

# 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)

### 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

### Position

Research Assistant /PhD Student/  
Research Fellow

### Program

Materials Science and Engineering

### Research Area

Surface Engineering and Corrosion

### Contacts

Aleksandra Baron-Wiechec

Email:

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[Web Page Link](#)

### Application Deadline

Open till filled

### Date Posted

Oct. 09, 2019

systems, mass spectrometry. chemicals and technical gasses, electronics, programming 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.gtiiit.edu.cn/en/recruit\\_research\\_support.aspx](https://www.gtiiit.edu.cn/en/recruit_research_support.aspx)

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

<https://sites.gtiiit.edu.cn/research/research-fellowship/>

### **Application**

– Application deadline: the position remains open until filled

– Send required documents electronically to: [aleksandra.baronw@gtiiit.edu.cn](mailto:aleksandra.baronw@gtiiit.edu.cn)