

Scientific Curriculum Vitae

Joan García

Family name: García Serrano

Name: Joan

Identity card: 46650832R

Date of birth : 09/06/1966

Current Position

Institution: Universitat Politècnica de Catalunya-BarcelonaTech (UPC)

Faculty: School of Civil Engineering

Department: Hydraulic, Maritime and Environmental Engineering

Address: Jordi Girona 1-3, Mòdul D-1, 08034 Barcelona

Phone: +34 93 4016464

Fax: + 34 93 4017357

E-mail: joan.garcia@upc.edu

Speciality (UNESCO Codes): Environmental Engineering (330809), Wastewater Treatment (330810)

Position Category: Full Professor

Start date: November 2008

Administrative situation: Permanent, full time

Research interests (key words)

Environmental Engineering, Environmental Biotechnologies, Modelling, Innovation, Wastewater Treatment, Water Reuse, Sludge Treatment, Waste treatment

Academic Degrees

Desgree	Center	Date
Biology	Univeristy of Barcelona	1990

Doctorate	Center	Date
Biology	University of Barcelona	1996

Previous Professional Activities

Activity	Center	Fechas
Assistant Professor Type 1	Civil Engineering School, UPC	1991 - 1998
Assistant Professor Type 2	Civil Engineering School, UPC	1998 - 2001
Assistant Professor Type 3	Civil Engineering School, UPC	2001 - 2002
Associate Professor	Civil Engineering School, UPC	2002 - 2008

Abstract

Joan Garcia (1966) is Full Professor of Environmental Engineering and leads the research group of "Environmental Engineering and Microbiology" (Universitat Politècnica de Catalunya, UPC) accredited by the Catalan Government (<http://gemma.upc.edu>). This group includes 2 professors, 1 lecturer, 3 research postdocs, 6 PhD students and 2 technicians. Joan obtained his degree in Biology in 1990 at the Universitat de Barcelona (UB) and in 1991 started to work as Assistant Professor in Environmental Engineering. Joan presented his doctoral dissertation on wastewater treatment engineering in 1996 at the UB, while at the same teaching at the Civil Engineering School of the UPC. He has been a postdoc research visitor at University of California at Berkeley (2001), and University of Ghent, Belgium (2005). For his contributions to water resources research and wastewater engineering received in 2008 an award of the

Spanish Ministry of Science and Innovation for the Intensification of Research Activity. He has written over 200 articles in scientific as well as technical journals, and proceedings. H = 33.

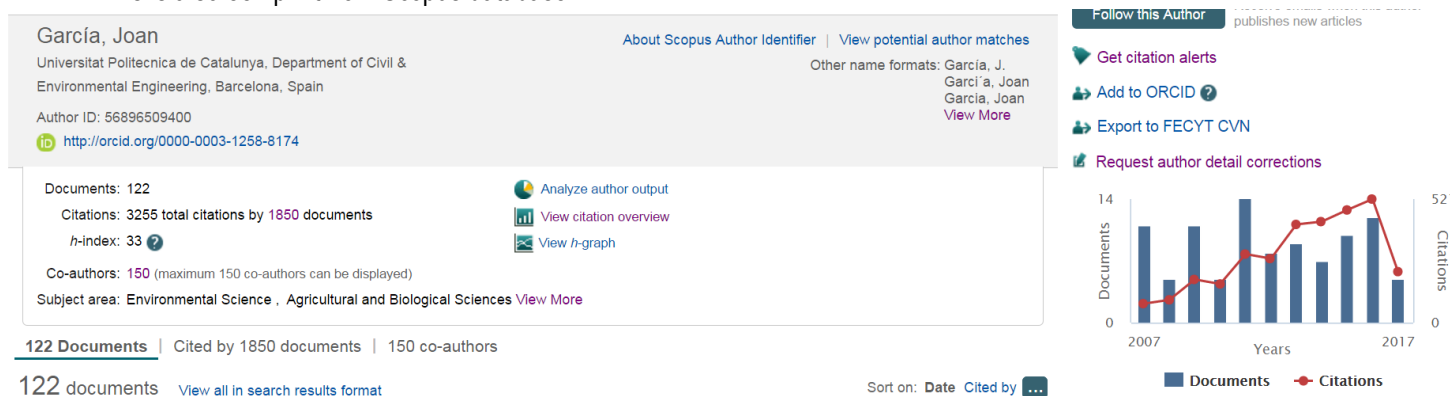
Joan carries out interdisciplinary research on the development and improvement of environmental technologies that mimicking nature and maximizing eco-efficiency allow treatment of wastewaters and other kinds of wastes. In particular research is currently conducted on systems for wastewater treatment and at the same time materials and energy recovery, like constructed wetlands and microalgae photobioreactors. Joan's results in the last 5 years have been published in more than 40 papers of which the majority located in the first quartile of the corresponding subject area (Environmental Engineering, Water Resources and Environmental Sciences). Joan is currently Managing Editor of the journal "Desalination and Water Treatment" (2009-now) and member of the Editorial Board of the journal "Ecological Engineering" (2007-now) (both ISI journals). In the last years Joan has leaded 7 competitive projects.

