

Superconducting Quantum Interference Device (SQUID) and iHelium3 setup

Superconducting quantum interference device is a very sensitive magnetometer used to measure the magnetic moment of a sample even if the amount is very less and low moment.

Make and Model:

Quantum Design U.S.A. and Japan

MPMS XL

Specification/ Features:

- Equipped with superconducting magnet (7 Tesla).
- Operating working temperature range 2-300 K.
- Direct current and alternating current magnetic susceptibility can be measured.
- Equipped with iHelium 3 set-up to measure the magnetic susceptibility of a sample in ultra-low temperatures (300 mK to 350 K)
- Equipped with Fibre optic sample holder (FOSH) for measuring the magnetic moment of a sample in the excited state through the excitation of Xenon lamp.
- Single crystal rotor is available for measuring the magnetic susceptibility of a single crystal.

Available mode of use:

- Solid
- Liquid

Whether the facility is open to external users: Yes

Location:

Room no. 003, LTP Lab, Ground Floor

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