**About the Role:**

Full time, fixed term contract for 2 years

Interview date: Thursday 5th September 2024

We seek an enthusiastic microscopist to join our Electron Microscopy Core Facility within the Faculty of STEM, supporting internal and external research projects and commercial work.

We seek an individual who can enhance the unit's capabilities in quantitative electron beam analysis of geological samples, particularly emphasising the quantitative analysis of major, minor, and trace elements in minerals, including meteorites. In this role, you will collaborate with leading research groups, including Planetary and Space Sciences, Astrobiology, and Dynamic Earth, in pursuit of exploration of the physical, chemical, and biological processes that shape our Solar System.

The role holder will work closely with facility staff and provide advanced technical support in scanning electron microscopy (SEM) and microprobe analysis, aiding in investigating geological and extraterrestrial samples.

By joining our team, you will be at the forefront of pioneering research from deep Earth geological processes to the quest for life in the cosmos. Your contributions will support groundbreaking discoveries in geological and archaeological sciences, significantly impacting our understanding of Earth and space.

We seek a motivated individual with a strong background in Geology or Mineralogy and a passion for microscopy. If you are excited about working in a dynamic and collaborative environment, we encourage you to apply.

**Key responsibilities**

**Operational:**

Proficient operation of all SEMs and microprobe within the facility

Quantitative micro-elemental analysis using suitable X-ray detectors (EDS, WDS) as applicable for users

Development of quantitative analytical protocols for major-, minor- and trace-element analysis in engineering and geological applications

Ensure the smooth running of scanning electron microscopes and the electron microprobe laboratories, and ensure the equipment is maintained and correctly aligned

Sample preparation for application in Geological and Material Sciences

Procure service contracts, lab supplies and consumables

Ensure proper communication flow and liaison with engineers, contractors, gas cylinder delivery, and on-site lab visitors

Undertake industrial clients' work; liaise, coordinate and collaborate (where appropriate) with other university staff involved; write reports

Present results at local meetings and national conferences

Provide experienced technical assistance or training to research staff and students in:

* 1. Sample preparation
  2. SEM and microprobe imaging and analysis
  3. Data recording and processing

Maintain accurate laboratory records in accordance with the Faculty policy

Demonstrate equipment and techniques to work experience students, parties of school students and members of the public

Support areas of teaching as appropriate

Daily tasks as requested by the Facility Manager

Ensure that Good Laboratory Practice procedures comply with current Health and Safety legislation

**General:**

Understand and commit to promoting the University's policies and procedures to support and encourage Equality & Diversity

To maintain confidentiality of information in line with data protection requirements and University policy

To comply with health and safety requirements, including being aware of personal responsibilities to maintain a safe working environment

To contribute to the University's agenda for social responsibility, including sustainability

To demonstrate a strong commitment to the principles and practice of equality and diversity

**Skills and experience**

## Essential Requirements

This role will suit you if you:

* Hold a PhD (or be close to completion) or have equivalent experience in Geology or Mineralogy or any other relevant discipline
* Experience in the operation of Scanning Electron Microscopes (SEM), sample preparation for SEM quantitative analysis and interpretation of results
* Experience in using micro-analytical software in combination with EDS and WDS for standardised, quantitative analysis of element abundance, including interpretation of results

**You will find a full summary of duties and skills required for the role in the job description here**

If you would like to discuss this role before making an application, please email Dr Igor Kraev ([igor.kraev@open.ac.uk](mailto:igor.kraev@open.ac.uk)) or [Careers@open.ac.uk](mailto:Careers@open.ac.uk)

**To apply for this role please submit the following:**

* **CV**
* **Personal statement, *up to 1,000 words*, you should set out in your statement why you’re interested in this role and provide examples of where your skills and experience meet the required competencies for this role as detailed in the job and person specification.**

**\*Early Close: We reserve the right to close adverts sooner than the closing date.**

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