Three PhD students supervised by Joan (Cristina Ávila, Enrica Uggetti and Anna Pedescoll) obtained the UPC Extraordinary Doctorate Awards to Ph Dissertations (2015 and 2013). The PhD student Roger Samsó received the 2014 Catalan Government Award for the best research work on environment (14,000 €).

Joan was Chair of the 10th International Society for Environmental Biotechnology Conference, held in Barcelona in June 2016, with 300 participants.

Bibliometric data

This is a screen print from Scopus database.



Research Projects Obtained Competitively

Research projects (only those leaded by Joan)

Innovative Eco-Technologies for Resource Recovery from Wastewater (INCOVER) (June 2016 – May 2019; Coordinated project with 18 research groups, companies and SME)

Funding body: EU H2020

Number of researchers: 3 (UPC group)

Autonomous Reed Bed Installations (ARBI) (September 2013–August 2015; Coordinated project with 7 research groups and SME)

Funding Body: EU FP7

Number of researchers: 3 (UPC group)

Algal Production and Digestion from Wastewaters (DIPROBIO) (January 2013-December 2016)

Funding Body: National Research Plan, Spanish Department of Economy

Number of researchers: 5

Safeguarding Water Resources in India with Green and Sustainable Technologies (SWINGS) (September 2012–November 2015; Coordinated project with 21 research groups and SME)

Funding Body: EU FP7

Number of researchers: 3 (UPC group)

Natural Water Systems and Treatment Technologies to cope with Water Shortages in Urbanised Areas in India (NaWaTech) (July 2012–August 2015; Coordinated project with 13 research groups and SME)

Funding Body: EU FP7
Number of researchers: 3 (UPC group)

Biotechnology for Africa's Water Supply (WATERBIOTECH) (January 2011-December 2013; Coordinated project with 20 research groups).
Funding Body: EU FP7
Number of researchers: 4 (UPC group)

Design of New Systems of Constructed Wetlands for Removing Conventional and Emerging Contaminants from Wastewaters: Monitoring 2009-2011 (January 2009-March 2012; Coordinated project with 5 research groups).
Funding Body: National Research Plan, Spanish Department of Economy
Number of researchers: 5

Sludge Treatment with Reed Beds: Performance Evaluation and Criteria for Design, Operation and Maintenance: Monitoring 2008-2010 (January 2008-December 2010)
Funding Body: Spanish Department of Environment
Number of researchers: 7 (UPC group)

Integrated System for the Treatment of Wastewater, Urban Runoff and Sludge in Small Communities by Means of Constructed Wetlands (January 2009-December 2010; Coordinated project with 2 research groups)
Funding Body: Spanish Department of Environment
Number of researchers: 5 (UPC group)

Sludge Treatment with Reed Beds: Performance Evaluation and Criteria for Design, Operation and Maintenance (January 2007-December 2007)
Lead researcher: Joan García
Funding Body: Spanish Department of Environment
Number of researchers: 6

Design of New Systems of Constructed Wetlands for Removing Conventional and Emerging Contaminants from Wastewaters (December 2005 - December 2008; Coordinated project with 5 research groups).
Funding Body: National Research Plan, Spanish Department of Economy
Number of researchers: 3 (UPC group)

Characterization of Biotic and Abiotic Reactions Involved in Organic Matter and Contaminants Removal in Subsurface Flow Constructed Wetlands. Sizing and Design Criteria (October 2002–September 2005; Coordinated project with 3 research groups)
Funding body: National Research Plan, Spanish Department of Economy
Number of researchers: 4 (UPC group)

Other projects related with research activities such as support actions, promotion, dissemination, etc. (last 5 years)

