# HTS MAGNETS FOR NEUTRON SCATTERING



- Cryogen free
- Large optical access
- Compact design
- Fast ramping
- Low fringe field
- Polarisation analysis with symmetric split-pair

## **APPLICATIONS**

- Neutron diffraction
- Neutron reflectometry
- Small-angle neutron scattering (SANS)
- Neutron spectroscopy (TOF)
- Polarized neutron scattering

#### EASY TO USE

- Small fringe field
- No ceiling height constraints
- No refilling constraints
- Vibration tolerant
- Remote location of PSU and compressor if required
- Simple to operate, robust performance
- Magnet monitoring electronics ensure long-term reliability





**HTS-110** 1B Quadrant Drive, Waiwhetu Lower Hutt 5010, New Zealand +64 4 570 8880
info@hts-110.com
nz.linkedin.com/company/hts-110



# HTS MAGNETS FOR NEUTRON SCATTERING

#### PERFORMANCE AND VERSATILITY

- Cryogen-free with fast cool down
- Split-pair magnets with fields up to 12 tesla or more
- Room temperature bore or cold bore which can be integrated with variable temperature inserts
- Higher operating temperatures allow faster ramping than conventional Low Temperature Superconducting (LTS) magnets
- Passive or active shielding to minimize fringe fields
- Rigid supports allow any field orientation
- Asymmetric split-pair or Symmetric splitpair with passive shielding possible to move zero field nodes for polarization analysis
- Large room temperature apertures with no material in neutron beams to cause scattering background
- Ability to be goniometer mounted for rotation

## STANDARD SYSTEM INCLUDES:

- Magnet sub-system with integrated cryocooler
- Bipolar four-quadrant power supply
- Fast up/down field ramp
- Active magnet protection electronics and energy dump linked to integrated temperature sensors and voltage taps
- 1 year warranty







**HTS-110** 1B Quadrant Drive, Waiwhetu Lower Hutt 5010, New Zealand +64 4 570 8880
info@hts-110.com
nz.linkedin.com/company/hts-110

