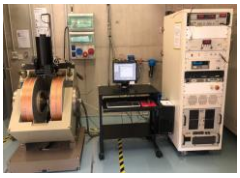
Our services

Magnetic measurement of thin films, nanoparticles and nanomaterials



YOUR NEEDS

- Characterize materials containing Co, Fe, Ni, rare earths, Characterize diamagnetic, paramagnetic, ferromagnetic, ferrimagnetic, antiferromagnetic and superconducting materials
- Measure magnetization
- Magnetic susceptibility measurement
- Measure magnetic permeability (low frequency AC and DC)
- Measure dynamic properties (dynamic magnetic susceptibility, gyromagnetic ratio, magnetic damping)
- Coercive field or magnetic anisotropy measurement
- Measure the Curie temperature
- To simulate the magnetic field generated by a magnetic or electrical system
- Carry out magnetic measurements as a function of magnetic field, temperature and field angle
- Carry out highly sensitive magnetic measurements
- To study different types of sample: polycrystalline or monocrystalline solids, thin films, powders, nanomaterials (nanoparticles, nanowires, nanotubes, etc.), liquids
- Measurement can be done from 2 to 1000 Kelvin
- Measurement cab be done between 0 and 9 Tesla

RELATED SKILLS

- Probe, control and functionalize the magnetism of matter
- Intermetallic compounds
- Nanofabrication
- Thin film deposition and characterization
- Growth of nanomaterials
- Chemical characterization (Spectroscopies, etc.)
- Structural characterization (AFM, TEM, XRD, etc.)
- Electrical measurements
- Numerical simulation and scientific calculation

OUR SOLUTIONS

- Magnetic measurement consultancy (dedicated engineers and researchers)
- Machine training and then lending one of our 9 magnetometers (VSM, SQUID, Susceptometer)
- Measurement service with one of our 9 magnetometers (VSM, SQUID, Susceptometer)
- Realization of a partnership R&D project
- Magnetic field simulation (FEMM, COMSOL)
- Lifelong learning in the field of magnetic measurement (magnetometry)
- If necessary, linking up with other centers in the networks of national and European magnetometry
- Our offers are eligible for Research Tax Credit

OUR REFERENCES

KEYWORDS

Magnetism, Magnetic Characterization, Magnetization, Susceptibility, Permeability, Curie Temperature, Coercive Field, Magnetic Field

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