Paderborn University is a high-performance and internationally oriented university with approximately 18,000 students. Within interdisciplinary teams, we undertake forward-looking research, design innovative teaching concepts and actively transfer knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our round about 2,600 employees in research, teaching, technology and administration a lively, family-friendly, equal opportunity environment, a lean management structure and diverse opportunities.

Join us to invent the future!

The Faculty of Natural Sciences - Department of Chemistry - is seeking to fill two positions as a

**PhD student (f/m/d)**

(Salary level 13 TV-L)

at 50% of regular working hours as soon as possible. This is a qualification position within the meaning of the Wissenschaftszeitvertragsgesetz (WissZeitVG), which serves to pursue a doctoral project in the field of chemistry. The position is to be filled for the duration of the doctoral project, depending on the qualification achieved to date, but generally for a period of 3 years. An extension to complete the doctorate may be possible within the time limits of the WissZeitVG.

**Responsibilities:**

- Performing and evaluating atomistic computer simulations of complex liquid mixtures (such as cellulose in ionic liquids) on high-performance computing (HPC) systems
- Support of method development (e.g. prediction of vibrational spectra) and software development (TRAVIS, CP2k)
- Preparation of scientific manuscripts and publications, assistance in the preparation of scientific project proposals
- Teaching commitment of usually 2 hours/week (SWS)
- Engagement in academic self-administration

**Requirements:**

- University degree in chemistry, physics, computer science, etc.
- Strong interest in independent scientific work and in the field of theoretical chemistry
- Good knowledge of German and English language (written and spoken)
- Ability to work in a team

Furthermore desirable *(optional)*:

- Basic knowledge of a programming language
- Initial experience with quantum chemical calculations or atomistic simulations
- Experience in working with Linux systems and/or the administration of such systems

**Research topics of the group:** See [https://brehm-research.de](https://brehm-research.de).

Since Paderborn University seeks to increase the number of female scientists, applications of women are especially welcome. In case of equal qualification and scientific achievements, they will receive preferential treatment according to the North Rhine-Westphalian Equal Opportunities Policy (LGG), unless there are cogent reasons to give preference to another applicant. Likewise, applications of disabled people with appropriate qualification are explicitly requested. This also applies to people with equal status according to the German social law SGB IX.

Applications with the usual documents are requested until 15.03.2024, preferably in electronic form, quoting reference number 6334, to [martin.brehm@uni-paderborn.de](mailto:martin.brehm@uni-paderborn.de).

Information regarding the processing of your personal data can be located at: [https://www.uni-paderborn.de/en/zv/personaldatenschutz](https://www.uni-paderborn.de/en/zv/personaldatenschutz)

Prof. Dr. Martin Brehm
Faculty of Science
University of Paderborn
Warburger Str. 100
33098 Paderborn

[www.upb.de](http://www.upb.de)