

We currently have a job opening starting December 1st, 2021, at the earliest, for a:

**Graduate Research Assistant (must hold a Diploma/Master's degree)
for a 30-hour/week position at the Institute of Applied Physics, Johannes Kepler
University, Linz, Austria**

Within a research project, water, carbon dioxide and (sun-)light shall be turned into methane and alcohols. These reactions shall be co-catalyzed using noble metal nanostructures and ionic liquids. Solar-methane and solar-alcohols can not only be used as CO₂-neutral fuels, but, may be even more important, also as CO₂ neutral feedstock for chemical engineering or for carbon capture and storage, yielding a negative carbon footprint. While the principles of a CO₂ neutral synthesis of solar-fuel are known, their use is impeded by a lack of industrial-scale and economic catalysts. In a cooperative project comprising groups from physics, chemistry and physical chemistry, we try to decipher the scientific details of such photochemical catalysis. This will provide a crucial contribution towards the realization of an artificial photosynthesis.

Your Qualifications:

- Candidates must hold a Diploma/Master's degree in physics, chemistry, or a related subject.
- Ideally, the candidates have experience in at least one of the following research areas: plasmonics, nanostructures, optical spectroscopy, electrochemistry, (photo-)catalysis, ionic liquids.

We offer:

- On the basis of full-time employment (40 hours/week) the minimum salary in accordance with the collective agreement is € 2,971.50 gross per month (14 x per year, CA Job Grade: B1). Employment will be for 30 hours/week.
- The original duration of the contract will be 1 year, extendable to 3 years in total.
- Opportunity will be given to use the results for a PhD thesis.

The Johannes Kepler University wishes to increase the proportion of female researchers and, for this reason, especially welcomes applications by qualified women. If applicants are equally qualified, a woman will be given preference for this position. The university welcomes applications from qualified applicants with physical disabilities. These applications will be given special consideration.

How to Apply:

Prospective applicants interested in the position are requested to electronically submit their application including the usual documentation and at least two contacts for obtaining references, to Prof. Dr. Thomas Klar, email thomas.klar@jku.at. Applications should be sent before November 19th, 2021.