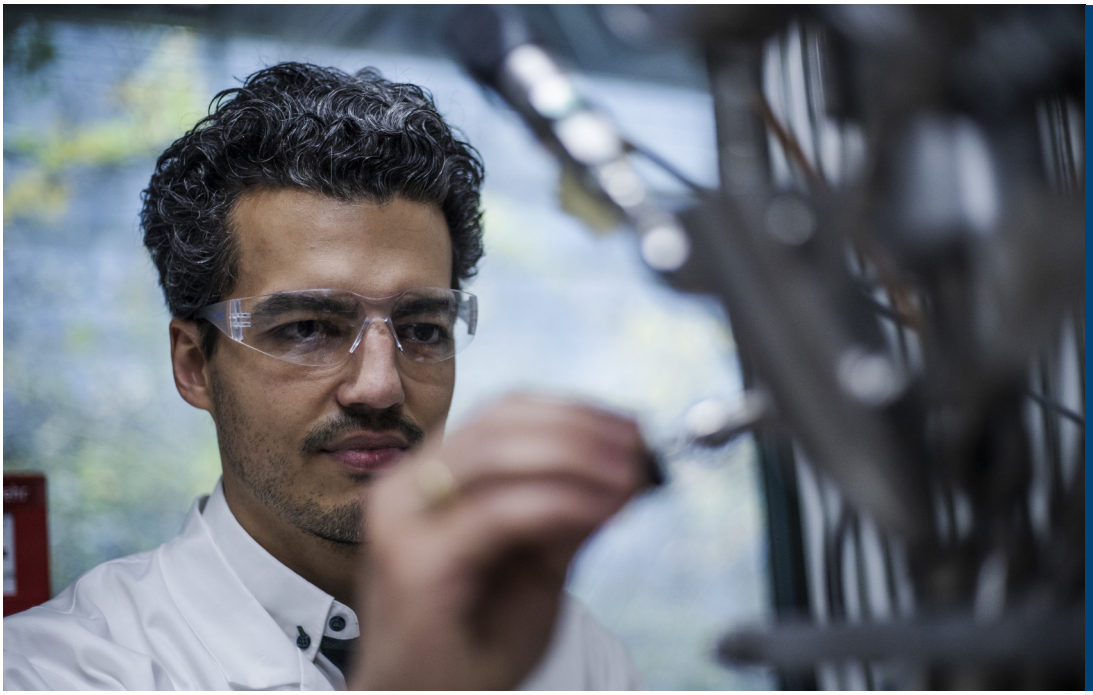

Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. As a member of the Helmholtz Association, we aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and a resource-efficient economy. Work together with around 7,500 employees in one of Europe's biggest research centres and help us to shape change!

Would you like to contribute to the energy transition in Germany through your work? Then the Helmholtz Institute Erlangen-Nürnberg for Renewable Energy (HI ERN) is the right place for you! The HI ERN forms the core of the close partnership between Forschungszentrum Jülich, Helmholtz-Zentrum Berlin for Materials and Energy, and Friedrich-Alexander-Universität Erlangen-Nürnberg at the Erlangen site. The collaboration relates to the areas of innovative materials and processes for photovoltaic energy systems and hydrogen as a storage and carrier medium for CO2-neutral energy. Support us researching and developing solutions for the climate-neutral, sustainable, and cost-effective utilization of renewable energies. For more information on HI ERN and its main research areas, please visit https://www.hi-ern.de

Join our team to the next possible date as

PhD Position - Development of New Methods for Solar Cell Recycling

Your Job:
The Sustainable Photovoltaics group at HIERN is looking for two PhD students to support the work in the ChemPRINT Collaborative Research Center, for the Implementation of the project work in the ChemPRINT project.
Research in the Sustainable Photovoltaics group focuses on the development of solar cells and modules with improved recyclability. Further information can be found at https://www.sustainable-pv.de

The aim of the project is the integration and selective detachment of ultra-thin layers in solar cells for better recycling, as well as the development of controllable processes for the detachment of layers and layer stacks at interfaces (photo-switching). The work is carried out in close cooperation with the Interdisciplinary Center for Nanostructured Films (IZNF).

Your tasks in this context include:

The job will be advertised until the position has been successfully filled. You should therefore submit your application as soon as possible. We look forward to receiving your application via our **Online-Recruitment-System!**

Questions about the vacancy?
Get in touch with us by using **our contact form.**
Please note that for technical reasons we cannot accept applications via email.
www.fz-juelich.de

- Fabrication and characterization of perovskite solar cells
- Deposition of ultra-thin films by means of Solution Atomic Layer Deposition (SALD) and their characterization
- Integration of photo-switches at organic and inorganic interfaces and their characterization
- Participation in national and international conferences (incl. presentation of your research results)
- Active participation in the activities of the SFB ChemPrint
- Writing of scientific publications and project reports

Your Profile:

- Masters degree in materials science, chemistry, physics, production engineering, energy technology or related subjects
- Expertise in the field of perovskite solar cells, demonstrated by the production of cells with good efficiency and stability
- Expertise in chemical engineering, especially in thin film deposition and characterization (microscopy, ellipsometry)
- Experience in the dissemination of scientific results, demonstrated by publications and presentations at conferences
- Willingness and ability to participate in international meetings
- Experience with conducting and documenting scientific experiments as well as processing and analyzing data (Python, Origin, Excel)
- Good communication in English, knowledge of German is advantageous

Our Offer:

We work on the very latest issues that impact our society and are offering you the chance to actively help in shaping the change! We offer ideal conditions for you to complete your doctoral degree:

- Outstanding scientific and technical infrastructure
- International, interdisciplinary work environment on an attractive campus (FAU South Campus), including many collaboration opportunities with partners at Friedrich-Alexander-Universität Erlangen-Nürnberg, Forschungszentrum Jülich, Helmholtz-Zentrum Berlin, and international institutions
- Opportunity to participate in (international) conferences and project meetings
- Continuous scientific mentoring by your scientific advisor
- Flexible work (location) arrangements, e.g. remote work
- 30 days of annual leave and provision for days off between public holidays and weekends (e.g. between Christmas and New Year)

The position is for a fixed term of 3 years. Pay in line with 75% of pay group 13 of the Collective Agreement for the Public Service (TVöD-Bund) and additionally 60 % of a monthly salary as special payment („Christmas bonus“). The monthly salaries in euro can be found on the BMI website: https://go.fzj.de/bmi.tvoed.entgelt

Place of employment: Erlangen

We welcome applications from people with diverse backgrounds, e.g. in terms of age, gender, disability, sexual orientation / identity, and social, ethnic and religious origin. A diverse and inclusive working environment with equal opportunities in which everyone can realize their potential is important to us.

Further information on diversity and equal opportunities: https://go.fzj.de/equality