

Standard Operating Procedure

Physical Property Measurement system (PPMS)

Integrated cryogen-free system for measurement of physical properties at low temperatures and in presence of high magnetic fields.

1. Check the chiller temperature and He cylinder pressure.
2. Check the pressure of Hose
3. Click Dynacool Multivu software and open cryostat monitor window.
4. Check the Tank pressure, Magnet temperature and chamber status.
5. Connect the desired module line to the chamber and activate the respective module in the software.
6. Load the sample and start the measurement.
7. After completion of the measurements, unload the sample and deactivate the module.

Precautions:

1. Chiller temperature should be $< 20^{\circ}\text{C}$
2. Hose pressure should be at the marked value.
3. Keep check on the inlet water pressure of water purifier which is fixed between chiller water line and compressor.
4. Before starting the system, make sure that pressure in He cylinder is $>$ than 300psi.

*While loading and unloading the sample, make sure that magnetic field is 0 Tesla and chamber is at RT.

*Don't insert/ remove any module cable if any module is activated.

*Please strictly follow this rule. Otherwise, it will cause serious damage to the system.