

## **Researcher, E13 TV-L temporary in the field of combined optical and atomic force microscopy**



The Institute for Photovoltaics (*ipv*) of the University of Stuttgart is working on the development of solar cells, light-emitting diodes, detectors and energy storage systems, particularly in the field of renewable energies.

For one of our ERC-funded projects, we are looking for a qualified, motivated and collaborative personality as a

### **Doctoral or Postdoctoral Researcher (m/f/d) E13 TV-L, temporary contract**

Within the ERC-funded project “The Nanoscale Photovoltaics Laboratory on a Tip” (NanoPLoT), we look for new team members on a postdoctoral or PhD level. You will help to develop a microscopy platform that combines spatially resolved optical spectroscopy with electrical atomic force microscopy. The setup will enable entirely new combinations of electrical excitation and optical detection and vice versa. The aim is to observe how nanoscale structures in hybrid perovskite materials influence charge carriers from the early stages of photon absorption over the charge separation at interfaces all the way to the external electrodes. The methods that you will be developing in this project will enable more efficient and stable solar cells by identifying and eliminating nanostructures with increased defect densities that lead to energy losses and instabilities.

We are looking for candidates with an excellent Master’s or PhD degree in Physics, Chemistry or Engineering. Ideally, you should have experience in one or more of the following fields: optical spectroscopy, confocal microscopy, hyperspectral imaging; experience in atomic force microscopy and/or optoelectronic applications of hybrid perovskite materials would be an additional bonus. Most of all, I value curiosity and enthusiasm for developing entirely new experimental methods to explore the secrets of nanoscale structures in hybrid perovskite materials.

For Postdocs, we offer a two-year full time contract. For PhD students, the contract is three years and 66% of a full-time position.

#### **We offer a varied and high-responsibility job in an international team and also:**

- Independent work with considerable scope for creativity
- Challenging activities in the lab, as well as practical and theoretical tasks
- Subsidy for public transportation (JobTicketBW)
- Flexible working hours and excellent training opportunities
- Company pension scheme and health care benefits

#### **You are interested?**

Then we look forward to receiving your application!

Please send your documents (CV, letter of motivation) in one file and by 15.09.2024 to:

[sekretariat@ipv.uni-stuttgart.de](mailto:sekretariat@ipv.uni-stuttgart.de)

If this is not possible, you can also send us your application in paper form. Please note that we are unfortunately unable to return application documents. Therefore, please do not submit any original documents, as we will destroy the application documents in accordance with data protection regulations once the process has been completed.

The University of Stuttgart would like to increase the proportion of women. Women are therefore expressly encouraged to apply. Persons with severe disabilities will be given priority if they are equally qualified. The employer is the University of Stuttgart.

Do you have any questions about the job? Please write to: [stefan.weber@ipv.uni-stuttgart.de](mailto:stefan.weber@ipv.uni-stuttgart.de)

Information on the handling of applicant data in accordance with Art. 13 GDPR can be found at: <https://www.uni-stuttgart.de/en/privacy-notice/job-application/>