INTERNATIONAL CALL IC13_22

JOB TITLE

Principal Investigator for the area of Environmental Informatics and System Toxicology

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). Recently, the group Mathematical Models for Environmental and Biomedical Engineering (MMEAB) has also 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, as well as to satisfy, from the University, the needs of the administration and the productive sectors, utilizing actions of knowledge and technology. TecnATox provides its customers with high-quality products and scientific-technical rigour.

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.

As we organise ourselves to face the emerging research challenges of the future, we are now appointing a Research Director for the area of Environmental Informatics and System Toxicology to join our organisation. The major role of the appointee will be the responsibility of scientific management of the European Partnership for the Assessment of Risks from Chemicals (PARC) project funded by the European Union's "Horizon Europe" framework programme. S/he will also lead the development and implementation of the broader Research and Innovation Strategy for the selected area and will lead and coordinate with a team of interdisciplinary scientists of IISPV. The appointee will have an international reputation for

scientific research in the area of Environmental Informatics and System Toxicology and will be a compelling spokesperson for the constituent research themes of TecnaTox and IISPV. S/he will be able to draw together 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 in silico and data science strategies across the applied research of the TecnaTox research and innovation portfolio.
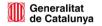
Researcher career profile (R3)

CANDIDATE PROFILE

- Degree in Life/Medical/Biological Sciences/Engineering with a master's in Computer or Bioinformatics
- The researcher must hold a Doctorate degree (PhD) in Environmental or human health risk assessment.
- 10 or more years of PostDoctoral Experience in computational modelling in the area of environmental or human health risk assessment.

REQUIREMENTS

- Competence and experience with Project management and research leadership
- Spoken and written English skills at a full professional level (demonstrable by lead authorship in scientific publications)
- Minimun 10 years of demonstrable experience (post PhD) in the area of environmental or human health risk assessment, especially in computational modelling including PBPK, QSARS, AI and advanced data science.
- Demonstrablele experience in Chemo-informatics and Systems biology including a broad range of in silico tools for environmental and human health risk assessment including but not limited to specialized tissue dosimetry (physiologically based kinetic models),

translational models (IVIVE, QIVIVE, inter-species scaling), QSAR, quantitative AOPs and Systems biology models.

- Proficiency in scientific programming with R, Matlab or Python.
- Research leadership with demonstrable skills in fundraising, proposal writing, team building and networking.
- Demonstrablele supervisory experience of PhDs and PostDocs in the area of environmental or human health risk assessment.
- Teamworking, ability to work independently and within a team with the ability to organize, and adjust with dynamism, versatility, rigour, confidentiality but equally take responsibility and show kindness to junior team members.
- Have the ambition to develop new research areas and seek to expand in new emerging multidisciplinary disciplines like (but not limited to) personalised medicines, health informatics and big data science application in life science.
- Be capable of critical analysis, evaluation and synthesis of new and complex ideas.
- Be able to explain the outcome of the research (and the value thereof) to research colleagues or lead the group in EU projects.
- 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.
- Has made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, innovation or application. This could merit national or international refereed publication or patent.
- Takes ownership for and manages own career progression, sets realistic and achievable career goals, and identifies and develops ways to improve employability.
- Has an established reputation based on research excellence in their field.
- 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;

- Can take the lead in executing collaborative research projects in cooperation with colleagues and project partners.
- Publishes papers as lead author, organises workshop or conference sessions

IT WILL BE VALUED

- Knowledge of advanced data science, additional computational degree or training.
- Motivation, creativity, initiative and proactive attitude.
- Ability to learn, flexibility and adaptability.
- Commitment to quality, to optimizing resources and to achieving results.
- Advanced skills in-silico modelling for human health risk assessment and new emerging paradigms like NAM, AOPs, systems toxicology etc.
- Previous experience in project management of large EU projects.
- Advanced knowledge of data management and FAIR data principles
- Knowledge of project and task planning especially in agile environments for scientific programming and model development.
- Ability to identify and solve problems.
- Develops integrated language, communication and environment skills, especially in an international context
- Understands the agenda of industry and other related employment sectors
- Understands the value of their research work in the context of products and services from industry and other related employment sectors
- Can communicate with the wider community, and with society generally, about their areas of expertise
- Can be expected to promote, within professional contexts, technological, social or cultural advancement in a knowledge-based society
- Can mentor First Stage Researchers, helping them to be more effective and successful in their R&D trajectory.
- Establishes collaborative relationships with relevant industry research or development groups
- Communicates their research effectively to the research community and wider society

- Is innovative in their approach to research
- Can form research consortia and secure research funding/budgets/resources from research councils or industry
- Is committed to the professional development of his/her own career and acts as a mentor for others.

LABOUR CONDITIONS

- Full-time position (40h/week)
- Workplace: Chemical Engineering Department, URV, C/ Països Catalans, nº 26, Tarragona
- Contract: temporary (7 years)
- Gross annual salary: 43.697,89 €
- Starting date: June, 2022

SELECTION PROCEDURE

- <u>Selection of CV's</u>. 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.
- <u>Evaluation of the CV.</u> Evaluation of the CVs up to a maximum score of 40 points.
- <u>Cover Letter.</u> 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

- <u>Personal interview.</u> With a maximum score of 40 points.

Items	40
Attitude	10
Fit in the workplace	10
Experience, developed functions/skills	10
Teamwork	10

SELECTION COMMITTEE

- President: Prof. Marta Schuhmacher
- Chair 1: Prof. Mònica Bulló Bonet
- Chair 2: Dr. Alberto Fernández Sabater.
- Chair 3: Dr. Laureano Jimenez

  SUBSTITUTES:

- President: Prof. Josep Lluís Domingo Roig
- Chair 1: Prof. Teresa Colomina
- Chair 2: Dr. Jaume Folch
- Chair 3: Dr. Martí Nadal.

CANDIDATURES

- The CV must include the DNI/NIE number or personal identification document number.

- Send the CV and the Cover Letter through the IISPV website. https://www.iispv.cat/oferta-de-treball/ic13_22-principal-investigator-for-the-area-of-environmental-informatics-and-system-toxicology/

  For any questions or queries: recruitment@iispv.cat

DEADLINE FOR RECEIPT OF CV 06/05/2022

COMMUNICATIONS

The IISPV will inform the candidates if they have been admitted or excluded to access the interview.