



2020-IPR-E-000-015588

**Global sensitivity analysis of the ADAM
consequence model**

Position for:

Trainee

As the science and knowledge service of the Commission, the mission of Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <http://www.jrc.ec.europa.eu>

Short description of the activity:

The Major Accident Hazards Bureau (MAHB), which was established around 1980, and formally recognized as a JRC Bureau in 1995, provides research-based scientific support to the European Community on the formulation, implementation and monitoring of EU policies for the control of major accident hazards, chiefly the Seveso III-Directive, 2012/18/EU. In this context, MAHB initiated the design and development of the Accident Damage Analysis Module (ADAM) to estimate the consequences industrial accident in terms of thermal radiation, overpressure or toxic concentration that may result from the loss of containment of a flammable or toxic substance.

The successful candidate will, in close cooperation with the staff of MAHB, contribute to the development and implementation of global sensitivity studies on the atmospheric dispersion module of ADAM. The studies will aim to establish the impact of various input parameters on the model's output uncertainty. The study will be conducted on a series of typical accident scenarios, resulting in the atmospheric dispersion of toxics as a consequence of the unintended release of dangerous substances.

	<p><u>Qualifications:</u></p> <p><u>Essential:</u></p> <ul style="list-style-type: none"> • The candidate should be close to attaining, or have already completed, a university degree in engineering or applied physics, • Demonstrated familiarity with atmospheric dispersion modelling and fluid dynamics • Good analytical skills • Good knowledge of spoken and written English (Level B2) <p><u>Advantage:</u></p> <ul style="list-style-type: none"> • Experience in using statistics (e.g., single and multiple regression) • Programming experience (C, MatLab) <p><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></p> <p>https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</p>
Directorate Unit	E. Space, Security and Migration E.2
Indicative duration	5 months
Preferred starting date	01/12/2020
JRC Site	Ispra
Country	Italy
<u>JRC contact details</u>	<p>For any technical problems with your application, please contact:</p> <p>HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu</p>