EUROPEAN COMMISSION
DIRECTORATE-GENERAL HUMAN RESOURCES AND SECURITY
Directorate HR.AMC –Account management Centre
HR.DDG. AMC 8

2017-IPR-E-000-9367	**Training on the Computational analysis of pressure-impulse curves for structural components**

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 activity:** The recent terrorist attacks have shown that protection of soft targets and buildings is important. A particular risk for buildings loaded by blast waves is the failure of glass since it is the most fragile part of a building and result in addition into harmful splinters. Computational models (explicit finite element method) are a fast and reliable tool to analyse mechanically blast effects to structures. The training consists in (a) developing models for the simulation of different glass types and other structural components under blast loading and (b) making parameter studies in order to investigate their behaviour and creating iso-damage curves (PI-curves). The explicit finite element software EUROPLEXUS will be used. **Qualifications:** **Essential:** University degree in civil/structural engineering and an MSc in a field relevant to the topic of the call. (Applications from students currently preparing a thesis for an MSc degree are eligible – the purpose of the training must be directly related to the subject of the thesis.) Good knowledge of the English language (level

	B2) Good analysing and problem-solving skills. **Advantage:** Previous research or professional experience relevant to the topic of the call and experience in the use of explicit FEM software will be considered an advantage. **For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:** https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees
Institute/Directorate **Unit**	Space, Security & Migration Safety & Security of Buildings Further information: https://ec.europa.eu/jrc/en
Indicative duration **Preferred starting date**	5 months As soon as possible
JRC Site **Country**	Ispra Italy
JRC contact details	**For any technical problems with your application, please contact:** HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu