



## **DLR – DAAD Fellowships**

### **Fellowship No. 561**

- Research Area :** Energy
- Research Topic:** **Study of Luminescent materials for advanced solar power concepts**
- DLR Institute:** Institute of Networked Energy Systems, DLR Oldenburg
- Position:** Doctoral Fellow
- Openings:** 1
- Job Specification:** Advanced solar power concepts include the utilisation of Photoluminescence (PL) to enable the chemical potential of light. Thermal PV as well as solar pumped solid-state LASERs benefit from PL materials with high quantum yield and advanced thermal stability. Within this PhD study novel PL materials will be characterised and integrated in prototype devices. Experiments for the study of thermally enhanced PL and quantum efficiency using have to be designed and optimized. The results will be published in peer reviewed scientific journals and discussed with experts all over the world during conferences and research meetings.
- Required Qualification:** Master's degree in Physics, Material Science or equivalent
- Advantageous Skills:** Advanced knowledge in Materials Physics, Solid state Physics, Nanophotonics and Photoluminescence of Quantum Dots and/or active Ions in Crystals. Programming skills in Python and/or MATHLAB. Experimental skills and hands on mentality.
- English competence:** See requirements on [www.daad.de/dlr](http://www.daad.de/dlr)
- Earliest Start Date:** 01.12.2022

**Application Deadline:** 01.11.2022

**Further Information:** <http://www.dlr.de>  
<http://www.daad.de/dlr>