

Competency Training Record for use of **High-Magnetic Fields and Cryomagnets**.

Location: **Physics Rooms 125, 126, 127, 130**.

PIs: **Martin Lees, Paul Goddard**.

Synopsis of training

The training will establish that the user:

- has read and understood the details of the equipment risk assessment.
- has undertaken all online training modules required by University.
- is a trained cryogenics user.
- is familiar with instruction manuals relevant to using equipment.
- understands what actions to take in case of emergency.
- understands the out-of-hours working policy.

In addition, the following key issues/hazards will be discussed:

- Cryogenic liquids — asphyxiation.
- Cryogenic liquids — frostbite.
- High magnetic fields — danger to pacemaker wearers and medical implants.
- High magnetic fields — danger from magnetizable tools.
- Significance of the 5-gauss line.
- Importance of high-field alerts (warning lights and signage).
- Causes and symptoms of a *magnet quench* and what to do in this eventuality.
- Magnet ramp rates and minimum helium levels.

Competency in the following tasks is to be established:

- Switching equipment on safely.
- Magnet controls for sweeping up and down magnetic field.
- Use of switch heater and persistent mode.
- Switching equipment off safely.

Note: for previously trained users a training refresh can be completed through the user demonstrating competence and understanding of the standard operating procedures, rather than a formal training session.

List of approved superusers who can train other users (where appropriate)

Name	Training Date	Refresh Date	Authorised by	Signature
Oleg Petrenko	13/12/2021	13/12/2024	Martin Lees	

List of approved users

Name	Training Date	Refresh Date	Authorised by	Signature
Matthew Coak	30/11/2021	30/11/2024	Paul Goddard	
Shroya Vaidya	30/11/2021	30/11/2024	Paul Goddard	
Daniel Mayoh	13/12/2021	13/12/2024	Martin Lees	

George Wood	13/12/2021	13/12/2024	Martin Lees	
Manisha Islam	TBC			
Amelia Hall	13/12/2021	13/12/2024	Martin Lees	
David Jonas	09/12/2021	09/12/2024	Martin Lees	