Research Associate in Materials in Extreme Environments

Fixed term appointment for up to 24 months

Salary in the range of £32,750 to £41,540 per annum

Applications are invited for a Research Associate to work with Professor Bill Lee on the development of ceramics for future nuclear applications as part of a project entitled Understanding and Designing Materials Systems for Extreme Environments, in collaboration with the experimental groups of Professor Bill Lee (Imperial College), Professor Mike Reece (Queen Mary University of London) and Professor Jon Binner (Loughborough University).

A key factor in using materials in nuclear applications is activation during use making waste disposal challenging due to transmutation reactions leading to formation of long lived and highly radioactive species. This project will examine the possibility of using some of the ternary MAX and other ceramic phases in nuclear applications focusing initially on accident tolerant fission fuel cladding but aiming at Generation IV fuel and fusion structural applications including in the diverter of a tokamak.

You should have a PhD degree (or equivalent) in Physical Sciences or Engineering. Experience of ceramic processing and advanced characterisation using electron microscopy is essential. Candidates should also demonstrate a strong grasp of complex crystal chemistry and phase equilibria while experience in the nuclear sector would be beneficial. You must be able to deliver high-quality scientific talks in English, and to have adequate written communication skills in English.

Informal e-mail enquiries may be made to Professor Bill Lee w.e.lee@imperial.ac.uk.

Our preferred method of application is online via our website at the following link: http://www3.imperial.ac.uk/employment (please select “Job Search” and enter the job reference EN20130438FH). Please complete and upload an application form as directed and submit any other relevant supporting documents such as your full CV.

Should you have any queries about the application process please contact: Mrs Darakshan Khan - d.khan@imperial.ac.uk

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Closing date: 22 December 2013

Committed to equality and valuing diversity. Imperial is also an Athena Silver SWAN Award winner, a Stonewall Diversity Champion and a Two Ticks Employer.