

## Vasiliĭ Petrovich Peshkov (Obituary)

N. E. Alekseevskĭĭ, A. F. Andreev, Yu. D. Anufriev, A. S. Borovik-Romanov, N. V. Zavaritskiĭ, K. N. Zinov'eva, P. L. Kapitza, A. Ya. Parshin, A. I. Shal'nikov, and Yu. V. Sharvin

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Soviet physics has suffered a heavy loss. Professor Vasiliĭ Petrovich Peshkov, Doctor of Physicomathematical Sciences and well-known Soviet experimental physicist, died suddenly on October 16, 1980 at the age of 67.

Vasiliĭ Petrovich was born in 1913 at Blagoveshchensk into the family of a teacher. After graduating from high school in 1929, he worked as an electrician until 1934, first at Blagoveshchensk and then, from 1932 onward, in Moscow. In 1934, V. P. Peshkov enrolled in the physics department of the Moscow State University, and completed his studies in 1940.

Immediately after finishing his university studies, he was taken on by P. L. Kapitza as graduate student at the Institute of Physical Problems of the USSR Academy of Sciences. His entire subsequent career was connected with this Institute: after the completion of his graduate studies, he joined the staff of the Institute and eventually became deputy director of the Institute's laboratories.

V. P. Peshkov's Candidate thesis, which he successfully defended in 1944, was devoted to the crystallization of solutions. His next field of research was concerned with the unique properties of superfluid liquid helium, and he soon demonstrated experimentally the existence of second sound. His Doctoral thesis, which he defended in 1946, was devoted to the same subject. The discovery of second sound in superfluid helium was a considerable contribution to science and produced a major response both at home and abroad. V. P. Peshkov was awarded the USSR State Prize for this achievement in 1947.

With characteristic determination and persistence, he followed this up with studies of the properties of liquid helium and with the development of experimental techniques, including ultralow-temperature thermometry. He was the first in the Soviet Union to achieve two-stage demagnetization, which enabled him to perform a number of experiments at 3 mK as far back as the early 1960s. He made considerable contributions to the development of simple and reliable solution cryostats.

The laboratory directed by V. P. Peshkov has also been successful in developing research work in fields such as quantum turbulence in superfluid liquids, in-



Vasiliĭ Petrovich  
Peshkov  
(1913-1980)

teractions between different parts of the normal component of helium, the state diagram of  $^3\text{He}$ - $^4\text{He}$  mixtures, and the properties of pure  $^3\text{He}$ . Vasiliĭ Petrovich also devoted a considerable amount of his time to the solution of technological problems. In recognition of the latter work, he was awarded a second USSR State Prize in 1953.

In addition to his very active research work, Vasiliĭ Petrovich spent considerable time and effort on teaching. He lectured at the Moscow Engineering Institute, Moscow State University, and Moscow Physicotechnical Institute, and headed the physics department of the Mendeleev Moscow Chemical Technology Institute. As scientist and communist, Vasiliĭ Petrovich was a member of VAK (Supreme Certification Board), scientific secretary of the Praesidium of the USSR Academy of Sciences, member (for a number of years) of the State Committee on the Coordination of Scientific Research of the USSR Council of Ministers, member of the Committee of Experts for the Lenin Prizes, and member of the Scientific Council on Low-temperature Physics.

He devoted much energy to the fostering of international links in science: he was chairman of the Soviet delegation on the Soviet-Finnish working group on collaboration in physics and was member of the editorial board of the "Journal of Low Temperature Physics".

He devoted much care and attention to the needs of the younger generation, and showed by his own example the importance of single-minded dedication to science.

The work of V. P. Peshkov has been of great importance to low-temperature physics, and his researches have contributed substantially to the development of this branch of physics.

The shining memory of Vasilii Petrovich Peshkov will remain forever with his friends and colleagues.

Translated by S. Chomet