

# Job advertisement

Vacancy ID: 027/2021

Closing date: 25 February 2021



FRIEDRICH-SCHILLER-  
UNIVERSITÄT  
JENA

Friedrich Schiller University is a traditional university with a strong research profile rooted in the heart of Germany. As a university covering all disciplines, it offers a wide range of subjects. Its research is focused on the areas Light–Life–Liberty. It is closely networked with non-research institutions, research companies and renowned cultural institutions. With around 18,000 students and more than 8,600 employees, the university plays a major role in shaping Jena's character as a cosmopolitan and future-oriented city.

The Otto Schott Institute of Materials Research seeks to fill the position of a

## Junior Group Leader “Theory and simulations of stimuli-responsive inorganic/hybrid materials” (m/f/d)

commencing on or before 01 April 2021.

Funded by the Carl Zeiss Foundation within its Breakthrough Program, the Friedrich Schiller University Jena has been establishing a coordinated research centre on stimulus-responsive hybrid materials. Thereby, understanding the mechanism of stimulus response in inorganic and hybrid material systems (functional glasses, mesoporous materials, hybrid crystals) through theoretical methods and computer simulations is of key importance. The junior group leader is expected to establish a competitive research team with a focus on machine learning and ab initio approaches for predicting the mechanical, electrical and optical response of such materials under the influence of external stimuli (e.g., temperature, pressure, light). The successful candidate will occupy a central role in a vibrant environment of materials scientists, solid state physicists, chemists and experts in computational materials science.

### Your responsibilities:

- Develop a research agenda in the area of modelling and simulations of stimulus-responsive hybrid and/or inorganic materials, with a focus on efficient machine learning and ab initio approaches
- Conduct interdisciplinary research and discovery at the frontiers of computational materials science
- Supervise and support young researchers on graduate and undergraduate level
- Develop a junior research group using external as well as internal funding sources
- Work on an academic scientific qualification e. g. in the field of science management

### Your profile:

- An excellent Ph.D degree in theoretical chemistry, computational physics or materials science
- Relevant experience on the areas of machine learning, computational materials science, theoretical chemistry and physics, programming and methods development
- Experience in applications/development of ab initio or density functional theory methods and machine learning approaches for simulations and predictions of material properties
- Leadership skills and the ability to forge a creative and highly motivated team of scientists, foster collaboration and diversity



**We offer:**

- Attractive start-up funding, including funds for initially two Ph.D student positions to become part of the group.
- Remuneration based on the provisions of the Collective Agreement for the Public Sector of the Federal States (TV-L) at salary scale TV-L E14 - depending on the candidate's personal qualifications -, including a special annual payment in accordance with the collective agreement.
- Opportunities to participate in diverse theoretical and experimental research projects with a strongly interdisciplinary nature.
- Access to state-of-the-art computing infrastructure, contacts to collaboration partners at EU's leading large-scale research facilities.
- A family-friendly working environment with a variety of offers for families: University Family Office 'JUniFamilie' and flexible childcare ('JUniKinder).

The position is initially limited until 31 March 2025. Subject to an evaluation of scientific achievements by the third year, a further extension is foreseen for two years.

This is a full-time position (40 hours per week).

Candidates with severe disabilities will be given preference in the case of equal qualifications and suitability.

Are you eager to work for us? Then submit your detailed written application, preferably by email (one PDF file), stating the vacancy ID 027/2021 by 25 February 2021 to:

**Prof. Dr. Marek Sierka**  
**Otto Schott Institute of Materials Research**  
**Löbdergraben 32**  
**07743 Jena, Germany**

or by email to:

**[marek.sierka@uni-jena.de](mailto:marek.sierka@uni-jena.de)**

Since all application documents will be duly destroyed after the recruitment process, we ask you to submit only copies of your documents.

For further information for applicants, please also refer to [www.uni-jena.de/Job portal \(in German\)](http://www.uni-jena.de/Job_portal_(in_German)).

Please also note the information on the collection of personal data at

[https://www4.uni-jena.de/en/jobs\\_information\\_collecting\\_personal\\_data-path-18,27.html](https://www4.uni-jena.de/en/jobs_information_collecting_personal_data-path-18,27.html).