

Characterization of magnetic, thermal, and electrical properties of materials

Measurements

Assistance on Experiment Design

Technical support

Scientific Reports

Technology Development

Technology transfer



Servicio General de Apoyo
a la Investigación - SAI
Universidad Zaragoza

Physical Measurements Service



Technology
Research
Innovation

Servicio de Medidas Físicas

Facultad de Ciencias. Edificio A, Planta Baja
C/ Pedro Cerbuna 12, 50009 Zaragoza-España

Phone: (34) 976762844

Fax : (34) 976761169

aaarauzo@unizar.es

<http://sai.unizar.es/medidas/indexEng.html>



Servicio General de Apoyo
a la Investigación - SAI
Universidad Zaragoza

Physical Measurements Service



Technology
Research
Innovation



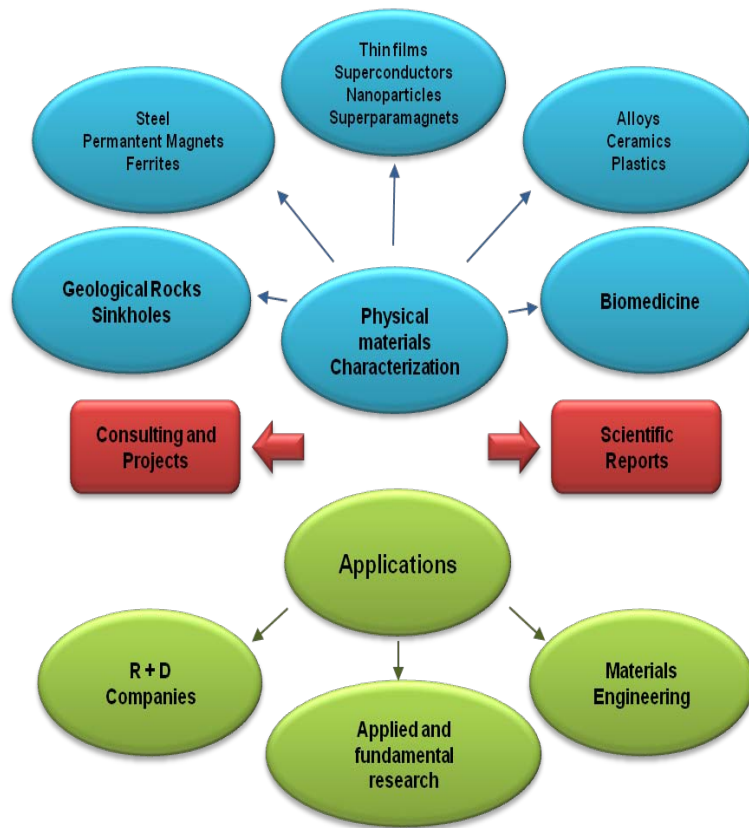
R+D Laboratory

Characterization of magnetic, thermal, and electrical properties of materials

Wide range of Temperatures and Magnetic Fields

Measurements
Assistance on Experiment Design
Technical support
Scientific Reports
Technology development and Transfer

R+D solutions suited for each user



Experimental facilities

Four automated user-friendly instruments are available:

MPMS-5T, MPMS-XL5, PPMS-9T and PPMS-14T

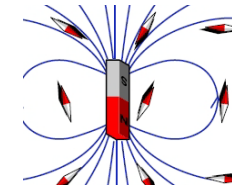
Options: oven, rotator, optic fiber, pressure, VSM

Temperature Range: 0.35 K to 1100 K

Magnetic Field Range: 0 to 14 T

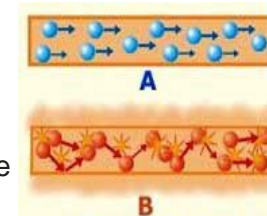
Magnetic Measurements:

- ✓ DC magnetization:
 - Extraction magnetometry (ACMS option)
 - SQUID magnetometry
 - VSM magnetometry
- ✓ AC magnetic susceptibility
 - SQUID magnetometry
 - ACMS Susceptometer
- ✓ AC permeability
 - AC closed magnetic flux permeameter
- ✓ Atomic Force Microscopy and Magnetic Force Microscopy
 - AFM/MFM (NanoScan Ltd.)
- ✓ Transverse susceptibility option
- ✓ Overhauser magnetometry



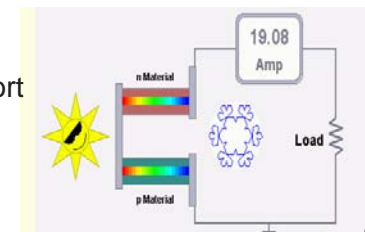
Electrical Measurements:

- ✓ DC resistivity
 - 4 contact resistivity
 - Hall
- ✓ AC transport
 - 4 contact impedance
 - I-V
 - Critical Current



Thermal Measurements:

- ✓ Heat capacity
- ✓ Thermal transport



Measurements and assistance.



Scientific Reports



Technology development and transfer