Universität Stuttgart
Institute for Photovoltaics (*ipv*)
Emerging Materials Group
Prof. Dr. Michael Saliba

Master Thesis / Research Project

Illumination Source for a Modular Solar Cell Stability Setup

As the march towards a green future accelerates, the need for modern solar cell materials has too. One of the most promising materials for this is perovskite. However, perovskite solar cells face one last hurdle until they can be used in everyday life – stability.

To better understand the degradation mechanisms holding perovskite solar cells back, we are building the **world's largest solar cell stability experiment**. A key element for this setup is a reliable light source.

Your task will be to **design this illumination source from scratch**. Your design must be cheap, modular, and meet the standard requirements for a solar simulator.

Tasks:

- Research light sources for solar cells.
- Design, model, and build a scalable light source within budget.
- Test the light source's stability, reliability, and suitability.

Requirements:

- Knowledge of photovoltaics and electrical engineering
- Thrive in independent research
- Full-stack engineering: from modelling to building to testing

The Research Project or Master's Thesis can be started immediately.
Send your CV, course marks, and a short motivation statement to:
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