Job Details

Postdoctoral Research Assistant

Department of Engineering Science, Parks Road, Oxford
Grade 7: £29,099 - £35,788 p.a.

We are seeking a full-time Research Assistant to join the Solid Mechanics and Materials Engineering Research Group at the Department of Engineering Science (central Oxford). The post is funded by Mitsubishi Heavy Industries and is fixed-term for up to two years.

The overall objective of the project is to develop a model which simulates the evolution of creep damage in the form of voids and cracks in the heat affected zone of a weld. The model will be combined with Finite Element studies of the stress state in a weld to predict the evolution of void density in practical welded components which operate at elevated temperatures. You will be responsible for: development of the model and its integration with the commercial finite element code ABAQUS; validating the model against available experimental data; producing six monthly reports for the external sponsor.

You should possess a PhD (or have equivalent experience) in a relevant area. You should also have a background in materials modelling and experience in finite element modelling. Experience in modelling the creep deformation and failure of engineering components would be an advantage, but is not essential.

Informal enquiries may be addressed to Professor Alan Cocks (alan.cocks@eng.ox.ac.uk).

Only applications received before midday on 24 February 2012 can be considered. You will be required to upload a covering letter, a brief statement of research interests (describing how past experience and future plans fit with the advertised position), CV and the details of two referees as part of your online application.

Contact Person :	Professor Alan Cocks	Vacancy ID :	102055
Contact Phone :		Closing Date :	**24-Feb-2012**
Contact Email :	alan.cocks@eng.ox.ac.uk		