10th International Society of Environmental Biotechnology Conference (ISEB) (Julio 2009 – Diciembre 2009)
Lead researcher: Joan García
Funding body: Spanish Ministry of Economy, Programa Estatal de Investigación, Desarrollo e Innovación orientada a los Retos de la Sociedad
Number of researchers: 6

ECotechnologies for Water Treatment and recovery of resources (ECOWAT) (January 2014-December 2016)
Lead researcher: Joan García
Funding body: Spanish Ministry of Economy, Support Action
Number of researchers: 5

Support to research groups recognised by the Catalan Government (January 2014-December 2016)
Lead researcher: Joan García
Funding body: Catalan Government
Number of researchers: 14

Water. Cat. Catalan R+D Network for Water Technologies (December 2010–December 2012, Coordinated Project with 4 research groups)
Lead researcher: Joan García
Funding body: ACC1Ó, Catalan Government
Number of researchers: 6 (UPC group)

Research Contracts

(only those led by Joan)

Consultancy and technical assistance in the drafting and construction of a wastewater constructed wetland system in Jaipur, India (2016-2017)
Company: STB HOLDINGS LTD
Number of researchers: 3

Sizing and design of a constructed wetlands for improvement of surface water quality of Rambla del Albujón, T.M. de los Alcázares (Murcia) (2016)
Company: Edinart Consulting, S.L.P
Number of researchers: 3

Mathematical models for hydraulic and biokinetic simulation of wastewater systems based on floating macrophytes. (2015-2016)
Company: QUARQ Enterprise S.A.
Number of researchers: 3

Determination of Optimum Chlorine Dosage for Treatment of Ballast Water (2014)
Company: Integral Design and Development
Number of researchers: 2

Assessment of Reclaimed Waters and Sustainability of the wetland system at Can Cabanyes, Granollers (2014)
Funding body: Granollers City Council
Number of researchers: 2

Assessment on the Operation and Management of the Constructed Wetland of the Periurban Park SPJ4 located in Granollers, Barcelona (October 2003 – up to now)
Funding body: Granollers City Council
Number of researchers: 2

Enlargement Design Proposal of the Constructed Wetland System Periurban Park SPJ4 located in Granollers, Barcelona (December 2008 – February 2009)
Funding body: Granollers City Council
Number of researchers: 2

Design Recommendations for Sludge Treatment with Reed Beds (February 2008–May 2008)
Funding body: Catalan Water Agency
Number of researchers: 7

Study on Sludge Treatment with Reed Beds: Design and Operation Criteria (October 2007-January 2008)
Funding body: Catalan Water Agency
Number of researchers: 7

Clogging of Constructed Wetland Systems: Relationship with Wastewater Quality (November 2005-April 2006)
Funding body: "Aigües de Catalunya SA"
Number of researchers: 4

Establishment of Design Criteria of Constructed Wetlands in the Context of Project Construction of a Coast Guard in Ebro Delta (April 2005-June 2005)
Funding body: URS Spain
Number of researchers: 1

Final Design of Wastewater Treatment Plant for Cheese Production Company "Formatges Muntanyola" (June 2005-August 2005).

Funding body: "Maria Mariné Basté (Formatges Muntanyola)"

Number of researchers: 1

Optimization and Improvement Wastewater Treatment Systems (January 2005-June 2005)

Funding body: "Hormigones Projectados SA"

Number of researchers: 3

Feasibility Assessment of Final Treatment of Wastewaters of the Enterprise "Masa Decor SA" by Means Constructed Wetlands (April 2005-June 2006)

Funding body: "Masa Décor SA"

Number of researchers: 3

Technical Assessment for the Operation and Maintenance of the Wastewater Treatment Plants of Riudecanyes, Vilajuiga and Cervià de Ter (September 2002–September 2003)

Funding body: Water Catalan Agency

Number of researchers: 3

Publications and Scientific and Technical Reports

Articles in journals included in the ISI database (all Joan's articles)

Arias, D.M., Uggetti, E., García-Galán, M.J., García, J. (2017). Cultivation and selection of cyanobacteria in a closed photobioreactor used for secondary effluent and digestate treatment. *Science of the Total Environment* 587–588, 157-167.

Pelissari, C., Guivernau, M., Viñas, M., Silva de Souza, S., García, J., Sezerino, P.H. and Ávila, C. (2017). Unraveling the active microbial populations involved in nitrogen utilization in a vertical subsurface flow constructed wetland treating urban wastewater. *Science of the Total Environment* 584-585, 641-650.

