

## International Standards on Residual Resistance Ratio Measurements

D. H. Kim

*Yeungnam University, Gyeongsan, Korea*

Copper is used as a matrix material in multifilamentary superconductors and works as an electrical shunt when the superconductivity is interrupted. It also contributes to recovery of the superconductivity by conducting heat generated in the superconductor to the surrounding coolant. The cryogenic-temperature resistivity of copper is an important quantity, which influences the stability of the superconductor. The residual resistance ratio is defined as a ratio of the resistance of the superconductor at room temperature to that just above the superconducting transition. In the International Standard, the test method of residual resistance ratio of Nb-Ti and Nb<sub>3</sub>Sn composite superconductors is described. The curve method is employed for the measurement of the resistance just above the superconducting transition. Recent issues arisen during the maintenance cycle on the Standards will be introduced.

Keywords : residual resistance ratio, composite superconductors, international standards