

One postdoctoral position on an EPSRC-sponsored project on Global Sensitivity Analysis

A post-doctoral position is available within the Centre for Process Systems Engineering (www.cpse.imperial.ac.uk) to work on the development of global sensitivity analysis techniques with particular application to times series models, demand forecasting, complexity reduction and model-based experiment design.

The approach builds on research at the CPSE which has developed some techniques that determine the most important parameters in complex models through variance based global sensitivity analysis using Sobol' sequences. These techniques can be used for model analysis, complexity reduction, parameter estimation and experiment design.

The project will involve the development of mathematical and computational techniques coupled to models in different formats.

The project supervisors are Professors Nilay Shah and Costas Pantelides, and project will be co-ordinated by a Research Fellow, Dr Sergei Kucherenko.

We are looking for candidates with experience in one or more of the following areas:

- Process systems engineering, especially scientific computing and analysis and modelling and optimization of complex systems
- Monte Carlo and Quasi Monte Carlo modelling and various sampling techniques
- Sensitivity analysis, global optimisation, statistics, experiment design

The appointee should hold a PhD degree in a relevant discipline, with particular emphasis on modelling and numerical methods in one or more of the areas above. Experience of object-oriented programming in C++ would be a distinct advantage.

The post will be tenable for up to three years in the first instance. The salary will be on the Research and Education scale, ranging from £22,116 to £32,232 per annum.

For the PhD position, a good first degree in a relevant engineering or scientific discipline is sought.

- [Application form](#)
- [Job description and Person Specification](#)
- Application forms, job description and person specification for the Research Associate position are available from the link above. Alternatively, those documents, together with further particulars, may be obtained by contacting: Mrs June Talbot, Department of Chemical Engineering, Imperial College London, South Kensington Campus, London SW7 2AZ. Tel: +44 (0)20 7594 5557 or email: j.talbot@imperial.ac.uk. Completed application forms should be sent, or emailed, to Mrs Talbot, together with a CV and list of publications by the closing date.

Closing date : 28 February 2006

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