# OBITUARY

## VLADIMIR IOSIFOVICH LIKHTMAN

Soviet science has suffered a great loss: on September 8, 1966,Doctor of Physico-Mathematical Sciences Professor Vladimir Iosifovich Likhtman, director of the laboratory of the Department of Physical Chemistry of Dispersed Systems, Institute of Physical Chemistry of the Academy of Sciences of the USSR, suddenly died.

V. I. Likhtman is widely known for his original investigations into the effect of the ambient medium on processes of deformation and machining of metals. He established new relations expressing the absorption interaction of surface-active substances of the medium with the surface of metals.

Together with associates, V. I. Likhtman discovered the phenomenon of a decrease of the yield point and increase of the creep rate of metallic single crystals in adsorption-active media. He was the first to determine experimentally the decrease of the surface energy of metal covered with a layer of a fusible melt.

The works of V. I. Likhtman devoted to a study of the regularities of the action of various lubricants during cold treatment of metals are of great value. New lubricants which he proposed are widely used in industry.

V. I. Likhtman made a major contribution to the development of the theory and practice of powder metallurgy. As early as the beginning of the 1950s he published an excellent work in which the mechanism of formation of the metallic contact during sintering of powders covered with a layer of oxides was clearly indicated.

V. I. Likhtman devoted numerous works to a study of the effect of active lubricants on the pressing and sintering of one-component compacts and complex powder compositions. These works, carried out for the first time by V. I. Likhtman, had an effect on setting up similar investigations here and abroad.

During the last years of his life V. I. Likhtman studied the physicochemical regularities of vibratory compaction of powder materials. Under his supervision a new technological process was worked out for compacting powder materials based on the use of low-frequency vibrations. This technology is presently being used widely in industry.

In addition to 120 original articles, V. I. Likhtman is the co-author of four major monographs devoted to problems of physicochemical mechanics and powder metallurgy.

In the history of Soviet science the name of Vladimir Iosifovich Likhtman, a great scientist-communist and a person of splendid personal qualities, will be associated with the development of the close interaction between physical and chemical ideas and methods of investigations directed toward solving important problems in the area of physical mechanics and powder metallurgy.

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