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

2017-IPR-F-000-8646	**Trainee on a computational methods for skin sensitisation**

Position for: Trainee	As the science and knowledge service of the Commission, the mission of DG 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 Chemical Safety and Alternative Methods (F.3) including The European Union Reference Laboratory for alternatives to animal testing (EURL ECVAM), is part of the Directorate F for Health, Consumers and Reference Materials. We develop, evaluate, harmonise and promote innovative methods for the regulatory safety assessment of chemicals. We provide support to a broad range of policy areas including industrial and household chemicals, cosmetics, food, plant protection products, endocrine disrupters and chemical mixtures. The traineeship position will give support to ongoing activities in the unit and EURL ECVAM in relation to the use and development of computer-based methods alternative to animal testing. In particular, the trainee will give support to a project aimed at the dissemination of a computer-based model for the prediction of skin sensitisation hazard, and will explore the possibility of improving the ability to predict eye irritation hazard. The trainee will have two main tasks: • Benchmark an in-house prediction model for skin sensitisation hazard with publicly available skin sensitisation datasets • Data mining of an eye irritation dataset and development of a computational prediction model The first task will initially include some literature research in order to gather the available datasets. This task will be followed by the use of some in silico tools (e.g. TIMES-SS, Dragon, and KNIME)

	for the application of the model. The outcome of this activity will be captured in an article that will be submitted to a peer-reviewed journal. The second task will correspond to the modelling of an in-house dataset with eye irritation in vitro and in vivo data. Chemoinformatic tools will be used to find patterns and groups of chemicals in the dataset, and if possible, a prediction model will be built. **Qualifications:** **Essential:** • Enrolled or in possession of a Master's degree in computational toxicology, computational chemistry, biostatistics, toxicology, chemistry, biology, statistics. • Advanced Excel user • Good level of English (level B2). **Advantage:** • Modelling experience • Knowledge of KNIME • Knowledge of chemoinformatics • Programming skills in R • Understanding of chemistry **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	Directorate F – F.3 – Chemical Safety and Alternative Methods Unit Further information: https://eurl-ecvam.jrc.ec.europa.eu/
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:** JRC-ESRA@ec.europa.eu