



PhD and Postdoc Positions in Theoretical Chemistry at the University of Fribourg in Switzerland

Our new Laboratory of Theoretical Chemistry led by <u>Stefan Vučković</u>, and funded by the <u>SNSF Starting Grant</u>, seeks candidates for one PhD and one postdoc position. The successful candidate will be part of a dynamic, interdisciplinary lab working on cutting-edge quantum chemistry research with an emphasis on the development of next generation of density functional theory (DFT) methods and their application to challenging chemistry. This project will build upon a recently developed novel paradigm for the construction of next-generation of DFT methods, designed to tackle the long-standing challenge of strong electronic correlations and improve the description of non-covalent interactions. Vučković's lab is hosted by the <u>Department of Chemistry</u>, at the <u>University of Fribourg</u> (UNIFR), situated in the city of Fribourg, where French-speaking and German-speaking parts of Switzerland meet (Fribourg is 20 minutes by train from Bern and 40 minutes from Lausanne).

Postdoc. We search for an independent thinker holding a PhD in Chemistry, Physics, or Mathematics with expertise in computational chemistry. The ideal candidate should have a strong background in quantum-chemical methods (DFT or wave-function), and practical experience in running chemical simulations is a plus. A passion for transforming quantum chemistry through the development of next-generation methods and their application to challenging chemistry is essential. The postdoc position is fully funded for 2 years, with a possible 2-year extension.

PhD student. We search for a candidate with a Master's degree in Chemistry, Physics, or a related field. Coding skills (e.g., Python) and previous experience with theoretical and/or computational chemistry are desired. PhD positions are fully funded for 3 years, with a possible 1-year extension.

We offer. The positions are funded by the Swiss National Science Foundation (SNSF). We offer a relaxed, stimulating, friendly and interdisciplinary work environment, with excellent working conditions (salary, project resources). The selected candidates will benefit from strong international collaborations and extensively work with leading researchers in the field. The proximity of UNIFR to the CECAM headquarters in Lausanne, where multiple workshops and schools in computational science are held every year, provides further opportunities for networking. Finally, should the successful candidates decide to continue with their academic careers, they will have their advisor's full support in obtaining independent funding (e.g., after the completion of the present fellowship, the postdoc can apply for SNSF" Ambizione to start their own group, while the PhD student can apply for the SNSF" Ambizione to start their own group, while the PhD student can apply for the SNSF" S Postdoc.Mobility).

The starting date of April 1, 2023 is preferable, but there is flexibility with the starting date. can be arranged. **Join us in making a big impact on chemistry and material science as we transform quantum chemistry!** To apply, please send a CV, a brief (preferably non-generic) cover letter (description of previous experience + motivation) and the names of two references to stefanvuckovic1@gmail.com.

For more specific information about the project and the positions, please contact me at the same email.