

Candidate Information

Position:	Research Fellow in Isotope Ecology and Mesopelagic Prey Fields
School/Department:	School of Biological Sciences
Reference:	26/113159
Closing Date:	Monday 16 March 2026
Salary:	£41,519 - £49,536 per annum.
Anticipated Interview Date:	Tuesday 31 March 2026
Duration:	36 months

JOB PURPOSE:

MOSAIC is a project supported by PEACEPLUS, a programme managed by the Special EU Programmes Body.

MAJOR DUTIES:

1. Lead stable isotope sample workflows, including the processing, cataloguing, and analysis of biological materials (e.g. mesopelagic fish, zooplankton, POM) collected during the MOSAIC research cruise.
2. Develop vertically resolved isotopic datasets ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, and related tracers) to explore trophic structure and energy transfer in pelagic food webs, with specific attention to prey fields supporting OSPAR-listed species.
3. Conduct trophic and mixing model analyses, integrating isotope data with biological and environmental variables to assess prey field composition, resilience, and predator-prey coupling.
4. Collaborate closely with cruise leads and partner institutions (e.g. UCC, NOC, IEO-CSIC) to ensure isotopic sampling aligns with parallel physiological, genomic, and acoustic surveys.
5. Contribute to meta-analysis and synthesis tasks, supporting the identification of climate-sensitive indicators of pelagic ecosystem function and resilience.
6. Prepare datasets and analytical pipelines in line with open science principles, ensuring reproducibility and data sharing across the MOSAIC consortium.
7. Present findings at international conferences and stakeholder meetings, supporting the communication of results to scientific, policy, and conservation audiences.
8. Co-author high-impact publications arising from the cruise and subsequent lab-based analysis, with a focus on marine food web dynamics and climate resilience.
9. Support the mentoring of interns and postgraduate students, contributing to training and capacity building across the project network.
10. Participate in regular project coordination meetings, contributing actively to scientific planning, troubleshooting, and cross-institutional integration of results.

ESSENTIAL CRITERIA:

1. PhD in marine ecology, isotope ecology, biological oceanography, or a related discipline (or thesis submitted by start date).
2. Experience conducting and interpreting stable isotope analyses in ecological contexts.
3. Experience working with marine field samples or at-sea collection.
4. Proficiency in R or Python for data handling and visualisation.
5. Understanding of marine food web dynamics and trophic models.
6. Evidence of scientific writing (e.g. published papers, thesis).
7. Ability to communicate complex scientific ideas clearly in oral and written formats.
8. Ability to work independently and as part of a diverse interdisciplinary team.
9. Strong organisational and time management skills.
10. Willingness to participate in offshore research cruises.
11. Willingness to travel between partner labs (QUB, UCC, NOC) for collaborative work.

DESIRABLE CRITERIA:

1. Training in analytical chemistry, geochemistry, or marine biogeochemistry.
2. Experience contributing to multi-partner research projects.
3. Cruise participation and working with zooplankton or micronekton samples.
4. Experience with isotope mixing models (e.g., MixSIAR).
5. Familiarity with data management best practices.
6. Conference presentations and/or stakeholder engagement experience.
7. Ability to mentor students or interns.
8. Enthusiasm for cross-institutional and international collaboration.
9. Understanding of open science principles and data sharing.
10. Interest in contributing to public outreach or science communication activities.

ADDITIONAL INFORMATION:

Informal enquiries can be directed to: Paulo Prodohl: p.prodohl@qub.ac.uk