Ávila, C., Pelissari, C., Sezerino, P.H., Sgroi, M., Roccaro, P. and García, J. (2017). Enhancement of total nitrogen removal through effluent recirculation and fate of PPCPs in a hybrid constructed wetland system treating urban wastewater. *Science of the Total Environment* 584-585, 414-425.

Sánchez-Ramos, D., Agulló, N., Samsó, R. and García, J. (2017). Effect of key design parameters on bacteria community and effluent pollutant concentrations in constructed wetlands using mathematical models. *Science of the Total Environment* 584-585, 374-380.

Solimeno, A., Acien, F.G. and García, J. (2017). Mechanistic model for design, analysis, operation and control of microalgae cultures: Calibration and application to tubular photobioreactors. *Algal Research* 21, 236-246.

Pelissari, C., Ávila, C., Trein, C.M., García, J., Dultra de Armas, R. and Sezerino, P.H. (2017). Nitrogen transforming bacteria within a full-scale partially saturated vertical subsurface flow constructed wetland treating urban wastewater. *Science of the Total Environment* 574, 390-399.

Gutiérrez, R., Ferrer, I., González-Molina, A., Salvadó, H., García, J. and Uggetti, E. (2016). Microalgae recycling improves biomass recovery from wastewater treatment high rate algal ponds. *Water Research* 106, 539-549.

Corbella, C., García, J. and Puigagut, J. (2016). Microbial fuel cells for clogging assessment in constructed wetlands. *Science of the Total Environment* 569–570, 1060-1063.

Gutiérrez, R., Ferrer, I., Uggetti, E., Arnabat, C., Salvadó, H. and García, J. (2016). Settling velocity distribution of microalgal biomass from urban wastewater treatment high rate algal ponds. *Algal Research* 16, 409-417.

Uggetti, E., Hughes-Riley, T., Morris, R.H., Newton, M.I., Trabi C.L. Hawes, P., Puigagut, J. and García, J. (2016). Intermittent aeration to improve wastewater treatment efficiency in pilot-scale constructed wetland. *Science of the Total Environment*, 559, 212-217.

- Solimeno, A., Samsó, R. and García, J. (2016). Parameter sensitivity analysis of a mechanistic model to simulate microalgae growth. *Algal Research* 15, 217-223.
- Samsó, R., García, J., Molle, P. and Forquet, N. (2016). Modelling bioclogging in variably saturated porous media and the interactions between surface/subsurface flows: application to Constructed Wetlands. *Journal of Environmental Management* 165, 271-279.
- Matamoros, Uggetti, E., García, J. and Bayona, J.M. (2016). Assessment of the mechanisms involved in the removal of emerging contaminants by microalgae from wastewater: A laboratory scale study. *Journal of Hazardous Materials* 301, 197-205.
- Ávila, C., García, J., Garfí, M. (2016). Influence of hydraulic loading rate, simulated storm events and seasonality on the treatment performance of an experimental three-stage hybrid constructed wetland system *Ecological Engineering* 87, 324-332.
- Solimeno, A., Samsó, R., Uggetti, E., Sialve, B., Steyer, J.P., Gabarró, A. and García, J. (2015). New mechanistic model to simulate microalgae growth. *Algal Research* 12, 350-358.
- Labella, A., Caniani, D., Hughes-Riley, T., Morris, R.H., Newton, M.I., Hawes, P., Puigagut, J., García, J. and Uggetti, E. (2015). Assessing the economic suitability of aeration and the influence of bed heating on constructed wetlands treatment efficiency and life-span. *Ecological Engineering* 83, 184-190.
- Passos, F., Gutiérrez, R., Brockmann, D., Steyer, J.P., García, J., Ferrer, I. (2015). Microalgae production in wastewater treatment systems, anaerobic digestion and modelling using ADM1. *Algal Research* 10, 55-63.
- Gutiérrez, R., Passos, F., Ferrer, I., Uggetti, E. and García, J. (2015). Harvesting microalgae from wastewater treatment systems with natural flocculants: effect on biomass settleability and biogas production. *Algal Research* 9, 204-211.
- Gutiérrez, R., Ferrer, I. García, J. and Uggetti, E. (2015). Influence of starch on microalgal biomass recovery, settleability and biogas production. *Bioresource Technology* 185, 341-345.
- Matamoros, V., Gutiérrez, R., Ferrer, I., García, J. and Bayona, J.M. (2015). Capability of microalgae-based wastewater treatment systems to remove emerging organic contaminants: a pilot-scale study. *Journal of Hazardous Materials* 288, 34-42.
- Samsó, R., Blázquez, J., Agulló, N., Grau, J., Torres, R. and García, J. (2015). Effect of bacteria density and accumulated inert solids on the effluent pollutant concentrations predicted by constructed wetlands model BIO_PORE. *Ecological Engineering* 80, 172-180.
- Ávila, C., Bayona, J.M., Martín, I., Salas, J.J. and García, J. (2015). Emerging organic contaminant removal in a full-scale constructed wetland system for wastewater treatment and reuse. *Ecological Engineering* 80, 108-116.
- Garfí, M., Pedescoll, A., Carretero, J., Puigagut, J. and García, J. (2014). Reliability and economic feasibility of online monitoring of constructed wetlands performance. *Desalination and Water Treatment* 52, 5848-5855.
- Ávila, C., Nivala, J., Olsson, L., Kassa, K., Headley, T., Mueller, R.A., Bayona, J.M. and García, J. (2014). Emerging organic contaminants in vertical subsurface flow constructed wetlands: Influence of media size, loading frequency and use of active aeration. *Science of the Total Environment*, 494, 211-217.
- Morató, J. Codony, R., Sánchez, O., Martín Pérez, L., García, J. and Mas, J. (2014). Key design factors affecting microbial community composition and pathogenic organisms removal in horizontal subsurface flow constructed wetlands. *Science of the Total Environment*, 481, 81-89.
- Samsó, R. and García, J. (2014). The Cartridge Theory: a high-level description of horizontal-flow wetlands' functioning based on modelling results. *Science of the Total Environment*, 473-474, 651-658.

