



## Recruitment for the Solar-driven chemistry in the Team of Photocatalysis:

### Interfacial engineering of semiconductors for highly selective light-driven chemical transformations

**Position:** **Post-doc**

**Institution:** Faculty of Chemistry, Jagiellonian University in Kraków, Poland

in cooperation with: Ulm University (Germany) and University of Helsinki (Finland)

**Duration of employment:** 36 months

**Position starts on:** September 1<sup>st</sup>, 2020

#### Selected goals of the project:

The project is aimed to study the possibility of selectivity control in photo(electro)catalytic processes through engineering of the semiconductor/solvent or semiconductor/gas interfaces. The major goal of this project is to develop novel and more efficient photo(electro)catalytic systems for various highly attractive conversions (*i.e.*, selective oxidations of alcohols and diphenyl sulfides, reduction of oxygen to hydrogen peroxide, reduction of carbon dioxide) and to gain fundamental mechanistic understanding of the factors governing the kinetics of charge separation, charge recombination and catalytic turnover in a direct relation to product selectivity.

Description of scientific interests of the Team of Photocatalysis and a brief description of the project can be found at [www.photocatalysis.eu](http://www.photocatalysis.eu) or <http://fotokataliza.pl/solar/>

#### Profile of candidates:

- ✓ doctor degree in chemistry or related disciplines (*e.g.*, materials science)
- ✓ relevant scientific achievements
- ✓ active participation in scientific community manifested, in particular, in the form of presentations at international conferences
- ✓ experience in heterogeneous photocatalysis and photoelectrochemistry,
- ✓ knowledge of photochemical, photoelectrochemical and spectroscopic semiconductor methods
- ✓ experience in the synthesis of advanced inorganic and hybrid materials
- ✓ ability to construct research equipment
- ✓ good command in English

#### Required documents:

- ✓ application
- ✓ curriculum vitae including: list of awards, papers, conference presentations, trainings
- ✓ personal data form for the person applying for employment
- ✓ degree certificates
- ✓ self-presentation including the most important research fields and scientific achievements of the candidate
- ✓ list of publications
- ✓ reviews of the doctoral dissertation

- ✓ for Polish applicants: the form of the last periodic evaluation, if the candidate was subject to such an evaluation
- ✓ opinion of the head of the department or scientific supervisor
- ✓ personal data processing information for job applicants

**Principal Investigator:** prof. dr hab. Wojciech Macyk

**Address for applications:** [macyk@chemia.uj.edu.pl](mailto:macyk@chemia.uj.edu.pl)

**Closing date:** August 3<sup>rd</sup>, 2020

We thank all candidates for their interests. We will contact with the best candidates only.