

Candidate Information

Position:	RiSC+ Research Fellow, Critical Mineral Supply Chains
School/Department:	Queen's Business School
Reference:	25/112358
Closing Date:	Tuesday 28 January 2025
Salary:	£39,922 - £43,605 per annum
Anticipated Interview Date:	Wednesday 12 February 2025 (Thursday 13 February to be confirmed)
Duration:	Fixed Term - Full Time, Available for up to 3 years

JOB PURPOSE:

To be a highly productive, ambitious and collaborative member of the RiSC+ team assisting in the development of research proposals and the planning and delivery of the research activity specifically in Modelling UK Supply Chains as complex systems for resilience.

The post is a critical role, and as such, successful applicants will have responsibilities in independent research, research planning and reporting and for collaboration with project partners.

The post is part of the ReImagining Supply Chains Network Plus (RiSC+ Network) project, focusing specifically on modelling and analysing critical mineral supply chains, with emphasis on rare earth elements (REEs) and electronic waste recycling. The post holder will work closely with the supply chain modelling team to develop comprehensive supply chain models while providing crucial domain expertise in critical minerals and circular economy approaches.

MAJOR DUTIES:

1. Undertake research under supervision within the critical minerals work package within RiSC+, providing subject matter expertise on critical mineral supply chains, particularly REEs and e-waste recycling.
2. Design and develop research methodologies to map and analyse critical mineral supply chains, focusing on:
 - 1) Supply chain vulnerabilities and resilience,
 - 2) Urban mining and e-waste recycling potential,
 - 3) Circular economy integration,
 - 4) Economic and environmental impacts.
3. Collaborate closely with the supply chain modelling team to provide domain expertise for model development and ensure accurate representation of critical mineral supply chains.
4. Validate model assumptions and outputs and develop scenarios for testing supply chain resilience.
5. Produce high-quality research outputs consistent with project aims, including:
 - 1) academic publications in leading journals,
 - 2) policy briefings and recommendations,
 - 3) industry guidance documents,
 - 4) workshop materials and presentations.
6. Engage with project stakeholders, including industry partners, government bodies, academic collaborators, end-users and policy makers.
7. Organise and lead stakeholder workshops and engagement activities to gather insights and disseminate findings.
8. Carry out analyses, critical evaluations, and interpretations using methodologies appropriate to the research area.
9. Assist grant holder in the preparation of funding proposals and applications to external bodies.
10. Carry out occasional educational supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
11. Undertake supplementary duties relevant to the success of the project including administrative duties and additional training and development activities as required.

ESSENTIAL CRITERIA:

1. Normally have or be about to obtain a *relevant PhD.
2. Hold at least a 2:1 honours degree in Materials Science, Supply Chain Management, Industrial Engineering, Environmental Science, or related disciplines or closely related discipline.
3. Have, or be about to obtain, a relevant PhD in Materials Science, Supply Chain Management, Industrial Engineering, Environmental Science, or related disciplines or closely related discipline. *(Candidates about to receive their PhD should provide proof that their viva is scheduled within two months).
4. Recent relevant* research experience to include:
 - Research experience in critical minerals, supply chain analysis, or related fields
 - Track record of using qualitative research methods such as case studies, interviews, or focus groups to gather insights from stakeholders during workshops, seminars and/or other events.
 - Evidence of stakeholder engagement.
 - Publication record commensurate with career stage.
5. Ability to contribute to broader management and administrative processes.
6. Willingness to undertake additional training in research methods and other related skills as required.
7. Understanding of critical minerals and their applications.
8. Knowledge of circular economy principles.
9. Strong written and verbal communication skills.
10. Ability to communicate complex information effectively in oral and written format.
11. Ability to build relationships to develop internal and external networks.
12. Self-motivated with ability to work independently.
13. Strong commitment to sustainability principles.
14. Excellent time management and organisational skills.
15. Strong networking and relationship-building abilities.
16. Enthusiasm for interdisciplinary collaboration.
17. Willing to spend time on placement at partner facilities/travel to same on a regular and frequent basis if needed.

DESIRABLE CRITERIA:

1. Experience in Technoeconomic analysis, cradle-to-grave assessment and LCA (Life cycle analysis).
2. Experience with ewaste recycling or urban mining Knowledge of rare earth elements processing and applications.
3. Familiarity with supply chain.
4. Experience with stakeholder engagement.
5. Understanding of UK and EU critical minerals policies.
6. Industry experience in relevant sectors.
7. Strong analytical and problem-solving abilities.
8. Excellent project management skills.
9. Proficiency in data analysis tools and software, for example, statistical techniques and tools such as SPSS and R for processing data.

ADDITIONAL INFORMATION:

Informal enquiries may be directed to Hangfei Guo at h.guo@qub.ac.uk