

JOB DESCRIPTION

Senior Research Associate in Molten Salt Properties and Associated Phases, Engineering
Vacancy Ref: A3497-R

Job Title: Senior Research Associate in Molten Salt Properties and Associated Phases	Present Grade: 7P
Department/College: Engineering	
Directly responsible to: Prof Claude Degueldre	
Supervisory responsibility for: Some supervision of Research Students, Masters Students, UG Project Students	
Other contacts Internal: Prof. Claude Degueldre, Prof. Sarah Green; academic staff and PDRAs in Engineering External: Project collaborators and partners, including in Mechanical, Materials and Aerospace Engineering, Liverpool University (led by Prof B Merk); in Physics, Liverpool University (led by Prof. C Welch); and in Mechanical, Aerospace and Civil Engineering, University of Manchester (led by Prof R Taylor).	
Major Duties: <ol style="list-style-type: none"> 1. Undertaking research necessary to achieve Lancaster University's aims within work-package 1 of the EPSRC funded project EP/V027239/01, relating to basic chemical studies and core design of the OP-MSR. This will entail research into (i) Identification of viable chloride based salt systems; (ii) Production of small amounts of candidate salt components and phase mixtures; (iii) Phase diagram development and thermo-physical experiments, and the creation of a reliable database for down-stream modelling and simulation studies by project partners. 2. Working effectively, safely and ethically in a cross-disciplinary academic team to achieve the above goals, and to be prepared to perform active experimentation on radio-active materials. 3. Participating in national and international conferences and workshops to present the results of the project to a wider audience and to learn about current advances in the field. 4. Leading the preparation of conference and journal papers for publication of project findings. 5. Participating in all project meetings, including the development of progress reports describing and reflecting on the results of the project. 6. Supporting the co-ordination, administration, training and supervision of research students within the Department, especially those working in nuclear related areas. 7. Undertaking personal learning and development, demonstrating ambition and ability to advance. 8. Take a leading role in identifying funding opportunities and developing project proposals for future funding based on the research area and results of this project. 9. Developing new research directions based on the above work and carrying those directions through to successful new publications. 10. Any other duties appropriate to the grade and position as directed by the project investigators. 	