



**Faculy of Chemistry** 

# **Post-Doc position in Material Sciences**

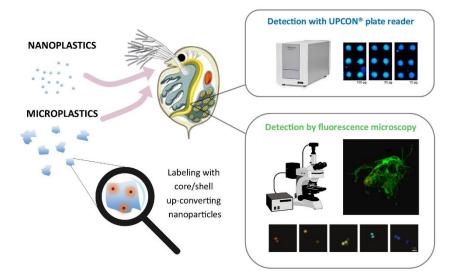
## Subject: Luminescent Nanomaterials

### **Requirements**:

- 1. Ph.D. degree in chemistry or related obtained between 2021 2023.
- 2. Experience in the synthesis of nanomaterials or inorganic materials.
- 3. Experience in the spectroscopic characterization of luminescent materials.
- 4. Previous experience with biological studies is welcome.
- 5. At least four publications in journals from JCR.

#### 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 more precise imaging of what is happening with nano- and microplastics in biological material than is possible with other research techniques.



Post-doc tasks include:

- 1. Synthesis of labeled nano- and microplastics by a bottom-up and top-down approach.
- 2. Preparation of colloids and suspensions of nano- and microplastics.
- 3. Materials characterization and spectroscopic measurements.
- 4. Assessment of nano- and microplastics uptake and accumulation in biological materials based on bioimaging.
- 5. Elaboration of research results and preparation of scientific publications.

#### Conditions of employment:

Post-doc 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 researcher will be involved in the project full-time and receive a salary for 48 months (13 salaries per year in the amount of 7,700 PLN gross / 6,200 PLN net).



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#### Additional information:

- 1. Adam Mickiewicz University in Poznań is one of the best academic centers in Poland and a research university.
- 2. The post-doc will be trained in synthesizing and working with the apparatus.
- 3. The researcher will become a young, dynamic team member, open to ideas and initiatives.
- 4. 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. Co-authorship of the best publications may be additionally rewarded (please contact us for more information).
- 5. The project is ongoing in cooperation with two foreign partners: the Centre of Environmental and Marine Studies at the University of Aveiro in Portugal and the Department of Biochemistry at Masaryk University in the Czech Republic. For this reason, short visits to these institutions are planned.
- 6. Please send a CV, a copy of your Ph.D. thesis, the names of two references, and a motivation letter stating your research interests to tgrzyb@amu.edu.pl, subject: "Post-doc application."

Link to website: http://lanasylum.amu.edu.pl/