

Hiwi Position in the field of „Optical modeling of perovskite silicon tandem solar cells“

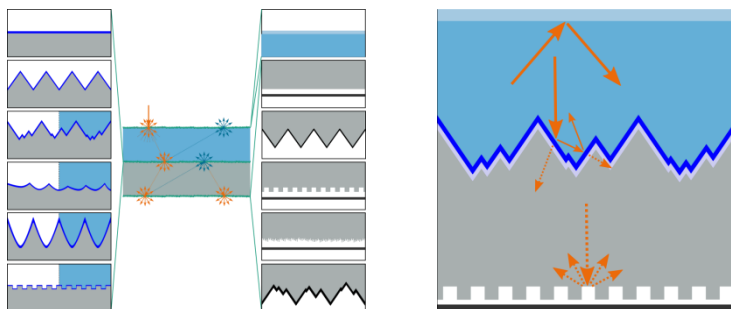
Starting from 1st of February 2018, the Technical Faculty at the University of Freiburg offers a Hiwi position for optical modelling of high-efficiency silicon-based tandem solar cells.

Your task

In close collaboration with the Fraunhofer Institute for Solar Energy Systems ISE you will have the opportunity to

- help optimizing the OPTOS simulation formalism by integrating new functionalities into the existing code and
- model optical properties of high-efficient silicon-based tandem solar cells.

OPTOS is a modeling tool for the solar cell optics with a special focus on advanced surface textures. It was developed at Fraunhofer ISE and is a matrix based approach, which allows for the efficient calculation of reflectance and absorptance of plane parallel sheets with arbitrary surface textures on both sides. The current version of the code is implemented in Python. Recently, also a graphical user has been integrated which facilitates the use for a broader range of users.



Your profile

For the Hiwi position, we are looking for a person that

- is motivated and interested in renewable energies and photovoltaics,
- has at least basic knowledge in optics (geometrical and wave optics),
- has programming experience, preferably in Python,
- speaks German and/or English fluently,

Institute for Sustainable
Systems Engineering
(INATECH)

Photovoltaic Energy
Conversion

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■ What we offer

The Technical Faculty of the University of Freiburg offers an excellent scientific and technological environment for interdisciplinary research. The Hiwi position includes a working time of 40 hours per month and is affiliated to the “Photovoltaic Energy Conversion” group of Prof. Stefan W. Glunz. This newly founded group is focused on the development of highest efficiency silicon based tandem solar cells. Close collaboration with the Fraunhofer Institute for Solar Energy Systems (ISE) ensures direct access to the program code and different people using it. Therefore, your work will have direct impact to current research developments.

For further inquiries and applications please contact:

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