

VLADIMIR ALEKSEEVICH KIRILLIN

(ON HIS SIXTIETH BIRTHDAY)



On January 20, 1973, was the 60th birthday of Academician V. A. Kirillin, a prominent Soviet scientist and one founder of the Soviet school of thermophysicists.

After graduating from the Department of Heat Power at the Moscow Power Institute in 1936, V. A. Kirillin worked at the Kashir GRÉS designing parallel-flow boilers and then on a fellowship with special interest in problems and research concerning the thermophysical properties of various substances and materials. In this field V. A. Kirillin completed his candidate's and doctoral dissertations, which were then followed by several original articles containing an outstandingly profound and thorough analysis of relevant processes and phenomena combined with a wealth of experimental material for practical use.

The scientific achievements of Vladimir Alekseevich have been well recognized by the scientific community of our country. His series on determining the thermophysical properties of heat carriers for power stations, over wide temperature and pressure ranges, was rewarded in 1951 with the USSR State Prize. In 1963 Kirillin was elected to the USSR Academy of Sciences as Corresponding Member. For his basic research on the properties of heavy water and its vapor at high values of the thermodynamic parameters, research done to satisfy the needs of the nuclear power industry, and for developing heat carrier (water vapor) standards for the design of ultrahigh-pressure electric power stations V. A. Kirillin was awarded the Lenin Prize in 1959.

The work of this scientist has been many-sided and very creative. It has not been restricted to studying the thermodynamic and the thermophysical properties of solids, liquids, and gases. It has also been concerned largely with heat-transfer processes in high-temperature structures and apparatus, with the nature of physicochemical phenomena in materials under high temperature, and with experimental studies of low-temperature plasma.

A special mention deserves the work which Vladimir Alekseevich has done in developing magneto-hydrodynamic generators for a direct conversion of heat into electric energy.

For his achievements in modern engineering, V. A. Kirillin was in 1962 elected to the USSR Academy of Sciences as full member. V. A. Kirillin has published over 160 scientific items, which include 6 monographs.

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His activities in this field contribute to the intensive development of important trends and to the recruitment of scientific talent for this purpose. V. A. Kirillin founded the Scientific-Research Institute of High Temperature (at the USSR Academy of Sciences), which is now the head organization dealing with problems in high-temperature thermophysics, he set up the Science Council at the Presidium of the USSR Academy of Sciences on "High-Temperature Thermophysics," and he initiated the publication of *Teplo-énergetika* – the leading scientific journal on heat power.

Vladimir Alekseevich is devoting much attention to the development of heat- and mass-transfer science in the Soviet Union, which has already resulted in the establishment of the Institute of Heat and Mass Transfer at the Academy of Sciences of the Belorussian SSR, Departments of Heat Transfer and of Mass Transfer at the Institute of High Temperatures at the Academy of Sciences of the USSR, and the Science Council on Heat and Mass Transfer in Technological Processes at the State Committee of Council of Ministers of the USSR.

Significant progress in the development of thermophysics and heat- and mass-transfer science is a result of Kirillin's creative work. Vladimir Alekseevich has always supported and still supports new ideas most important to the development of heat- and mass-transfer science, as well as the publication of journals where Soviet achievements in this branch of science are communicated.

The journals *Teplofizika Vysokikh Temperature* (published by the Academy of Sciences of the USSR), *Inzhenerno-Fizicheskii Zhurnal* (published by the State Committee on Science and Engineering at the USSR Council of Ministers and by the Academy of Sciences of the Belorussian SSR), *Teploenergetika*, and several others have started on the initiative of V. A. Kirillin, who is also member of their editorial boards.

His merits as a teacher are not less significant. He was the first to set up the Chair of Thermophysics at the Moscow Power Institute, where much work has been done in training highly qualified engineers-thermophysicists.

A great influence on the development of Soviet science has had and still has V. A. Kirillin's scientific-administrative activity in such government posts as Vice-Minister of Higher Education (1954-1955), as alternate delegate to the State Committee on New Technologies at the USSR Council of Ministers (1955), as Head of the Science Department of Higher Educational Institutions and Schools Ts KPSS (1955-1962), as Vice-President of the Academy of Sciences of the USSR (1963-1965), and as Vice-Chairman of the USSR Council of Ministers as well as Vice-Chairman of the State Committee on Science and Engineering at the USSR Council of Ministers (since 1965 till now).

V. A. Kirillin has successfully combined his scientific and scientific-administrative activities with a great deal of work in Societies. He is a member of the Ts KPSS (since 1966) and a delegate to the Supreme Council of the USSR at the Sixth, Seventh, and Eighth Congress.

His inexhaustible energy, his undivided devotion to work, his adherence to principle, and his untiring search for innovation have earned V. A. Kirillin the deep respect of the scientific community.

The Party and the Government have appreciated the many-sided contribution of Kirillin by decorating him with three Lenin Orders, the Red Labor Star, and other medals.

On the occasion of his sixtieth birthday, the editorial staff of *Inzhenerno-Fizicheskii Zhurnal* together with the many readers congratulate Vladimir Alekseevich and wish him good health as well as further great scientific accomplishments.