



Bank account: Bank Gospodarstwa Krajowego

in PLN: PL 36 1130 1150 0012 1186 5820 0004

in EUR: PL 09 1130 1150 0012 1186 5820 0005

SWIFT: GOSKPLPW, VAT Number: PL 6750001805

Krakow, 31/03/2022

#### Open Research Position (Research Assistant) in the Group of Nano and Microscale Systems

#### **Employer:**

Jerzy Haber Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences, Krakow, Poland

#### **Formal requirement:**

The candidate has been employed and conducted research in a scientific unit in Ukraine directly before the outbreak of the war and arrived on the territory of Poland on February 24, 2022 or later.

## **About the position**

The Group Nano and Microscale Systems is looking for candidates with knowledge in colloidal and/or polyelectrolyte physical chemistry at an experimental and/or theoretical level. We intend to hire one or more researchers for 1 year. A PhD degree in a relevant field is required. The position will be funded by National Science Centre projects OPUS 2018/31/B/ST8/03277 (PI DSc Aneta Michna) and SONATA 2018/31/D/ST5/01866 (PI DSc Piotr Batys). The projects are ongoing and the position is open immediately.

### **Research description**

Polyelectrolytes are polymers containing ionizable functional groups. Self-organization of polyelectrolytes having opposite charges leads to the formation of polyelectrolyte complexes, which are extremely important from the point of view of basic research and applications. These complexes adsorbed at planar surfaces, as polyelectrolyte layers, can be exploited as nano scaffolds for adsorption of biologically active molecules (hormones, polypeptides, proteins).

The main goals of the planned studies will be systematic research regarding the determination of physicochemical properties of selected polyelectrolytes and colloidal particles, investigation of the mechanism of their complex formation, and a quantitative description of adsorption of polyelectrolytes on solid/liquid interface leading to the formation of polyelectrolyte layers via experimental and/or theoretical methods.

# Required academic qualifications

- PhD (or Ukrainian academic degree, i.e., kandidat nauk) in Chemistry, Physics or related field
- Good communicative skills, orally and written, in English
- Research experience related to colloids and/or polyelectrolytes
- Good knowledge of physical chemistry

# **Remuneration and Application**

The salary will be around  $3\,500-4\,500$  PLN (after-tax), depending on qualifications. The call will be closed after finding a suitable candidate, but no later than May 31, 2022. To apply for this position, please send a short CV or ORCID number via email directly to the following contact persons:

DSc Piotr Batys (piotr.batys@ikifp.edu.pl) or DSc Aneta Michna (aneta.michna@ikifp.edu.pl)