



### **Proposition of PhD student stipend in the Power Sources Group**

We propose a PhD student stipend in the Faculty of Chemical Technology, Poznan University of Technology (Poland) for collaborative work during 33 months in the frame of the SONATA project funded by the National Science Centre (Narodowe Centrum Nauki – NCN). The main objective of the project is to advance knowledge about electrochemical ageing mechanisms of porous activated carbon materials in organic electrolytes. The key target is to describe the oxygen functionalities degradation path during consecutive cycles of charge/discharge of electrochemical capacitors and development of preventive measures which will prolong the lifespan of the device.

Within the frame of the project the PhD student will:

- modify and characterize the physio-chemical properties of the series of porous activated carbons.
- prepare and perform the electrochemical analysis of electrochemical capacitors operating in organic electrolytes
- perform post-mortem analysis of aged carbons to describe the oxygen functionalities degradation pathways
- develop new electrolyte composition for energy storage devices with increased energy and lifespan

The proposed work program is recommended for chemists aiming to develop a background in fundamental and applied science for their future carrier in the research and development branch. The applicants should possess a good background in electrochemistry and material science, especially in activated carbon chemistry. They should be willing to self-improvement, have a strong motivation for scientific work, creativity in solving problems, independence, and the ability to work in a team. Good English speaking and writing is also expected.

**Amount of stipend per month: 3,000 PLN gross**

**Starting date: 1st November 2020 duration of 33 months**

Candidates wishing to apply are requested to send:

- Curriculum Vitae and a motivation letter, presenting scientific interests and achievements to date;
- recommendation letter from their current scientific supervisor;
- attested copies of education certificates including grade reports and other documents.

to Jakub Menzel, PhD ([jakub.menzel@put.poznan.pl](mailto:jakub.menzel@put.poznan.pl)) before **23 September**.