BOOK REVIEW

L. P. FILIPPOV, Measurement of Thermal Properties of Solid and Liquid Metals at High Temperatures, 325 pp. Izd. Mosk. Un., Moscow (1967)

THE MONOGRAPH by Filippov describes a particular and very important aspect of molecular physics—measurement of thermal properties of solid and liquid metals. Rather few works, both in the Soviet Union and abroad concerned with development and experience of measurements, are available. The monograph contributes much to this field. The author presents the detailed development of measurement methods and error estimations of particular methods.

Filippov discusses both the steady and unsteady methods. The emphasis is stressed on the unsteady-state methods of longitudinal, radial (mainly in short rods) and plane waves.

The author makes use of the methods developed for measuring thermal diffusivity, heat capacity and thermal conductivity, and extends the measurement methods from solid metals to liquid metals.

The measured thermal properties of a number of metals are given at the end of the monograph. Many tables and figures furnish the data of measurements. The monograph is written in simple and concise language. Derivation of formulae are available to scientific workers of physical and engineering institutes and laboratories, and also to students of Universities and higher educational institutions.

The monograph is a valuable contribution to the investigation of thermal properties of metals (solid and liquid) at high temperatures.

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