INTERNATIONAL CALL IC37_22

JOB TITLE

Chemoinformatics Engineer in the area of Human Health Risk Assessment

JOB DESCRIPTION

The Center for Environmental, Food and Toxicological Technology (TecnATox) was born in 2008 as a result of the merger of members of the group of the Laboratory of Toxicology and Environmental Health (LTSM) and the groups of Environmental Analysis and Management (AGA, later AGACAPE) and Research in Neurobehavior and Health (NEUROLAB). The Mathematical Models for Environmental and Biomedical Engineering (MMEAB) group has recently joined. All four groups from the Universitat Rovira i Virgili are research groups consolidated by the Agency for the Management of University and Research Grants (AGAUR). TecnATox aims to carry out research and development in the field of environmental and food protection at the European level and to perform technology transfer and consultancy services arising from the needs of the regulatory/government departments and industrial/private sectors. TecnATox provides its customers with high-quality services ensuring scientific-technical rigor.

The Center for Environmental, Food, and Toxicological Technology (TecnATox) is functionally attached to Health and the Environment of the IISPV and works in close relationship with the other units of the institute.

The primary role of the appointee will be varied research contributions in the European Partnership for the Assessment of Risks from Chemicals (PARC) project funded by the European Union's "Horizon Europe" framework program (Grant Agreement No 101057014). S/he will contribute with Chemoinformatics in the area of human Health risk assessment and development and implementation of the broader application of chemoinformatics/bioinformatics methods and collaborate with a team of interdisciplinary scientists of IISPV. S/he will be able to collaborate with a broad range of scientists, within a distributed organisation, under a compelling, overarching research strategy. The appointed individual will be committed to championing and embedding broader chemoinformatics/bioinformatics and human Health risk assessment across the applied research of the TecnaTox research and innovation portfolio.

CANDIDATE PROFILE

- Degree in Biochemistry or Bioinformatics.
- The researcher must have a master's degree in a related field of chemistry/biochemistry with good project exposure to applied chemoinformatics/bioinformatics in the area of human health risk assessment by the date of starting this job.

REQUIREMENTS

- Competence and experience with applied research of chemoinformatics/bioinformatics in the area of human health risk assessment.
- Demonstrablele experience in Chemo-informatics pipeline and applied data science/machine learning in the life science domain.
- Spoken and written English skills at a full professional level (demonstrable by authorship in scientific publications and interview)
- Experience in scientific programming with Python, Java Script (certificate or GitHub profile).
- Experience with advance data science and machine learning framework (SciKit learn, Tensorflow, PyTorch, Pandas, Matplot lib etc).
- Experience with the software development environment and software development life cycle.
- Experience with chemoinformatics pipelines like RDKit, DeepChem, KNIME, Docking pipeline, and molecular fingerprint.
- Basic experience with molecular dynamics tools, text mining, BASH scripting, HPC and cloud environment.
- Have the ambition to develop new research areas and seek to expand in new emerging multidisciplinary disciplines like (but not limited to) System toxicology and OMICS.
- Be capable of critical analysis, evaluation and synthesis of new and complex ideas.
- Has demonstrated a systematic understanding of a field of study and mastery of research associated with that field.
- Has demonstrated the ability to conceive, design, implement and adapt a substantial programme of research with integrity.

- Makes a positive contribution to the development of knowledge, research and development through co-operations and collaborations.
- Identifies research problems and opportunities within their area of expertise.
- Identifies appropriate research methodologies and approaches and design and conducts research independently and in the team which advances the research agenda.
- Publishes papers as lead author, and participates in project workshops or conference sessions.

IT WILL BE VALUED

- Motivation, creativity, initiative, and proactive attitude.
- Ability to learn, flexibility, and adaptability.
- Commitment to quality, optimizing resources and achieving results.
- Previous experience of collaboration in research projects especially in the area of human health risk assessment.
- Establishes collaborative relationships with relevant academic/industrial research groups
- Communicates their research effectively to the research community and wider society
- Is committed to the professional development of his/her own career and acts as a mentor for others.
- Teamworking, ability to work independently and within a team with the ability to organize, and adjust with dynamism, versatility, rigour, and confidentiality but equally take responsibility.

LABOUR CONDITIONS

- Full-time position (40h/week)
- Workplace: Chemical Engineering Department, URV, C/ Països Catalans, nº 26, Tarragona
- Contract: Temporary (3 years)
- Gross annual salary: 24.276,56 €
- Starting date: October 2022 (or with a mutual agreement within 2 months of selection)

SELECTION PROCEDURE

- Selection of CV's. Suitable and unsuitable CV's will be identified according to the requirements. Applicants who do not meet the requirements indicated in the candidate profile and requirements will not pass to the next phase.
- Evaluation of the CV. Evaluation of the CVs up to a maximum score of 40 points.
- Cover Letter. Attach to the resume a cover letter with a maximum length of 2500 characters with spaces. With a maximum score of 20 points.

To access the interview phase, it is necessary to have obtained a minimum score of 40 points in the sum of scores of the evaluation of the curriculum and cover letter

- Personal interview. With a maximum score of 40 points.

Items	**Score**
Attitude	10
Fit in the workplace	10
Experience, developed functions/skills	10
Teamwork	10

SELECTION COMMITTEE

- President: Prof. Marta Schuhmacher (Group Leader)
- Chair 1: Dr. Vikas Kumar (Principal Investigator)
- Chair 2: Dra. Montse Mari (Technician)

SUBSTITUTES:

- President: Prof. Teresa Colomina (Group Leader)
- Chair 1: Prof. Monica Bullo (Principal Investigator)
- Chair 2: Dr. Joaquim Rovira (Postdoctoral Researcher)

CANDIDATURES

- The CV must include the DNI/NIE number or another personal identity document number.
- Send the CV and the Cover Letter through the IISPV website. **https://www.iispv.cat/oferta-de-treball/ic37_22-chemoinformatics-engineer-in-the-area-of-human-health-risk-assessment/**

For any questions or queries, please contact us by email: recruitment@iispv.cat

DEADLINE FOR RECEIPT OF APPLICATION: 16/08/2022

COMMUNICATIONS

The IISPV will inform the candidates if they have been admitted or excluded for the next phase of selection.