

## PEOPLE OF SOVIET SCIENCE

### ON THE SIXTIETH BIRTHDAY OF SERGEI STEPANOVICH ZABRODSKII



On December 17, 1971 the eminent Soviet scientist, Professor Sergei Stepanovich Zabrodskii, Doctor of Technical Sciences, Corresponding Member of the Academy of Sciences of the Belorussian SSR, celebrated his 60th birthday and 40 years of active work.

S. S. Zabrodskii was born in Nesvizh in the former Minsk Province. On finishing at the Power Engineering Faculty of the Belorussian Polytechnic Institute in 1939 and completing his service in the Soviet Army in 1946 Zabrodskii worked as a Junior Scientific Associate in the Power Sector of the Academy of Sciences of the Belorussian SSR. In 1950 Zabrodskii defended his Candidate's dissertation, and from 1950 through 1957 was a Senior Scientific Associate in the Power Engineering Institute of the Academy of Sciences of the Belorussian SSR. From 1957 he was Head of the Laboratory of Disperse Systems in this Institute (now the Institute of Heat and Mass Transfer).

In 1959 Zabrodskii successfully defended his Doctoral dissertation and in 1964 he was made a professor.

In 1966 Zabrodskii was elected a Corresponding Member of the Academy of Sciences of the Belorussian SSR.

Sergei Stepanovich Zabrodskii has written more than 120 papers on the heat transfer and hydrodynamic properties of disperse systems of the gas-solids type. Most of his published papers deal with research on fluidized beds of various types. The results of these investigations are summed up in the monographs *Heat Transfer by a Fluidized Bed of Granular Material* (1958), *Hydrodynamics and Heat Transfer in a Fluidized Bed* (1963), and *High-Temperature Fluidized-Bed Apparatuses* (1971).

The monograph *Hydrodynamics and Heat Transfer in a Fluidized Bed* has been published abroad.

The results of research and pilot-plant studies carried out under Zabrodskii's leadership have enabled engineers to employ disperse gas-solids systems more effectively in various branches of engineering for the development of new technological processes, more advanced apparatus, and the improvement of existing processes and equipment. Zabrodskii has proposed several new methods of heat treatment of products and disperse materials. The originality and value of these proposals, which have been approved as

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patents, have been confirmed by 23 author's certificates. Many of these proposals have been adopted in industry.

Zabrodskii is known as one of the pioneers of the development and industrial adoption of the pulsating fluidized-bed method in the USSR. He was awarded a gold medal for his original apparatus for the drying of medical preparations, which was exhibited at the Exhibition of Achievements in the National Economy, 1970.

Many of Zabrodskii's pupils are working successfully in the Academy of Sciences of the Belorussian Polytechnical Institute, and other scientific-research and higher education institutes in the republic. He has trained 18 Candidates of Sciences.

Zabrodskii has frequently read scientific papers at All-Union and international conferences.

For many years Zabrodskii has combined important scientific research with scientific administration work and public activity. He is the deputy Secretary Academician of the Physicotechnical Sciences Division of the Academy of Sciences of the Belorussian SSR, Deputy Editor-in-Chief of *Inzhenerno-Fizicheskii Zhurnal*, member of the editorial board of *Izvestiya Akademii Nauk BSSR (Seriya Fiziko-Energeticheskaya)*, President of the Section of the Scientific Council on Mass and Heat Transfer in Technological Systems of the State Committee of the Science and Engineering Council of Ministers of the USSR, and a member of the Honorary Editorial Committee of the *International Journal of Heat and Mass Transfer*.

As a progressive communist scientist Zabrodskii takes an active part in the public work of the Academy of Sciences of the Belorussian SSR.

Zabrodskii's services have been acknowledged by the award of five medals and a Diploma of the Supreme Soviet of the Belorussian SSR.

For his services in the development of science, and to commemorate his 60th birthday, the Presidium of the Supreme Soviet of the USSR on 16 December, 1971 awarded S. S. Zabrodskii the Badge of Honor.

A great scholar and teacher, a modest and sensitive man, Sergei Stepanovich Zabrodskii enjoys great prestige and deep respect.

The Editorial Board wishes him good health, happiness, and new creative achievements.