

**Faculy of Chemistry** 

# **Ph.D. Position in Material Sciences**

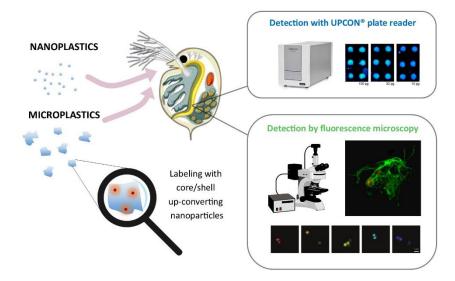
## Subject: Nano- and microplactics monitoring

#### **Requirements**:

- 1. Master's degree in chemistry or related obtained between 2021 2023.
- 2. Experience in the synthesis of nanomaterials or polymer chemistry is welcome.
- 3. English level that allows reading literature on the project subject and preparing publications.

#### **Description of tasks:**

The project aims to obtain nano- and microplastics labeled with up-converting nanoparticles as model systems for environmental pollution studies and analysis. The possibilities of monitoring the transfer and migration of nano- and microplastics on selected biological systems such as plants, simple aquatic organisms such as daphnia, and cells will also be tested. Anti-Stokes emission allows for the more precise imaging of what is happening with nano- and microplastics in biological material than is possible with other research techniques.



Doctoral tasks include:

- 1. Synthesis / production of labeled nano- and microplastics.
- 2. Measurements of physicochemical properties of products.
- 3. Elaboration of research results.
- 4. Preparation of scientific publications in English.

#### Conditions of employment:

Ph.D. student will join prof. Tomasz Grzyb group at Faculty of Chemistry, Adam Mickiewicz University in Poznań, Poland. Our laboratory is well-equipped and uses modern techniques to analyze and prepare nanoparticles.

The doctoral student will be involved in the project full-time and receive a scholarship for 48 months. The scholarship will be paid based on an agreement between the university and the scholarship holder. The amount of the scholarship is 5,000 PLN gross (~3,800 PLN net).

#### Additional information:

- 1. Adam Mickiewicz University in Poznań is one of the best academic centers in Poland and a research university.
- 2. The doctoral student will be trained in synthesizing and working with the apparatus.
- 3. We offer the possibility of further training during the implementation of a doctorate in English.

### ADAM MICKIEWICZ UNIVERSITY, POZNAŃ



**Faculy of Chemistry** 

- 4. The doctoral student will become a member of a young and dynamic team, open to ideas and initiatives.
- 5. Employment in the AMU allows applying for the financing of internships and workshops abroad and participation in international conferences beyond those provided by the project.
- 6. In our group, doctoral students have a high success rate in obtaining NCN Preludium grants that allow them to conduct their own research and obtain additional salary.
- 7. The project is ongoing in cooperation with two foregin partners: Centre of Environmental and Marine Studies at University of Aveiro, in Portugal, and Department of Biochemistry at Masaryk University in Czech Republic. For this reason, short visits to these institutions are planned during the doctorate.
- 8. Please send a CV, copy of your Master's thesis, names of two references, and a motivation letter stating your research interests to <u>tgrzyb@amu.edu.pl</u>, subject: "Ph.D. application nanoplastics." The positions are open until filled. Link to website: http://lanasylum.amu.edu.pl/