

At the University of Bremen, Germany, a PhD position will be available from March 1<sup>st</sup>, 2015, for a duration of 3.5 years. The position will be embedded within the quantum crystallography group headed by Dr. Simon Grabowsky, and is announced as

Research Associate (salary level TVL 13),  
payment at 67% of the full weekly working time (26.3 hours).

Tasks include research within the DFG project “Advancing Quantum Crystallography: Visualisation and Characterisation of Chemical Reactions via Diffraction Experiments” (funded within the Emmy-Noether programme) and the preparation of a dissertation based on the conducted research.

The project involves crystallisation experiments and single-crystal diffraction at synchrotron sources, but mainly computer-aided analysis of the diffraction data yielding the molecular electron density and the fitted experimental wavefunction. With these methods chemical questions dealing with the nature of bonding in hyper- and sub-coordinated molecular silicon compounds are to be tackled. However, the project allows flexibility of the research direction in consultation between PhD candidate and supervisor.

Applicants must have a masters or diploma degree – or equivalent – in chemistry or physics (or a closely related field). Advanced English speaking and writing skills are a prerequisite. Well-founded knowledge of crystallography and quantum chemistry as well as solid computer skills (including Linux operating systems and programming) are desirable.

The University of Bremen is a medium-sized German university with ca. 250 professorships and ca. 19,000 students. The success of its research strategy was recently reflected with its selection by the German Excellence Initiative as one out of only 11 German universities.

Applications from female candidates and applications of academics with a migration background are explicitly welcome. Disabled candidates with the same professional and personal qualifications will be given preference.

The application should comprise a cover letter including a statement describing the applicant's research and technical background as they relate to the position, an academic graduation diploma (a preliminary one if necessary), a transcript of records, a curriculum vitae, and a letter of support written by the supervisor of the final thesis. Documents can be sent by mail or e-mail (in a single pdf document) to the below address. Deadline for application is January 31<sup>st</sup>, 2015. Please refer to reference no. A195/14.

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For further questions or more information please contact us under tel. +49 (0)421 218 63152 or via e-mail. Please do not send originals because documents will not be returned, but all documents will be destroyed after the selection process.