The Chair of Theoretical Chemistry offers, subject to resources being available, a position as

Research Associate/ PhD Student

(Subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting as soon as possible. The position entails 65 % of the fulltime weekly hours. The position is limited until 30.06.2024. The period of employment is governed by Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). The position offers the chance to obtain further academic qualification (e.g. PhD).

Tasks: The successful candidate will investigate the electronic, optical, and electrical transport properties of various two-dimensional materials and heterostructures under the influence of strain fields using density-functional based methods. More specifically, she/he will investigate mono- and multilayer systems which are strained such that wrinkles or ripples are formed. Understanding the formation of these wrinkles in detail and unravelling the interrelation between the structure/morphology and the electronic properties are the main objectives of this project. The work will be embedded in the Collaborative Research Centre 1415 “Chemistry of Synthetic Two-Dimensional Materials” and involves close collaboration with experimental and other theory groups, and strong commitment to scientific networking.

Requirements: university degree (M. Sc. or equivalent) in chemistry or physics, and profound knowledge in computational and theoretical physics/chemistry. Capability of team work, in particular with experimental partners, is essential. Skills in high-performance computing, solid-state materials, topological properties, and density-functional theory (and FHI-aims in particular) are welcome.

What we offer: We offer a position with a competitive salary in one of Germany's most attractive research environments. TU Dresden is one of eleven German Universities of Excellence and provides outstanding working, research, and networking possibilities. The position will be in the group of Dr. Thomas Brumme at the Chair of Theoretical Chemistry which is headed by Prof. Thomas Heine and where ~25 researchers from 9 nations works interdisciplinary in the fields of computational materials science, theoretical and computational chemistry/physics, and physics of low-dimensional materials. It maintains strong ties with the local experimental groups of TU Dresden and the institutes of the DRESDEN-concept environment. The chair hosts its own computer cluster and has full access to the high-performance computing infrastructure at ZIH Dresden, one of Germany's leading HPC centres. Dresden, the capital of the State of Saxony, is a city with a beautiful historical city centre and offers a high standard of living with high ratings in housing, safety, and healthcare.

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your comprehensive application including the usual documents by 07.07.2020 (stamped arrival date of the university central mail service applies) by mail to: TU Dresden, Fakultät Chemie und Lebensmittelchemie, Professur für Theoretische Chemie, z.H. Dr. Thomas Brumme, Helmholtzstr. 10, 01069 Dresden or via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf-document to antje.voelkel@tu-dresden.de. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis