Research position (predoctoral level) at Universidad Autónoma de Madrid

PESTICIDE RISK ASSESSMENT IDENTIFICATION EXPERT SYSTEM (PRIES-CM)

A research contract at pre-doctoral leven is available in the group of Prof. **Manuel Alcamí** at Universidad Autónoma de Madrid (MolPM group), in the framework of a synergy project funded by the Madrid regional government (Y2020/EMT-6290, PRIES-CM).

THE RESEARCH PROJECT

The project aims to develop and apply computational methods for identifying the risk of the pesticide use, in order to provide a solution to the identification of emerging contaminants in waters and their possible origin. This methodology will allow us to predict the risk that pesticides and their byproducts pose to the environment and to health.

The available position concerns the **theoretical determination of properties of interest** of pesticides and their byproducts. The selected candidate will obtain the structures and spectra for those systems using Quantum Chemistry and Molecular Dynamics simulation methods. Those applicants interested in obtaining a PhD degree will be mentored by the project main researcher.

CANDIDATES PROFILE

Candidates of any gender and nationality are welcome to apply, with the eligibility requirements included here. Among others, applicants should:

1. Hold a **BSc** degree in **Physics, Chemistry, Chemical Physics** or a closely related subject. Postgraduate studies at master level in theoretical chemistry and/or computational modelling will also be positively evaluated.

2. Demonstrate excellent knowledge of quantum chemistry programmes (as Gaussian, Orca, etc) and knowledge of programming (Python and Fortran)

3. Be fluent in English;

We will value positively any additional skills or experience in the areas of organic chemistry that is also relevant to the offered position.

STARTING DATE AND DURATION

The position should ideally start by November 2021 and will be funded until 30/06/2022, with annual renewals up to the end of the project (by June 2024) upon mutual agreement.

REMUNERATION

Gross salary (including national income taxes) amounts to 1.547 €/month, besides social security and pension rights.

APPLICATION PROCEDURE

Candidates must send their applications (including CV, BSc diploma and proofs for other merits they wish to be evaluated) through the UAM jobs portal: https://sede.uam.es/sede/piproyectos. Applicants should follow a 3 step process (identification + encoding details + registering the application), as described in the call document: link here

Registration in the Madrimasd job portal and subscription to the position with reference **PRIES-CM-UAM-PIA1** (http://www.madrimasd.org/empleo/ofertas-destacadas/) is **also mandatory**.

Deadline to apply: **15 days from the date of publication.**

Selected candidates shall be contacted for an interview, where practical questions will also be asked.