



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

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

**Position:** **PhD student**

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

in cooperation with: Ulm University and University of Helsinki

**Period of stipend agreement:** 30 months

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

**Stipend's amount:** 4000 zloty/month (tax-free)

#### **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 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:**

- ✓ master degree in chemistry or related disciplines (e.g., materials science)
- ✓ good background in inorganic chemistry, material science and photochemistry
- ✓ high motivation for scientific work
- ✓ research experience will be advantageous
- ✓ good command in English

#### **Required documents:**

- ✓ motivation letter with description of candidate's research interests
- ✓ curriculum vitae including: list of awards, papers, conference presentations, trainings
- ✓ degree certificates
- ✓ a letter of recommendation

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

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

**Closing date:** July 28<sup>th</sup>, 2020

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