

PhD in chemical crystallography

A PhD position in chemical crystallography is available at the University of Bern (Department of Chemistry and Biochemistry), in the group of PD Dr. Piero Macchi.

The specific subject of the PhD thesis depends on the profile of the candidate. The main research subjects of the group are:

- a) determination and analysis of the electron density distribution in solids and correlation with materials properties;
- b) determination of crystal structures at non ambient conditions, especially at high pressure.

For both subjects, the research involves <u>X-ray diffraction at variable pressure</u> <u>or temperature</u>, using laboratory and synchrotron radiation sources, and <u>theoretical modeling</u> using *ab initio* quantum mechanical techniques.

The Candidate

The ideal candidate holds a <u>Master of Science in Chemistry or Physics</u>, with a strong background in <u>solid-state physical chemistry</u>. Previous experience with <u>X-ray diffraction</u> or <u>Computational Chemistry</u> would be an asset, but it is not mandatory. The candidate should be fluent in <u>English</u> and possibly in German.

The Position

The candidate will attend the PhD School of *Chemistry and Molecular Science* at the University of Bern. The salary scheme is very competitive.

The position is available immediately and applications are welcome until the position is filled.

A detailed CV and names of at least two scientists for reference should be sent to:

Piero Macchi, *Laboratory of Chemical Crystallography*, University of Bern, Freiestrasse 3, CH-3012 Bern (Switzerland), piero.macchi @dcb.unibe.ch