

SYLLABUS :-

Superconductivity is a quantum mechanical phenomenon that exhibit fascinating properties like zero resistance, expulsion of magnetic flux. Adding to these, tunneling of super carriers across a barrier lead to many electronic devices that surpass the existing semiconductor devices. The lectures cover the superconducting orderparameter, flux quantization and tunneling principles. Principles of Josephson effect and dc SQUID and their applications in many fields will be discussed and method of making such devices will also be outlined.