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| Last updated: | 17.07.24 |

**JOB DESCRIPTION**

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| Post title: | **Research Fellow in isotope geochemistry and carbon cycle reconstruction** | | |
| Standard Occupation Code: (UKVI SOC CODE) | 2119 - Natural and social science professionals | | |
| School/Department: | Ocean & Earth Science | | |
| Faculty: | Faculty of Environmental and Life Sciences (FELS) | | |
| Career Pathway: | Education, Research and Enterprise (ERE) | Level: | 4 |
| \*ERE category: | Research pathway | | |
| Posts responsible to: | David Evans | | |
| Posts responsible for: | n/a | | |
| Post base: | Office-based & Non Office-based | | |

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| Job purpose |
| To undertake research in accordance with the specified research project under the supervision of the award holder. To undertake leadership, management and engagement activities. |

| Key accountabilities/primary responsibilities | | % Time |
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|  | Carry out elemental and isotopic measurements of fossil samples in the University of Southampton’s Geochemistry Research Group laboratories, including associated sample preparation and characterisation (SEM, XRD, FTIR). | 45 % |
|  | Regularly disseminate findings by taking the lead in preparing publication materials for referred journals, presenting results at conferences, or exhibiting work at other appropriate events. | 20 % |
|  | Develop, maintain, and run box models in a programming language. | 10 % |
|  | Collaborate/work on original research tasks with colleagues in other institutions and contribute towards the writing of bids for research funding. | 10 % |
|  | Carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control. | 5 % |
|  | Carry out occasional undergraduate or MSc student supervision, and any other duties as allocated by the line manager following consultation with the post holder. | 5 % |
|  | To allocate 10 days a year (pro rata if part-time) to undertake training and continuing professional development (CPD), develop research identity and leadership skills in line with the Researcher Development Concordat. | 5 % |

| Internal and external relationships |
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| Direct responsibility to holder of research award or academic supervisor.  May have additional reporting and liaison responsibilities to external funding bodies or sponsors.  Visit, liaise, and engage with collaborators/colleagues in other work areas and institutions within the framework of the wider project. |

| Special Requirements |
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| To be available to participate in fieldwork as required by the specified research project.  To attend national and international conferences for the purpose of disseminating research results.  *Applications for Research Fellow positions will be considered from candidates who are working towards or nearing completion of a relevant PhD qualification. The title of Research Fellow will be applied upon successful completion of the PhD. Prior to the qualification being awarded the title of* ***Senior Research Assistant*** *will be given.* |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | PhD or equivalent professional qualifications and experience in geochemistry or analytical chemistry.  Experience in the use of single and/or multi-collector plasma mass spectrometer instruments. | Experience of sample characterisation using chemical and/or spectroscopic techniques (e.g. (laser ablation) ICPMS, SEM, XRD, FTIR).  Experience in the use of fossil samples for the purposes of reconstructing changes in climate and/or elemental cycling in Earth history.  Experience in building chemical box models in a programming language.  Demonstrate commitment to maintaining professional knowledge and awareness through continuing personal and professional development.  Understanding of relevant Health & Safety issues. | Application, CV, and interview |
| Expected  Behaviours | Able to apply and actively promote equality, diversity and inclusion principles to the responsibilities of the role.  Demonstrate the Southampton Behaviours and work with colleagues to embed them as a way of working within the team. |  | Interview |
| Planning and organising | Able to organise own research activities to deadline and quality standards. |  | Interview |
| Problem solving and initiative | Able to develop understanding of complex problems and apply in-depth knowledge to address them.  Able to develop original techniques/methods. |  | Interview |
| Management and teamwork | Able to supervise work of junior research staff, delegating effectively  Work effectively in a team, understanding the strengths and weaknesses of others to help teamwork development. |  | Application/Interview |
| Communicating and influencing | Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience.  Able to present research results at group meetings and conferences.  Able to write up research results for publication in leading peer-viewed journals.  Work proactively with colleagues in other work areas/institutions, contributing specialist knowledge to achieve outcomes. |  | Application/Interview |
| Special requirements | Able to attend national and international conferences to present research results.  Able to support field work and sample collection, potentially in remote areas and outside of normal working hours.  Be able to carry out finely detailed tasks (such as preparing samples for analysis in a clean laboratory environment). |  | Application/Interview |

**JOB HAZARD ANALYSIS**

**Is this an office-based post?**

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| Yes | If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below. |
| No | If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below.  Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder. |

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

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| **ENVIRONMENTAL EXPOSURES** | **Occasionally**  (<30% of time) | **Frequently**  (30-60% of time) | **Constantly**  (> 60% of time) |
| Outside work | x |  |  |
| Extremes of temperature (eg: fridge/ furnace) | x |  |  |
| ## Potential for exposure to body fluids |  |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) |  |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: | x |  |  |
| Frequent hand washing | x |  |  |
| Ionising radiation |  |  |  |
| **EQUIPMENT/TOOLS/MACHINES USED** | | | |
| ## Food handling |  |  |  |
| ## Driving university vehicles(eg: car/van/LGV/PCV) |  |  |  |
| ## Use of latex gloves (prohibited unless specific clinical necessity) |  |  |  |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) |  |  |  |
| **PHYSICAL ABILITIES** | | | |
| Load manual handling | x |  |  |
| Repetitive crouching/kneeling/stooping |  |  |  |
| Repetitive pulling/pushing |  |  |  |
| Repetitive lifting |  |  |  |
| Standing for prolonged periods | x |  |  |
| Repetitive climbing (ie: steps, stools, ladders, stairs) |  |  |  |
| Fine motor grips (eg: pipetting) | x |  |  |
| Gross motor grips | x |  |  |
| Repetitive reaching below shoulder height |  |  |  |
| Repetitive reaching at shoulder height |  |  |  |
| Repetitive reaching above shoulder height |  |  |  |
| **PSYCHOSOCIAL ISSUES** | | | |
| Face to face contact with public |  |  |  |
| Lone working | x |  |  |
| ## Shift work/night work/on call duties |  |  |  |