



SQUID LABORATORY
Central Research Facility,
IIT Kharagpur-721302

Date: _____

Department Requisition No. _____

1. User's Profile

Name of the User: _____ Roll No.: _____

Name of Guide / Supervisor: _____ Department / Centre: _____

Contact Details: _____ Tel. No.: _____

Name of the Institute/College/Industry: _____

2. Sample Type (Please ✓)

Powder / Pellet / Film

Ferromagnetic Ferrimagnetic Anti ferromagnetic / Paramagnetic / Diamagnetic

3. Expected moment per gram: _____ **Sample formula:** _____

Any other details: _____

4. Required temperature rate [max.20K/min 4K]: _____

5. Required option : SQUID VSM[400K-2K] / OVEN[900K-300K] / ACS[400K- 2K]

6. Measurement Type: Moment(M) or Susceptibility (χ) Vs Temperature(K)

Field (Oe)		Temperature (K)		Frequency (Hz)	
ZFC	FC	ZFC	FC		

7.Measurement type :Moment Vs Field

Max. field (Oe)	Temperature(K)	Expected Coercevity	Total no. of data points(max.160)

8. Measurement type: Moment Vs Time

Field (Oe)	Temperature (K)	Duration (Sec)

Instruction:

- (i) Please submit one form per sample.
- (ii) Total Number of hour is depending on the basis of measurement.
- (iii) Sample should be vacuum compatible.
- (iv) Thin films of size 3mm x 5mm and thickness 1mm.
- (v) For pellet or powder sample, Ferro, Ferrimagnetic, Superconductivity samples require only 1-3 mgms. for the analysis and paramagnetic sample require 10-15 mgs.
- (vi) Information related to magnetic transition, moment etc. are necessary for the proper selection of VSM/ SQUID experimental parameter.

TERMS & CONDITIONS AND CHARGES FOR AVAILING INSTRUMENT FACILITIES

1. For the time slot and other necessary criteria , please contact the concerned staff beforehand.
2. Repeat of analysis may be done if there is any instrumental or operating error.
3. Acknowledge the CRF Facility in the future publication if any.

CHARGES	DURATION	AMOUNT IN INR
Internal(Institute)	1slot= 3 hours	Rs. 900 + 18% GST
Internal(project)	1slot= 3 hours	Rs. 1500+ 18% GST
External users (academic/R&D)	1slot= 3 hours	Rs. 1500+ 18% GST
Industry	1slot= 3 hours	Rs. 3000+ 18% GST