

## JOB DESCRIPTION Vacancy Ref: A2475

Job Title: Senior Research Associate

Present Grade: 7P

Department/College: Department of Mathematics & Statistics

Directly responsible to: Dr. Emma Eastoe

Supervisory responsibility for: None

Other contacts

**Internal:** PhD students and other members within the extreme values research group; colleagues in Department of Mathematics & Statistics.

**External:** The sponsoring commercial partner and the wider research community.

## Major Duties:

To conduct research including communication with project end-users and consultees, writing project reports and journal publications, and presenting at project workshops and national or international conferences. The role carries responsibility for ensuring that research and development activities ensures that project delivaerables are met according t the pre-arranged time schedule, but has autonomy to ensure that objectives are met.

- To contribute to the research project by
  - 1. Reviewing existing stationary and non-stationary extreme value models for natural hazards used either within the nuclear industry or in other fields. As well as a review of the existing acadenmic literature, interviews with external end-users and consultees must also be conducted.
  - 2. Based on the output of (1), putting together, with the commercial partner, a framework for exploring and demonstrating improved methods for modelling non-stationary extreme events. This framework will be followed in the second-half of the project.
  - 3. Demonstrating alternative non-stationary extreme value modelling approaches to those already in use by the nuclear industry as listed in (1), and to illustrate how these alternative methods differ in approach, interpretation and, where appropriate, end-result from the existing methods.
- To publish in leading journals and, where appropriate, to contribute to publications in these journals jointly with other members of the project.
- To provide regular progress reports to the Line Manager and the commercial partner.
- To attend and contribute to project meetings with staff from the commercial partner.
- To adhere to all deadlines contained within the deliverables schedule of the project specification.
- To attend meetings, workshops and conferences in the UK and abroad, presenting research results and networking.
- To present findings in such a way that any findings and recommendations may be easily uptaken by the commercial partner.
- To undertake any other duties as may be requested by the Investigators, provided that these are appropriate to the grade of the post.