

## Open postdoctoral research position on application of innovative bioelectrochemical systems for water treatment at the University of Girona (Spain)

The candidate will work on the recently funded European Project Horizon 2020 **ELECTRA** (Electricity driven Low Energy and Chemical input Technology foR Accelerated bioremediation).

### Project description

**ELECTRA** is a recently approved 4-year project that involves the participation of 17 universities, research centres and companies in the EC and China. The project aims at improving bioremediation of surface and ground waters, as well as soils, using innovative approaches based on bioelectrochemical technologies, potentially having a low energy and contamination impacts on site. **ELECTRA** involves the participation of European and Chinese partners in two highly connected consortia, thus bringing to the candidate a good opportunity to interact with multiple institutions among Europe and Asia.

The project tackles with basic research at laboratory scale with several bioremediation techniques and contaminants, and envisions the final application of “on-site” tests and application of winner technologies in contaminated sites that have been selected in Europe and China.

The participation of the [University of Girona](#) in **ELECTRA** is funnelled through the [LEQUIA](#) and [gEMM/IEA](#) research groups and brings together expertise in molecular microbiology and bioelectrochemistry. Proposed technologies at the UdG to be tested within **ELECTRA** include the use of bioelectrochemical systems (BES) for the simultaneous removal of nutrients and metals. Tasks include all steps from selection of microorganisms to tests on site. The candidate will work on the initial steps of strains development and purification together with testing in BES reactors. Emphasis will be put to develop new isolation and enrichment techniques and the implementation of molecular methods for the detection, enumeration and evaluation of candidate microorganisms.

### Employment

**Position:** Full time **postdoctoral** researcher. Fixed term appointment is set to initially **1 year**, but possibilities for renewal of an additional year (2 years in total) are optional upon evaluation.

**Place of work:** Work will be performed at the group of Molecular Microbial Ecology within the Institute of Aquatic Ecology, and the Laboratory of Chemical and Environmental Engineering (LEQUIA), University of Girona, SPAIN.

**Starting date:** 1<sup>st</sup> March 2019.

**Gross annual salary:** 31.049,52€ including national health insurance.

### Requirements

We look for a highly motivated postdoctoral researcher in Microbial Ecology/Environmental Engineering, with proven skills and expertise based on previous publications in the fields. Although not mandatory, expertise in bioelectrochemical engineering will be valued.

### Scientific knowledge and skills

- Hold a PhD in biology, microbiology, environmental engineering, biotechnology, or equivalent
- Be fluent in English.
- Experience and knowledge on wastewater technologies and electrochemistry is desirable.
- Be able to work with regular analytics (IC, GC, LC), and molecular analyses (PCR, amplicon based sequencing). Experience in bioinformatics is desirable.
- Be able to design and perform experiments, and to analyse data critically.
- Be able to communicate through high-quality scientific channels, e.g. peer reviewed publications, presentations to conferences or seminars, etc.

### Personal knowledge and skills

- Ability to work effectively with team members from different backgrounds and with different tasks.
- Ability to meet objectives within strictly set deadlines.
- Demonstrated ability to work efficiently and with minimum supervision.
- Willingness to travel internationally for project meetings and conferences.

### Applications

Applications must be sent via e-mail with subject line mentioning “ELECTRA PostDoc UdG” to [promotor\\_biosan.biologia@udg.edu](mailto:promotor_biosan.biologia@udg.edu) not later than December 21<sup>st</sup> 2018.

Application documents:

- Motivation Letter
- Brief CV, including Educational qualifications and Professional affiliation. Employment history, Current Research Interests, Main Research outcomes (Publications, conferences).
- Reference letter/s

Applications will be regularly reviewed by a Selection Committee prior to the deadline hence **early application is recommended**. If necessary, candidates should be invited to attend an interview and the remaining unsuccessful applicants will be notified accordingly.

### We offer

- Participation in a research group with a highly recognised trajectory in research
- Inclusion in an international and multidisciplinary team
- Intensive contacts with fellow researchers and Industrial partners in Europe
- Work in a research EU2020 funded project that addresses global environmental challenges within bioremediation

More information regarding this position can be obtained directly contacting  
Dr. Lluís Bañeras ([lluis.banyeras@udg.edu](mailto:lluis.banyeras@udg.edu))  
Dr. Sebastià Puig ([sebastia.puig@udg.edu](mailto:sebastia.puig@udg.edu))