特集：落下施設を利用した微小重力実験
（解説）

落下塔を用いた種々の熱物性値測定

藤井　英俊・松本　大平・野城　清

Measurements of Thermophysical Properties Using Drop Shafts

Hidetoshi FUJII, Taihei MATSUMOTO and Kiyoshi NOGI

Abstract

A new oscillating drop method was introduced to measure the surface tension, density and viscosity of a liquid without any external forces under microgravity. The optimization of the levitation method of a droplet is discussed. Since the accuracy of the values obtained by an oscillating drop method under microgravity is much higher than those from the previous methods, the method should be used to measure the thermophysical properties of several standard materials. The drop-shaft facilities, which produces a high quality microgravity condition, are required for this method.