



# **Our skills**

Study of the crystallochemical, magnetic and magnetocaloric properties of hybrid materials and intermetallic compounds





### YOUR NEEDS

- Intermetallics or MOFs Synthesis
- Characterization of crystallochemical and magnetic properties

# **RELATED SKILLS**

- Magnetic measurements
- Structural and microstructural characterization
  Electronic microscopy
  - X-ray diffraction

## **OUR SOLUTIONS**

- Fundamental studies of the crystallochemistry and magnetic properties of hybrid materials and intermetallic compounds (low dimensional systems, exotic magnetism, frustrated magnetism, intermediate valence materials)
- Magnetocalorific materials for refrigeration, heat pump and heat conversion applications
- Mössbauer spectronomy transmission and reflection
- X-ray diffractometer for monocrystals and polycrystals
- PPMS 9T (Cp measurement, AC and DC magnetic measurements, DC electrical measurements)
- Magnetic balance
- 2 glove boxes
- Hydrothermal bombs
- HF ovens
- Vacuum stations

# **KEYWORDS**

Hybrid materials, intermetallic compounds, magnetocalorific materials, synthesis, crystal chemistry, magnetism, magnetocalories, layered compounds, magnetic properties, magneto-structural correlations, neutron-diffraction, inorganic skeletons, powder diffraction, crystal-structure, refrigeration, haldane-gap antiferromagnetic, synchrotron

### OUR REFERENCES







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