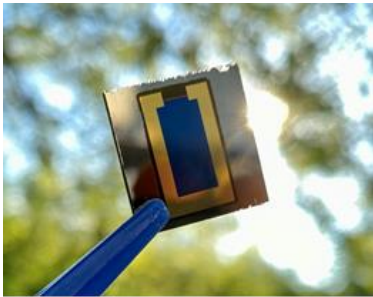


# Open PhD Position on Inkjet-Printed Perovskite for Industrial-Sized Photovoltaic Applications



(images: Ruiz-Preciso, Breig, Tasforce | KIT)

The rise of perovskite thin-film solar cells in recent years has opened up an exciting route to advance the power conversion efficiency of established photovoltaic technologies. For the first time, a wide bandgap thin-film PV technology is available at low cost that can be combined with established low bandgap semiconductors, such as crystalline Si and CIGS thin-films, in a multijunction tandem device with the potential of surpassing the efficiencies of 33%. However, to date several key scientific and technological challenges still need to be overcome to harvest this potential. At KIT, we engage in this worldwide endeavour and research the fundamentals, novel materials and processes for perovskite multijunction photovoltaics.

**This PhD position will be part of our efforts to develop industrial-relevant and scalable processes for perovskite-based tandem photovoltaics.**

We are looking for highly motivated and excellent candidates with a strong personal drive for scientific research. We are looking forward to your application to join our international team!

*The position focuses on research in the following subjects:*

- Develop inkjet-printing processes for industrial sized high throughput photovoltaic applications.
- Design large scale high efficiency perovskite-based tandem solar cells.
- Engage in national and international collaborations and projects.
- Publish research findings in peer-reviewed journals and present at relevant conferences.

## Infrastructure and Team

The position will be based in InnovationLab Heidelberg and is embedded in the perovskite PV taskforce at KIT, which combines the expertise and equipment of several research groups at KIT. For the fabrication and prototyping of perovskite solar cells, a broad fabrication and characterization platform will be accessible via the involved institutes, the InnovationLab Heidelberg, the Light Technology Institute (LTI) and the Institute of Microstructure Technology

(IMT). The position is within the *Next Generation Photovoltaics* division of T.T. Prof. Dr. Ulrich W. Paetzold.

### Applications

Applicants must hold a Master's degree (M.Sc.) in physics, materials science, electrical engineering, chemistry or related subjects. In best case, the PhD candidate shall have a strong scientific background in semiconductor optoelectronics, inkjet printing, thin-film and/or multijunction photovoltaics.

For the application please provide the following documents in electronic form:

- Motivation letter (1 page max.);
- CV;
- Transcript of records;
- M.Sc. diploma/certificate;
- List of publications (if applicable);

Incomplete applications will have to be disregarded.

### Link to the official job application:

[Open Position PhD at KIT](#)

### Contact Information

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