

We are a young, innovative university located in the heart of the Ruhr metropolis. We pride ourselves in outstanding research and teaching, think in terms of opportunities rather than limitations and develop ideas with a view to the future. Diversity is an integral part of our culture as we promote potential and are committed to upholding genuine equity in education.

The University of Duisburg-Essen (UDE), Campus Duisburg, Faculty of Physics, offers a

**Post-Doc position (f/m/x)
(Pay Scale 13 TV-L, full time),**

Reference: 399-23

The Faculty of Physics offers research-oriented education and is participating in several collaborative research centers of the German Research Foundation (DFG). More than 30 faculty members, 12 of them in theoretical physics, represent a diverse research program with focus on condensed matter physics.

Your tasks

- Conducting research in methodical developments and conducting ab initio simulations of excited electronic states
- Collaboration in the DFG-funded projects CRC 1242 and the International Research Training Group GRK 2803 "Scalable 2D-Materials Architectures"
- You enjoy teaching in the Bachelor and Master programs in physics and instructing students in their final theses and doctoral projects

Qualifications required

- Ph.D. degree in physics or theoretical chemistry, preferentially in the area of computational condensed matter physics or computational materials science
- Documented experience in methods of atomistic quantum simulations of the electronic structure of low-dimensional systems, surfaces or interfaces
- German language skills (at least B1) or very good English language skills for teaching courses
Acquaintance with computers running under Unix/Linux and programming skills in Python, C or Fortran are required
- Experience with codes for density functional theory calculations (VASP, Quantum Espresso, FHI-aims) and/or methods for treating electronically excited states (e.g. GW, TDDFT) would be ideal

Opportunities for further scientific qualification are offered within this position.

We offer

- An intellectually stimulating environment and international network
- An interesting, responsible job with great creative potential
- A pleasant, open-minded working environment in a dynamic team with respectful cooperation
- Family and childcare services
- Access to further education and the opportunity to participate in university sports and health programs
- A very good public transport connection and free parking spaces
- The possibility to work from home

Start of Employment **November 1, 2023**

Duration of Employment **2 years**

Working time **39 h 50 m (100%)**

Application Deadline **August 3, 2023**

Please send your application as a single document (CV, motivation letter, certificates/transcripts of your academic degrees, names of references) via e-mail to Prof. Peter Kratzer, University of Duisburg-Essen, Faculty of Physics, 47048 Duisburg, phone +49-203-379-3313, e-mail: peter.kratzer@uni-due.de, quoting reference number **399-23**.

For information about the faculty please refer to <https://www.uni-due.de/physik/kratzer/>

University of Duisburg-Essen pursues the goal of promoting the diversity of its members. (<https://www.uni-due.de/diversity>).

In accordance with the State Equal Opportunities Act, women with the same qualifications are given preferential consideration. Applications from suitable disabled persons and persons of equal status within the meaning of § 2 para. 3 SGB IX are desired.

By applying the advertised position, you expressly agree to the requirements in accordance with the General Data Protection Regulation and to being contacted by mail. Further information on data protection can be found here: <https://www.uni-due.de/imperia/md/content/dokumente/2023/ude-datenschutz-bewerberinnen.pdf>

