*Laboratory of Chemical Crystallography*
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# Ph.D. on High pressure synchrotron studies in molecular crystals

A Ph.D. position is available within an on-going project on *Chemical bonding and reactions in molecular crystals at high pressure*, a joint collaboration between the Paul Scherrer Institute (SLS-Material Science beamline) and the University of Bern (Department of Chemistry and Biochemistry).

***The Project***

The research involves X-ray diffraction at variable pressure and temperature. Method development and beamline use at the Swiss light source (SLS), a third generation synchrotron facility, is integral part of the Ph.D. project and a unique tool for delivering its goals.
The project will focus on:

a) Materials response to high pressure
b) Pressure induced modifications of chemical bonds and molecular activations, up to reactivity
c) Structure-property correlation at high pressure.

**The Candidate**

The ideal candidate holds a Master of Science in *Chemistry* or *Physics*, with a strong background on solid state physical chemistry. Previous experience with high pressure techniques and/or X-ray diffraction would be an asset, but it is not mandatory.
The candidate must be fluent in English, German is a further asset.

***The Position***

The candidate will attend the PhD School of *Chemistry and Molecular Science* at the University of Bern, while most hands-on work will take place at the Swiss Light Source (Villigen – PSI). The position is available immediately. The salary scheme is very competitive. Applications will be accepted until the position is filled. A CV and names of 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
and/or
**Nicola Casati**, *Swiss Light Source Powder Diffraction Station*, Paul Scherrer Institute, 5232 Villigen PSI (Switzerland)
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