

## **Fellowship/Contract Offer Announcement at Polytechnic University of Valencia (Spain)**

CalAgua research team, which belongs to the Environmental and Water Engineering Institute (IIAMA) from Polytechnic University of Valencia, is looking for applicants for a PhD grant associated to the following project: "Simulation, modelling and control of energy recovery in the form of biogas from the organic matter and nutrients of wastewater by coupling an AnMBR process with a microalgae cultivation process".

Grant holder will develop his thesis in the area of wastewater treatment and resources and energy recovery from wastewater. The main objective of this project is to check in a semi-industrial scale the technical, economical and environmental viability of the proposed technology for urban wastewater treatment, which is based on using anaerobic membrane bioreactors, coupled with microalgae cultivation from the obtained effluent. Project will be focused on the study of microalgae production from carbon dioxide and nutrients (nitrogen and phosphorus) obtained in the anaerobic treatment process. Apart from improving anaerobic wastewater treatment, this technology makes possible the optimum nitrogen and phosphorus recovery from effluent wastewater and biogas. The use of carbon dioxide obtained from both the anaerobic decomposition of organic matter and the energy recovery from biogas, by methane combustion, will minimise the overall CO<sub>2</sub> emissions associated to wastewater treatment.

Required education: Chemical Engineering, Industrial Engineering, Environmental Engineering, Civil Engineering or similar, with a good student records, with teamwork skills, interest in the Environmental field and strong motivation on doing research in the area of the project.

Apart from educational background, good English level will be appreciated. Also knowledge and experience in the following aspects will be considered: wastewater treatment, particularly anaerobic treatments; lab assembly or pilot plant operation skills; industrial processes control; process automation (PLC programming); and programming skills in Visual Basic and Matlab®.

Main purpose: Research training in a project funded by R+D+i Spanish National Plan and PhD degree.

Duration: 4 years (2 years fellowship + 2 years contract)

Salary: minimum 1.100 Euros/month

Deadline: announcement will be published at the end of January or beginning of February 2012. Application deadline will be 15 days after publishing.

Starting date: summer/autumn 2012

Further information and application: more information about FPI grant (FPI-MICINN programme) and specific requirements can be found in Ministry of Science and Innovation website ([www.micinn.es](http://www.micinn.es)).

<http://www.micinn.es/portal/site/MICINN/menuitem.d20caeda35a0c5dc7c68b11001432ea0/?vgnnextoid=8da5b9746e160210VgnVCM1000001034e20aRCRD>

People interested in this offer can send a brief CV by e-mail to the main researcher: José Ferrer Polo ([jferrer@hma.upv.es](mailto:jferrer@hma.upv.es)).

Further information about research team: [www.calagua.webs.upv.es](http://www.calagua.webs.upv.es)