A research contract at predoctoral level is available in the group of Prof. Manuel Alcamí at Universidad Autónoma de Madrid (MolPM group), in the framework of the Proof of Concept Proyect SEPIA (PDC2021-121203-I00) funded by MCIN/ AEI /10.13039/501100011033 and by the European Union "NextGenerationEU"/PRTR.

The research project

The project aims to develop a database of quantum chemistry calculations of pesticides with the final goal to predict their environmental impact and to identify possible byproducts.

The available position concerns the theoretical determination of properties of interest of pesticides and their byproducts. The selected candidate will be involved in the automatization of processes for calculation of the structures and spectra of those systems using Quantum Chemistry and Molecular Dynamics simulation methods, and results management. This position is funded for 15 months, but the selected candidate can enroll in a PhD program and will be mentored and guided to look for additional funds to complete the research project, if interested.

Candidates Profile

Candidates of any gender and nationality are welcome to apply, with the eligibility requirements described in the call documents. 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 October 2022 and will be funded until 30/11/2023.

Remuneration

Gross salary (including national income taxes) amounts to 1.629,30 €/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.

Deadline to apply: September 5th, 2022.

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