- Ávila, C., Matamoros, V., Reyes-Contreras, C., Piña, B., Casado, M., Mita, L., Rivetti, C., Barata, C., García, J. and Bayona, J.M. (2014). Attenuation of emerging contaminants in a hybrid constructed wetlands system under different hydraulic loading rates and their associated toxicological effects in wastewater. *Science of the Total Environment* 470-471, 1272-1280.
- Passos, F., Hernández-Mariné, M., García, J. and Ferrer, I. (2014). Long-term anaerobic digestion of microalgae grown in HRAP for wastewater treatment. Effect of microwave pretreatment. *Water Research* 49, 351-359.
- Catalán, Pla-Rabés, García, J. and Camarero, L.I. (2014). Air temperature-driven CO₂ consumption by rock weathering at short timescales: evidence from a Holocene lake sediment record. *Geochimica et Cosmochimica Acta*, 136, 67-79.
- Ávila, C., Garfí, M. and García, J. (2013). Three-stage hybrid constructed wetland system for wastewater treatment and reuse in warm climate regions. *Ecological Engineering* 61, 43-49.
- Samsó, R. and García, J. (2013). Bacteria distribution and dynamics in constructed wetlands based on modeling results. *Science of the Total Environment* 461-462, 430-440.
- Passos, F., García, J. and Ferrer, I. (2013). Impact of low temperature pretreatment on the anaerobic digestion of microalgal biomass. *Bioresource Technology* 138, 79-86.
- Passos, F., Solé, M., García, J. and Ferrer, I. (2013). Biogas production from microalgae grown in wastewater: effect of microwave pre-treatment. *Applied Energy* 108, 168-175.
- Samsó, R. and García, J. (2013). BIO_PORE, a mathematical model to simulate biofilm growth and water quality improvement in porous media: application and calibration for constructed wetlands. *Ecological Engineering* 54, 116-127.
- Mburu, N., Rousseau, D.P.L., van Bruggen, J.A., Thumbi, G., Llorens, E., García, J. and Lens, P. (2013). Simulation of reactive transport in tropical horizontal subsurface flow constructed wetland treating domestic wastewater. *Science of the Total Environment* 449, 309-319.
- García, J., Salas, J.J., Martín, I. and Vymazal, J. (2013). Research and innovation on ecotechnologies applied to improve wastewater treatment efficiency. *Ecological Engineering* 50, 1-4.
- Ávila, C., Salas, J.J., Martín, I., Aragón, C. and García, J. (2013). Integrated treatment of combined sewer wastewater and stormwater in a hybrid constructed wetland system in southern Spain and its further reuse. *Ecological Engineering* 50, 13-20.
- Ávila, C., Reyes, C., Bayona, J.M. and García, J. (2013). Emerging organic contaminant removal depending on primary treatment and operational strategy in horizontal subsurface flow constructed wetlands: influence of redox. *Water Research* 47, 315-325.
- Pedescoll, A., Knowles, P., Davies, P., García, J. and Puigagut, J. (2012). A comparison of in situ constant and falling head permeameter tests to assess the distribution of clogging within horizontal subsurface flow constructed wetlands. *Water, Air and Soil Pollution* 223, 2263-2275.
- Garfí, M., Pedescoll, A., Bécares, E., Hijosa-Valsero, M., Sidrach-Cardona, R. and García, J. (2012). Effect of climate and wastewater quality on removal efficiency in two experimental plants of constructed wetlands located in Spain. *Science of the Total Environment* 437, 61-67.
- Uggetti, E., Ferrer, I., Arias, C., Brix, H. and García, J. (2012). Carbon footprint of sludge treatment reed beds. *Ecological Engineering* 44, 298-302.
- Uggetti, E., Ferrer, I., Nielsen, S., Arias, C., Brix, H. and García, J. (2012). Characteristics of biosolids from sludge treatment wetlands for agricultural reuse. *Ecological Engineering* 40, 210-216.
- Uggetti, E., Argilaga, A., Ferrer, I., García, J. (2012). Dewatering model for optimal operation of sludge treatment wetlands. *Water Research* 46, 335-344.

