THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF SCIENCE & ENGINEERING

SCHOOL OF NATURAL SCIENCES

DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES

RESEARCH ASSOCIATE IN PLANETARY SCIENCE

VACANCY REF: SAE-016312

Salary: Grade 6 £32,816 to £40,322 per annum (according to relevant experience)

Hours: 1 FTE

Duration: Fixed term from 01 April 2021 until 31 March 2024

Location: Sackville Street, Manchester

Enquiries about the vacancy, shortlisting and interviews:
Manager: Dr Rhian Jones
Email: rhian.jones-2@manchester.ac.uk

BACKGROUND

Research Associate for STFC grant, “Planetary Science at The University of Manchester”, Project titled “Source and fate of halogen elements in early Solar System materials”. The Research Associate will join a leading group of planetary scientists and isotope geochemists within the Department of Earth and Environmental Sciences. The project will be carried out under the direction of Dr. Rhian Jones and in collaboration with Drs. Romain Tartèse and David Neave.

Overall Purpose of the Job

Conduct research to meet the objectives of the project titled “Source and fate of halogen elements in early Solar System materials”. The goal of the project is to investigate the distribution of halogen elements in chondritic meteorites, through observations of halogen-bearing phases, and through experimental studies that reproduce conditions experienced by chondrites and their individual components. Results will be interpreted in terms of the structure and early evolution of the Solar System, and the nature of volatile species available during accretion of the Earth and other terrestrial planets.
Key Responsibilities, Accountabilities or Duties

The range of duties will include:

- Undertake research on the halogen chemistry of chondritic meteorite samples
- Conduct experiments that reproduce conditions appropriate to interpreting the behaviour of halogen elements in chondrites
- Analyse chondrite and experimental samples using electron beam, secondary ion mass spectrometry (SIMS) and laser ablation inductively coupled plasma (LA-ICP-MS) techniques
- Collaboratively develop novel experimental and analytical protocols
- Interpret analytical data and write up results for publication
- Communicate results effectively in conference presentations and journal articles
- Contribute to collaborative decision making with colleagues in areas of research
- Use research resources, laboratories and workshops as appropriate
- Plan and manage own research activity in collaboration with others
- Build contacts and participate in networks for the exchange of information
- Be aware of the risks in the work environment and their potential impact on own work and that of others

PERSON SPECIFICATION

Essential:

- Have, or be about to obtain, a PhD (or equivalent) in a relevant subject (geology, planetary science or a related discipline)
- Willingness to work onsite at the University of Manchester
- Experience working with, and undertaking analysis of, geological or extra-terrestrial samples
- Ability to evaluate and interpret experimental data
- Have a journal and/or research conference publication record commensurate with academic career experience
- Excellent written and oral communication and interpersonal skills
- Excellent time management and organisational skills
- Willingness to network with members of the UK and international planetary science community
- Willingness to learn and develop through training opportunities
- Ability to conform to health and safety requirements of working in a laboratory and develop risk assessments for new activities as needed

Desirable Knowledge, Skills, Experience and Qualifications:

- Knowledge of current meteorite research
- Experience of working with and preparing extra-terrestrial materials
- Experience of one or more relevant analytical techniques including scanning electron microscopy, electron probe microanalysis, LA-ICP-MS and SIMS
- Experience of experimental petrology