

Research associate (f/m/d) in the field of physics, chemistry or materials science

Part-time 50 %

Job description

As part of the CRC 1441 TrackAct, you will use state-of-the-art UHV equipment for the controlled synthesis of well-defined model catalysts, which consist of size selected Pt-, Pd- and Pt-Pd clusters on different substrates. The catalytic activity of the as prepared catalysts will be characterized using an in situ chamber directly connected to the cluster deposition system. Additional methods such as scanning probe techniques and other surface analysis will be employed to characterize the morphology and surface properties of the deposited clusters. The catalytic performance, measured using model reactions, will be correlated to the cluster size, deposition energy, etc. In addition, samples for detailed TEM studies will be prepared. It is expected that the successful candidate will closely collaborate with the other projects in CRC 1441.

In addition to the scientific activity, there is the possibility of a part-time doctorate.

Personal qualification

You have a university degree (diploma (university)/ master's) of physics, chemistry or materials science and technical knowledge in the field of ultra-high vacuum. Basic knowledge in the field of physics, chemistry and material sciences, possibly in catalysis, is a prerequisite. Analytical skills to solve physical and technical problems, good English skills as well as the ability to work in a team complete your profile.

Salary

Salary category 13, depending on the fulfillment of professional and personal requirements.

Organizational unit

Institute of Nanotechnology (INT)

Starting date

asap

Contract duration

3 years

Application up to

end of April 2021

Contact person in line-management

For further information, please contact Prof. Dr. Hahn, phone 0721 608-26350.

Application

Please apply **online** using the button below for this vacancy number 111/2021.
Personnel Support is provided by

Ms Winkels
phone: +49 721 608-25011,

Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany

We prefer to balance the number of employees (f/m/d). Therefore, we kindly ask female applicants to apply for this job.

Recognized severely disabled persons will be preferred if they are equally qualified.