

## Ph.D. position at Heidelberg

A Ph.D.-student position in geoscience/mineral physics is available at the University of Heidelberg from 01.01.2007 (salary according to 1/2 BAT IIa, for 3 years) on the subject of pressure-induced modifications of minerals exposed to relativistic heavy ions at extreme conditions.

Aim of the project is to understand the influence of energetic heavy ions on structural transitions of mineral phases to high-pressure polymorphs. A particular focus will be how the interactions between heavy ions and crystal lattices trigger mineral transformations on a nanoscale. Heavy-ion irradiation experiments will be performed at GSI using diamond-anvil cells and a Paris-Edinburgh high-pressure cell, which is supposed to be set up in 2007. Material analyses and nanostructure investigations by means of Raman spectroscopy, XRD, SEM, TEM and AFM complete the scope of the studies. The project is part of a collaboration between geoscientific research groups of the University of Heidelberg (Prof. R. Miletich <http://mineralogie.uni-hd.de/>, PD Dr. U.A. Glasmacher, <http://www.thermo-archaeo.uni-hd.de>) and the Materials Research Department of the Gesellschaft für Schwerionenforschung GSI, Darmstadt (Prof. R. Neumann, [www.gsi.de](http://www.gsi.de)). Working places are at Heidelberg and Darmstadt.

The successful candidate should have experience with performing experiments. A well-founded background in physics is essential. Expertises in the use or setup of high-pressure instruments are welcome but not prerequisite.

We invite interested candidates with a diploma (MSc) in mineralogy/crystallography, experimental physics or materials science to send an application (including a curriculum vitae, copies of diplomas and the name of a referee) by e-mail to:

Prof. Ronald Miletich

([miletich@min.uni-heidelberg.de](mailto:miletich@min.uni-heidelberg.de), +49 6221 548216)

or

PD Dr. Ulrich A. Glasmacher ([ulrich.a.glasmacher@urz.uni-heidelberg.de](mailto:ulrich.a.glasmacher@urz.uni-heidelberg.de), +49 6221 544866)

Applications will be considered until the position is filled.

---

Ronald Miletich  
Mineralphysik und Strukturforschung,  
Mineralogisches Institut, Universität Heidelberg

Im Neuenheimer Feld 236, D-69120 Heidelberg  
<http://www.mineralogie.uni-hd.de>  
[miletich@min.uni-heidelberg.de](mailto:miletich@min.uni-heidelberg.de)  
+49-(0)6221-54 8216, Fax 4805  
La via as sparta at ferma pedun pilia la dretta direcziun  
(Die Strassen teilen sich, Wanderer, nimm den richtigen Weg)