



Beamline Scientist II (90922)
For the EMA and XDS beamline at the SIRIUS and LNLS

Function Description:

The extreme condition research group of LNLS has an immediate open Scientist position for an outstanding experimentalist in high-pressure/temperature and materials research. The successful candidate should be heavily involved in the design and implementation of the EMA beamline at the Sirius Synchrotron (under construction). This beamline is intended for spectroscopy (XAS/XMCD/XES), scattering (XRD/XRS) and imaging (B-CDI) experiments under extreme pressures by taking advantage of submicron beamsizes (down to $0.1 \times 0.1 \mu\text{m}^2$) with high photon flux (up to 10^{14} ph/s). In addition, the scientist must develop his/her own research activities and supervise students and post-docs. He/she also must be involved in high pressure/temperature experiments at our current 2nd generation synchrotron in order to prepare the instrumentation and the Latin American community to take advantage of state-of-the-art instrumentation when Sirius is ready.

Qualifications and experience:

We are looking for a creative, self-motivated individual, who has the ability and interest to pursue challenging, interdisciplinary problems in a fast paced research environment. Applicants must have a Ph.D. degree in physics, chemistry, materials science, earth science, biophysics, engineering, or a related field.

Post-doc experience in the field is desirable but not obligatory.

The successful candidate should meet some of the following qualifications (although quick learning scientist with expertise in other areas could be considered in exceptional cases):

- Synchrotron x-ray diffraction and/or spectroscopy;
- Experience with micro and/or nano focused x-ray beamsizes;
- Bragg Coherent Diffraction Imaging
- X-ray Raman Scattering (Inelastic X-ray Scattering) and/or x-ray emission spectroscopy;
- High pressure experiments in diamond anvil cells;
- Commissioning/operation/use of a synchrotron hard x-ray Beamline.

Interested, please send CV, cover letter and letter of appointment to elisa.turczyn@lnls.br

In the subject line put "90922", otherwise the CV and other documents will be disregarded.