

Post-doctoral associate: Ontologies, Workflows, Nano-informatics, Database

Starting date : September 2019Employer and Location : Aix Marseille University, Aix en Provence, FranceDuration : 12 months

Aix Marseille University has an open position for a post-doc researcher to join the "sustainable environment" research group at the CEREGE, Aix en Provence. The position is funded by the European Commission as part of the H2020 project NanoInformaTIX. NanoInformaTIX is a €6million project that aims to create a comprehensive, sustainable, multi-scale modelling framework for exposure and (eco)-toxicity of Engineered Nanomaterials (ENM) to facilitate cost-effective risk assessment, less reliant on animal testing, and to support the design of safer materials and products.

We are looking for a postdoc to work on ontology, workflows and database management. Specifically, the candidate will have to developed workflows for ontological development and maintenance in collaboration with existing ontology development communities. This project is in the context of the implementation of a comprehensive database that will integrate nanosafety data from various international datasets. Workflows to integrate the ontology into data curation, data validation and input/output of modelling tools will be defined. This project will allow leveraging ontologies and file sharing within the NanoEHS community and the FAIR principles should be considered in the current network of environmental databases.

This position offers the opportunity for international collaboration and global visibility within the nanoinformatics field.

Required Skills and Experience for the post-doc position:

- The ideal candidate should have a PhD in Data Science, Bioinformatics, Computer Science or a related field. Candidates with a sound and proven data science background and excellent quantitative skills are encouraged to apply.
- Knowledge of biological ontologies, controlled vocabularies, semantic web technologies (<u>OWL</u>, <u>RDFS</u>, <u>RDF</u>) and expertise in Protégé, as well as experience in programming languages (e.g., Python, R, Java) and database design and handling would be highly valued.
- Demonstrate an understanding of both science and informatics.
- Good presentation skills, aptitude for international collaborations.

Please send CV, statement of research interests and the names and addresses of three references to: Jérôme Rose, <u>rose@cerege.fr</u>, Mélanie Auffan, <u>auffan@cerege.fr</u> or Camille de Garidel, <u>cgaridel@cerege.fr</u>