

We are one of the youngest universities in Germany and think in terms of possibilities, not limitations. In the heart of the Ruhrregion, we develop ideas of the future at our 11 faculties. We are strong in research and teaching, live diversity, support potential and are highly committed to an educational equality that has earned this name

The **University of Duisburg-Essen**, Faculty of Physics at the Campus Duisburg, experimental physics invites applications for a position of

Research Assistant

(Payment according to Grade E 13 TV-L)

Our Profile:

In the field of thin film photovoltaics with a focus on multi-optical concepts for chalcopyrite solar cells we are seeking a physicist (PhD) for our work on optical, electrical and thermal simulations of realistic solar energy devices.

Main tasks:

Our current focus of optical simulations bases on both analytical (Mie theory, scattering matrix formulation) and numerical (finite-element method - FEM) approaches to simulate nanostructures and thin-film stacks. Combined models allowing for the description of coupled effects shall address optical, electrical and thermal properties as well as nano- and macro-scales. We expect the candidate to be a reliable expert for our theoretical and computational questions, who is able to interact well with group members of various backgrounds as well as with cooperation partners. The close link between theory and reality/experiment is one of our major aims. Contribution to teaching obligations and supervision of students will enrich the job. The work allows for further qualification in the scientific field.

Your Profile:

- Excellent academic degree (PhD) in physics or closely related field providing profound background in solid state physics to address optical, electrical and thermal properties of matter
- In-depth experience with analytical and numerical methods as outlined above, in particular FEM (Comsol Multiphysics)
- Highly independent working behavior balanced with excellent team player skills and the ability to conduct and accompany theoretical investigations

- Background knowledge in nano- and microoptical concepts and light management for preferably energy materials
- Sound knowledge in programming (z.B. Matlab)
- Very good speaking and writing abilities of English language

We offer:

- Active participation in the development and the advancement of interesting research areas
- Further qualification and participation in research projects
- Pleasant and open minded working atmosphere

Starting date: **as soon as possible**

Duration: **2 years**

Working time: 100 percent of a full-time appointment

Application deadline: **24.01.2018**

The University Duisburg-Essen aims at promoting the diversity of its members (see <http://www.uni-due.de/diversity>).

It aims at increasing the share of female faculty members and therefore explicitly encourages women to apply. Women with equal qualifications will, in accordance with state equality legislation, be given priority.

People with disabilities are encouraged to apply (see § 2 Abs. 3 SGB IX).

Please send your application with the usual documents, citing the code 423-17 to Prof. Dr. Martina Schmid, Fakultät für Physik, University of Duisburg-Essen, Fakultät für Physik, 47048 Duisburg, E-Mail: martina.schmid@uni-due.de. Applications per E-Mail are preferred.

Please find more information concerning the faculty and the opening at:

