Research, Informatics and Graduate Studies

https://sites.gtiit.edu.cn/research/positions/ao-2019001/

Research assistant/ PhD student / Research Fellow in Surface Engineering and Corrosion – Group of Prof. Aleksandra Baron-Wiechec (AO-2019001)

Program
Materials Science and Engineering

Research Area
Surface Engineering and Corrosion

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Web Page Link

Application Deadline
Open till filled

Date Posted
Oct. 09, 2019

Description

Are you experienced in mass spectrometry? Maybe you are keen on electrochemistry? Are you brave enough to cross disciplines and work on the boundary of materials science, electrochemistry and particle physics? The Laboratory of Surface Engineering and Corrosion, group of Asst. Prof. Aleksandra Baron-Wiechec is looking for scientists to lead exciting experimental research projects combining mass spectrometry with electrochemistry and electrochemical microscopy.

We work in a collaborative international environment, a working language is English.

Contract duration: Post-doc (up to 3 years), PhD (3+1 year), Research assistant/technician (negotiable)

Project Details

The lab equipment contains:

- Thermal Desorption Spectrometer (TDS)
- Differential Electrochemical Mass Spectrometry (DEMS)
- Anodizing station, chemistry lab space for sample preparation
- Electroanalytical methods, Potentiostat/Galvanostat, Voltammetry, EIS
- Scanning Electrochemical Cell Microscopy (SECCM)
- Access to large user facilities (neutron/synchrotron science facilities, ion beam accelerators)

Duties depend on the level of the appointment, but will be centred around:

- setting up and running the equipment (TDS, DEMS, SIMS, Electroanalytical methods)
- proposing an independent plan and conduct experiments in the areas of corrosion or electrochemistry, surface analysis, mass spectrometry and similar
- samples preparation and characterisation using various techniques
- guiding students and visiting researchers attaching to the research lab
- assisting the PI on preparation of research proposals applications and literature review of research papers/reports etc.

Requirements

Depends on the level of the appointment:

- good verbal and written English communication and interpersonal skills
- a few years of experience in engineering and/or chemical laboratory environment using technical lab equipment, power suppliers, vacuum

systems, mass spectrometry. chemicals and technical gasses, electronics, programing or
- knowledge on the use of electrochemical methods to characterize corrosion processes, anodizing of metals, or
- practical knowledge of mass spectrometry or vacuum systems, for example ICP-MS, GC-MS, TDS

Please check details and required documents for specific levels:

- Research Assistant, Laboratory Technician

https://www.gtiit.edu.cn/en/recruit_research_support.aspx

- MSc/PhD student https://sites.gtiit.edu.cn/research/graduate-studies/
- Post Doctoral researcher (Research Fellow) visiting Researcher

https://sites.gtiit.edu.cn/research/research-fellowship/

Application

– Application deadline: the position remains open until filled

– Send required documents electronically to: aleksandra.baronw@gtiit.edu.cn