Proposition of a 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 a collaborative work during 48 months in the frame of a MAESTRO project funded by the National Science Centre (Narodowe Centrum Nauki - NCN).

The main objective of the project is to develop new knowledge for better understanding the charging/discharging mechanisms of electrochemical energy storage systems (e.g., supercapacitors) made of porous electrodes and ionic liquids as electrolytes. In order to extend the operating range of the systems, a special attention will be paid to studying the low temperature properties of binary mixtures of ionic liquids. Within the frame of the project, the PhD student will i) develop new carbon materials with controlled porous structure; ii) study the thermal properties of ionic liquids and their binary mixtures in a wide temperature range; iii) determine the properties of electrochemical cells based on ionic liquids and carbons with specially designed porous structure; iv) establish models of the interaction of ions with the pores of electrodes.

This work program is recommended for chemists interested by fundamental and applied science, and aiming at developing a future carrier connected with research and industrial developments. The fellow should possess a good background in materials science and electrochemistry. She/he should be good team player and have ability and willing to taking initiative. Good English speaking and writing is also expected.

Amount of stipend per month: 3,000 PLN netto

Starting date: September 1\textsuperscript{st}, 2017

Duration: 48 months

Candidates wishing to apply are requested to send their Curriculum Vitae, a recommendation letter from their current scientific supervisor, a motivation letter, attested copies of education certificates including grade reports and other documents to Professor F. Béguin (francois.beguin@put.poznan.pl) before August 11\textsuperscript{th}, 2017.

For more information, they can as well contact Professor F. Béguin, Institute of Chemistry and Technical Electrochemistry, Piotrowo 3, Poznan, Building A1, room 801a, tel. 61 647-5985.