

Expression of Interest



Contact Person/Scientist in Charge

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Universidad de Alicante

Department / Institute / Centre

- **Name:** Department of Ecology
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- **Province:** Alicante

Research Area

- Environmental Sciences and Geology (ENV)

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):

This emerging research group focuses its work on understanding how the environmental stressors affect ecosystems. Our studies focus on the marine environment, mainly in the intertidal and subtidal areas. We use different approaches from mesocosm experiments in the lab to manipulative or observational studies in the field. One of the main areas of interest is how different environmental stressors interact and how the effect of these stressors can be influenced by climate change.

We are looking for motivated people to do research on marine ecology, who are able to work in a team and can also work independently, who are willing to learn and open minded with out-of-the-box thinking. The candidate should have good communication skills in English and experience with the publication of scientific outcomes is desirable.

Project description:

Effects of extreme climate events on ecosystems.

Extreme climatic events have a major role in the structuring of biological communities, and their occurrence is expected to increase due to climate change. Most research in this field has focused on changes in the trends of mean climate values, rather than the occurrence of extreme events. Extreme events are rare climatic events with an abnormally high intensity and climate change is expected to increase their occurrence. Extreme events can have a disproportionately high impact on ecosystems relative to the short timescale in which they occur. Thus, extreme events are expected to be important drivers for structuring biological assemblages and consequently on ecosystem functioning. In the initial investigations we have found that climate extremes can drive biological assemblages to early successional stages compared to several mild disturbances.

As a second step we aim to study:

1. the effect of how extreme events can affect ecosystem according to other environmental stressors such as pollution, and;
2. how the invasibility of invasive species is modulated by this type of climate events.

The results of this project has relevant implications in the forecasting of the ecological consequences of climate change and will be of great help in the designing of measures to mitigate its effects. The research will take place mainly in the field, in the rocky intertidal area through manipulative experiments.

For more information you can read this paper: <https://www.nature.com/articles/srep30607>

Applications

Applicants should submit their CV and letter of motivation explaining their background and research interests. Potential candidates are encouraged to express their interests before August.