



# SpectromagPT

Magneto-optical Cryofree<sup>®</sup>  
superconducting magnet  
system

# SpectromagPT Platform

## Features / Benefits

**SpectromagPT** is a split pair, horizontal field magneto-optical **Cryofree** superconducting magnet system. It provides optical access to a sample in a variable magnetic field and low-temperature environment.

- 7 T magnetic field in a compact geometry
- Experimental inserts suit many applications
- The sample can be quickly changed via a top-loading probe while the system is cold. No need for a complicated load-lock mechanism.
- Sealed circulation loop reduces the risk of contamination and blockages, increasing the continuous running period of this system
- Excellent optical access in the horizontal plane (both parallel and perpendicular to the magnetic field)

# Applications

## Magneto-Optical Effects

Enables investigations of Faraday effect, magneto circular dichroism and other high field optical effects.

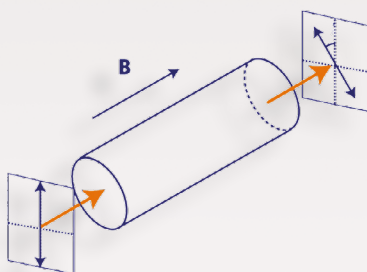
## Spectroscopy

Combining high magnetic fields with optical access for Raman magneto-spectroscopy and photoluminescence.

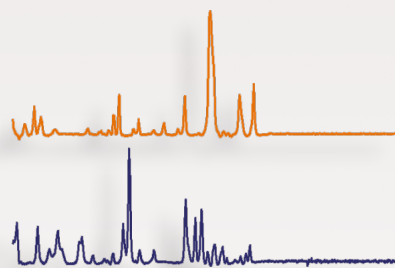
## Photonics

Characterisation of quantum dots and nano-devices for photonic applications.

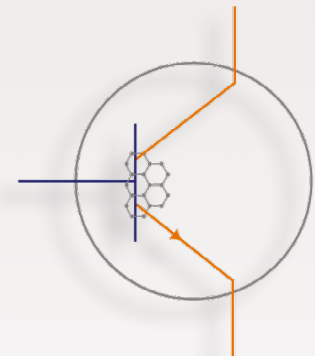
### Magneto-Optical Effects



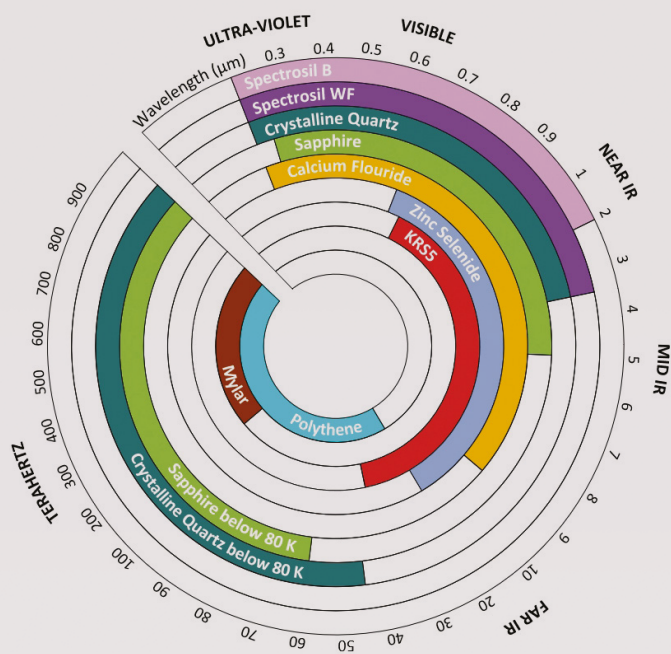
### Spectroscopy



### Photonics



# Window Materials



## Key Specifications

|   |  |
|---|--|
| Temperature range                                 | 1.6 K to 300 K   |
| Standard sample probe temperature stability       | ± 0.1 K  |
| System cooldown                                   | ~ 40 hours from room temperature to 4 K  |
| Standard sample probe cooldown                    | ~ 90 minutes from room temperature to < 2 K (probe loaded into cold variable temperature insert) |
| Magnetic field                                    | ≤ 60 minutes   |
| Variable temperature insert sample space diameter | 30 mm nominal  |



# Service Support

## Our support to you

Because Oxford Instruments is unique in designing and manufacturing the complete system, we offer unrivalled support and expertise for your SpectromagPT system through our regional Customer Support teams backed by unmatched factory expertise.

## Related Products



### MercuryITC

Cryogenic programmable intelligent temperature controller.



### Nanonis Tramea

Fully integrated measurement ready solution for quantum transport.



### Sample Protect

Protect sensitive samples from electrostatic discharge.

Visit <https://nanoscience.oxinst.com/products/spectromagpt> or email [nanoscience@oxinst.com](mailto:nanoscience@oxinst.com)

Main service locations: UK, USA, Germany, China, Japan and India

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