ev and his students in the field of heat exchange of liquids in the presence of natural convection and boiling are widely acknowledged. The results of this scientist's investigations consist of more than 100 articles and four original monographs. The monograph "Heat and Mass Transfer in the Turbulent Boundary Layer," written by him jointly with S. S. Kutateladze, gained great recognition.

The distinguishing characteristics of Leont'ev's creative genius are a tendency to wide generalizations, raising of new problems, and deep insight into the essence of a scientific problem.

Leont'ev is an excellent teacher and scientific leader. Without imposing his own ideas or points of view, he supports in every way the independent manner of thinking in his students. Willingly and generously passing



on his knowledge and experience to scientific youth, Leont'ev accentuates its attention on the solution of more essential problems, which open new perspectives in science and engineering. The most authoritative is the Moscow intercollegiate seminar on heat and mass transfer directed by Leont'ev.

Leont'ev, over a period of many years, has combined the intensive scientific work with a fruitful teaching activity. From 1953 to 1959 he was a lecturer with the thermodynamics department of the Moscow Wood Pulp Technical Institute, from 1959 on, at first a lecturer, then starting with 1963 a professor and head of thermodynamics department at the University of Novosibirsk.

Leont'ev carries on great scientific organization work. He is substitute chairman of the Council on Energetics of the Ministry of Defense and SSO of the USSR, and the Heat- and Mass-Transfer Section of the Scientific Council of the Academy of Sciences of the USSR on the complex "Thermophysics" problem, a member of the National Committee of the USSR on Heat and Mass Transfer. While carrying on all of these important duties, Leont'ev is exceptionally determined, principled, and kind.

We congratulate Aleksandr Ivanovich Leont'ev warmly and cordially on his fiftieth birthday and wish him good health and new creative successes.