

Expression of Interest



Contact Person/Scientist in Charge

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Universidad de Alicante

Department / Institute / Centre

- **Name:** Organic Chemistry Department
- **Address:** Universidad de Alicante
- **Province:** Alicante

Research Area

- Chemistry (CHE)

Brief description of the institution:

The University of Alicante (UA) was created in 1979. Today it educates and trains more than 25.000 students -3.000 of them are international students - and offers more than 43 undergraduate and 80 postgraduate programmes: consequently it is proportionally one of the fastest growing universities in Spain. The UA houses 227 research groups in Social and Legal Sciences, Experimental Sciences, Technological Sciences, Human Sciences, Education and Health Sciences and 15 Research Institutes (Water & Environment, Materials, Electrochemistry, Biodiversity, Chemical Processes and Organic Synthesis, and Modern Languages, among others). Thus, the UA employs over 3.500 researchers/ professors and has a complex management /administration structure of 1.300 people, which involves an annual budget of 200 million Euros.

UA is a young and dynamic university with vast experience in implementing EU funded projects in different programmes and areas, with presence in more than 60 countries worldwide. In the last 10 years, UA has successfully acted as coordinator of many Tempus, Alfa, Edulink projects involving Third Countries and Lifelong Learning and Framework Programme (FP, DG Research) Projects. Moreover, the participation in FP has been increasing in the last years, taking part in 25 5th FP, 26 6th FP, 45 7th FP projects (13 of them

coordinated by UA), and 11 in H2020.

It is worth underline the big effort performed by UA in order to meet the commitment with the principles set out in the European Charter for Researchers and in the Code of Conduct for the Recruitment of Researcher

Brief description of the Centre/Research Group (including URL if applicable):

With regard to the research, the Organic Chemistry Department is interested in the synthesis of molecules with potential biological or pharmaceutical properties and in the development of new methodologies based on highly selective organometallic compounds as highly reactive intermediates. The laboratories are fully-equipped to perform high quality research, which places our department among the best in the area of organic chemistry.

<https://dqorg.ua.es/en/message-of-welcome.html>

Project description:

Although chemists in academia strive to develop new catalysts that comply with the Millennium Declaration of the United Nations General Assembly's 4th objective on protecting our common environment, the truth is that solvents constituted 80-90 % of the non-aqueous mass of materials used to make an active pharmaceutical ingredient (API). Thus, the improvement of the environmental impact of solvents is of paramount importance in the development of new sustainable chemical processes.

In contrast to the petrol oil derived solvents, which are often highly toxic, expensive from the production and environmental disposal of waste point of view, and came from non-renewable sources, Nature provides us with certain non-toxic, inexpensive and readily degradable or recyclable alternatives, such as water, ethanol, glycerol or deep eutectics solvents (liquids at room temperature consisting in mixtures of two solids; DES), which are characterized by a high density of hydrogen bonds. In this line of research, we are exploring the preparation of various metal catalysts capable of carrying out its activity in these alternative bio-renewable solvents.

<https://personal.ua.es/en/djramon/>

Applications

We continue to look for potential candidates for European Marie Curie grants, If you are interested in working in a multidisciplinary chemical environment and have good curriculum vitae, send us your CV before 15/07/2019