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| Last updated: | <date> |

**JOB DESCRIPTION**

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| Post title: | **Research Fellow** | | |
| Standard Occupation Code: (UKVI SOC CODE) | 2119 - Natural and social science professionals | | |
| School/Department: | School of Ocean and Earth Science | | |
| Faculty: | FELS | | |
| Career Pathway: | Education, Research and Enterprise (ERE) | Level: | 4 |
| \*ERE category: | Research pathway | | |
| Posts responsible to: | Geochemistry Research Group Chair (ERE L7) | | |
| Posts responsible for: |  | | |
| Post base: | Office-based/Non Office-based (see job hazard analysis) | | |

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| Job purpose |
| To undertake research in accordance with the specified research project under the supervision of the award holder. |

| Key accountabilities/primary responsibilities | | % Time |
| --- | --- | --- |
|  | Develop cheap, robust and stable dual O2 and pH sensing solid-state micro-electrode. | 30 % |
|  | Develop self-positioning system for the probe exploiting the amperometric and impedimetric response of the solid-state electrode | 30 % |
|  | Carry out preliminary proof of concept applications to demonstrate the reliability of our new self-positioning electrode | 20% |
|  | Supervise the work of junior research staff | 5 % |
|  | Carry out occasional undergraduate supervision under the direct guidance of a member of departmental academic staff. | 5 % |
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| Internal and external relationships |
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| Direct responsibility to holder of research award or academic supervisor.  Collaborators/colleagues in other work areas across the CoralChem project. |

| Special Requirements |
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| To be available to participate in laboratory and 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) in the Physical Sciences in the general area of electrochemistry or electronics and instrumentation | Experience in either or both of the following: (i) developing scanning probe techniques  (ii) Experience with developing and applying electrochemical methods | Application/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  Able to interpret complex datasets |  | 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 |
| Other skills and behaviours | Understanding of relevant Health & Safety issues  Positive attitude to colleagues and students |  | Application/Interview |
| Special requirements | Be able to carry out finely detailed tasks (such as preparing samples for analysis by micro-CT).  Be able to demonstrate good lab practices suitable for analytical methodology development  On occasions (<10 days per year) and when necessary, work outside of the normal working day (with time off in lieu)  Be able to partake in marine-based field work if required. |  | 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:  Concentrated acids | 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 | x |  |  |
| Lone working | x |  |  |
| ## Shift work/night work/on call duties |  |  |  |