

In Memoriam Professor R. I. Soloukhin (1930–1988)



ON 6 JANUARY 1988 death took away Professor Rem Ivanovich Soloukhin, an eminent Soviet scientist in the fields of physics of combustion and detonation, high-temperature gas dynamics, physics of lasers and low-temperature plasma. Born on 19 November 1930, he graduated in 1953 from the Physical Department of the M. V. Lomonosov State University in Moscow and immediately started his professional career at the Krzhizhanovsky Institute of Power Engineering of the U.S.S.R. Academy of Sciences and then at the Moscow Physico-Engineering Institute.

During 1959–1976 Professor R. I. Soloukhin worked at the Siberian Branch of the U.S.S.R. Academy of Sciences and since 1976 was Director of the A. V. Luikov Heat and Mass Transfer Institute of the B.S.S.R. Academy of Sciences.

Professor R. I. Soloukhin actively conducted studies on the problems of ignition and kinetics of chemical reactions in gases due to shock waves, investigations into the structure of multi-front detonation waves in gases; he created a simple and effective gas-dynamic model of combustion-to-detonation transition, studied propagation of shock waves in radiative transfer systems and in non-homogeneous media, developed original gas-dynamic laser systems based on selective thermal excitation and mixing in a supersonic flow, worked out effective schemes of high-power flow-type convective lasers with electric power excitation and chemical lasers initiated by an electron beam. His scientific contributions include over 300 published research papers.

In 1965, for his investigations of detonation in gases, Professor R. I. Soloukhin was awarded the Lenin Prize in the field of science and technology. In 1968 he was elected a Corresponding Member of the U.S.S.R. Academy of Sciences and in 1977 a Full Member of the B.S.S.R. Academy of Sciences. His scientific merits have been widely acknowledged both in the Soviet Union and around the world.

Professor R. I. Soloukhin contributed much to the development of scientific cooperation in the fields of physics of combustion and detonation, heat and mass transfer, physics and plasma, power engineering, and machine building. He was awarded a number of authoritative international awards and prizes, was elected a Corresponding Member of the International Academy of Astronautics, and a Member of American Combustion Institute. For many years Professor R. I. Soloukhin was an Editor of the *International Journal of Heat and Mass Transfer*, and a Member of the Scientific Council of the International Center for Heat and Mass Transfer.

An outstanding scientist, Professor Rem Ivanovich Soloukhin deserves a place in the memory of those who met him.

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