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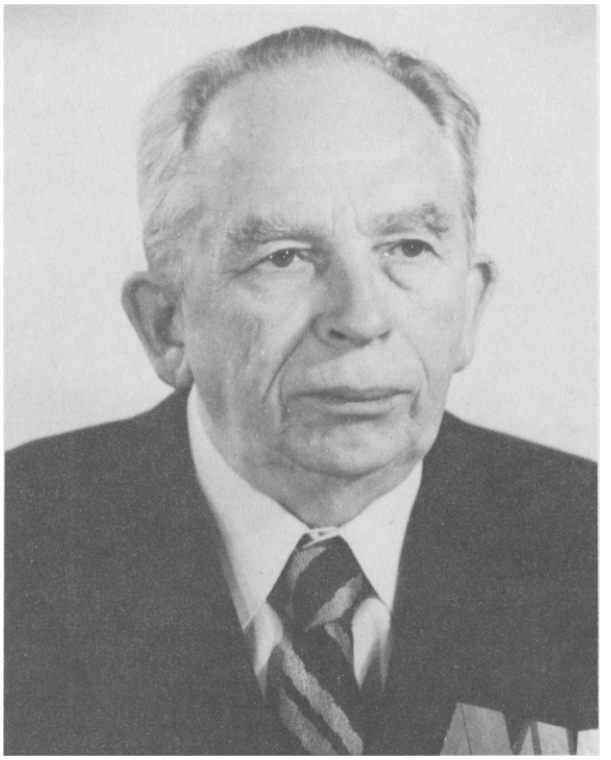
PROFESSOR BORIS SERGEYEVICH PETUKHOV

ON HIS 70TH BIRTHDAY



THE YEAR 1982 marks the 70th birthday and the 45th anniversary of scientific and pedagogical activity of Professor B. S. Petukhov, the Corresponding Member of the U.S.S.R. Academy of Sciences, and Head of the Heat Transfer Department of the Institute for High Temperatures of the U.S.S.R. Academy of Sciences.

B. S. Petukhov was born on 4 August 1912 in the town of Novozybkovo. On graduating in 1936 from the Kuibyshev Industrial Institute he worked at the Institute of Engineering Construction where, two years later, he took charge of the Thermal Engineering Department. In 1938 he entered the post-graduate courses at the Moscow Power Engineering Institute. That year marked the beginning of his great scientific activity. In 1956 he presented his Dr.Sc. Thesis and was conferred with the title of Professor. Since 1966 he has headed the Heat Transfer Department at the Institute for High Temperatures of the U.S.S.R. Academy of Sciences. In 1976 he was elected a Corresponding Member of the U.S.S.R. Academy of Sciences on recommendation by the Section for Physical and Technical Problems of Energetics of the Academy.

B. S. Petukhov is an outstanding representative of the Soviet school of thermal physics. On the basis of a wide range of experimental and theoretical investigations he has advanced the theory of convective heat transfer for the variable properties of heat transfer agents in the presence of the substantial effect of gravitational field. With a thorough study of the mechanism of heat transfer and theoretical investigations he has combined the solution of problems directly related to practical engineering. His work on heat transfer in turbulent flow in channels of heat agents at near-critical parameters of state, convective heat transfer and heat transfer under the conditions of boiling of liquid metal and dissociating coolants are examples of this—studies directly associated with the needs of nuclear power engineering and a number of areas of modern technology. In recent years he has directed investigations into radiative–convective heat transfer in channels of high-temperature power-engineering plants (with reference to the MHD-method of energy conversion), and heat transfer and resistance in the process of helium boiling in channels.

B. S. Petukhov is the author of more than 150 scientific publications, including such monographs and textbooks for colleges as *Experimental Investigation of Heat Transfer Processes*, *Heat Transfer and Resistance in Laminar Liquid Flow in Tubes* and *Heat Transfer in Nuclear Power Engineering Plants.*

Professor Petukhov is engaged in great educational activity and the training of research personnel. Under his guidance more than 40 candidates and doctors of science have presented their theses. He has assembled

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initiative groups of research workers at the Institute for High Temperatures of the U.S.S.R. Academy of Sciences and at the Moscow Power Engineering Institute who have successfully conducted investigations in the field and contributed much to the development of the science of heat transfer.

His research and teaching successfully combines with diversified scientific and organizational activity as the Chairman of the Heat Transfer Section of the Scientific Council on Thermal Physics at the U.S.S.R. Academy of Sciences, and as the Deputy Chairman of the National Committee for Heat and Mass Transfer of the U.S.S.R. Academy of Sciences. For all his activities B. S. Petukhov has been presented with a number of awards by the government of the U.S.S.R.

R. I. SOLOUKHIN
O. G. MARTYNENKO