

OPEN POSTDOC POSITION



The [New Materials Design Group](#) at the [IMPMC](#) laboratory of the [Sorbonne University](#) and the [Optical Conductivity Group](#) of the [LPEM-ESPCI](#) laboratory in Paris, France, have a 18-months postdoc position opening for a research project on:

“**Novel metastable phases of multiferroic materials**” involving:

- high-pressure synthesis and in situ X-ray diffraction
- optical conductivity studies

This position is funded by the [MATISSE](#) Laboratory of Excellence. The annual net salary amounts to around 35,000 €. Preferred starting date is not later than **October 1st, 2018**.

The selected candidate will work closely with a diverse group of scientists, engineers and PhD students. Interpersonal communication and teamwork are important elements of this work environment.

The successful candidate will be required to:

- Use of static high-pressure large volume press, *e.g.* Paris-Edinburgh and/or multi-anvil press, techniques to perform high-pressure synthesis of single crystals of transition-metal oxides.
- Perform *in situ* study of P - T phase diagrams by means of synchrotron X-ray diffraction.
- Perform extensive optical conductivity temperature-dependent studies on single crystals and complementary physical property measurements in order to investigate the magnetoelastic coupling in the above transition-metal oxides.
- Work with a group of scientists, engineers, postdocs and students to maintain and advance the above press platforms and associated diagnostics.
- Report experimental results by publishing and attending scientific conferences.
- Performing work in a safe and secure manner.
- Mentor students and other junior team members.

Minimum Job Requirements:

- Strong background in large-volume press and optical conductivity techniques.
- Ability to independently perform structural refinements from x-ray and/or neutron diffraction measurements and interrelated experience with common analysis tools (FullProf, GSAS, Fit2D, Jade, and other software).
- Experience with common data acquisition tools: Labview, oscilloscopes, precision voltage current source instruments, detectors, etc.
- Ability to explain and present technical issues, both verbally and in written form, to an audience with various technical backgrounds.

Education: PhD in condensed matter physics, materials science and relevant experience or closely associated scientific field.

Contact: please submit a detailed cover letter to Professor Andrea Gauzzi (andrea.gauzzi@upmc.fr) with your resume addressing all required and desired skills and save the cover letter with the name “Matisse2018_postdoc_yourname”.