- Nivala, J., Knowles, P., Dotro, G., García, J. and Wallace, S. (2012). Clogging in subsurface-flow treatment wetlands: Measurement, modeling and management. *Water Research* 46, 1625-1640.
- Uggetti, E., Ferrer, I., Lind, S., Martikainen, P. and García, J. (2012). Quantification of greenhouse gas emissions from sludge treatment wetlands. *Water Research* 46, 1755-1762.
- Uggetti, E., Ferrer, I., Carretero, J. and García, J. (2012). Performance of sludge treatment wetlands using different plant species and porous media. *Journal of Hazardous Materials* 217-218, 263-270.
- Hijosa-Valsero, M., Matamoros, V., Sidrach-Cardona, R., Pedescoll, A., Martín-Villacorta, J., García, J., Bayona, J.M. and Bécares, E. (2011). Influence of design, physico-chemical and environmental parameters on pharmaceuticals and fragrances removal by constructed wetlands. *Water Science and Technology* 63, 2527-2534.
- Pedescoll, A., Corzo, A., Álvarez, E., García, J. and Puigagut, J. (2011). The effect of primary treatment and flow regime on clogging development in horizontal subsurface flow constructed wetlands: an experimental evaluation. *Water Research* 45, 3579-3589.
- Pedescoll, A., Passos, F., Alba, E., García, J. and Puigagut, J. (2011). Mechanical resistance properties of gravel used in subsurface flow constructed wetlands: implications for clogging. *Water Science and Technology* 63, 1801-1807.
- Hijosa-Valsero, M., Matamoros, V., Pedescoll, A., Martín-Villacorta, J., Bayona, J.M., Bécares, E. and García, J. (2011). Evaluation of primary treatment and loading regimes in the removal of pharmaceuticals and personal care products from urban wastewaters by subsurface-flow constructed wetlands. *International Journal of Environmental Analytical Chemistry* 91, 632-653.
- Alfranca, O., García, J. and Varela, H. (2011). Economic valuation of a created wetland fed with treated wastewater located in a peri-urban park in Catalonia, Spain. *Water Science and Technology* 63, 891-898.
- García, J. (2011). Advances in pollutant removal processes and fate in natural and constructed wetlands. *Ecological Engineering* 37, 663-665.
- Pedescoll, A., Corzo, A., Álvarez, E., Puigagut, J. and García, J. (2011). Contaminant removal efficiency depending on primary treatment and operational strategy in horizontal subsurface flow treatment wetlands. *Ecological Engineering* 37, 372-380.
- Pedescoll, A., Samsó, R., Romero, E., Puigagut, J. and García, J. (2011). Reliability, repeatability and accuracy of the falling head method for hydraulic conductivity measurements under laboratory conditions. *Ecological Engineering* 37, 754-757.
- Vera, L., García, J., Sáez, K., Moragas, L. and Vidal, G. (2011). Performance evaluation of eight years experience from constructed wetlands systems in Catalonia as alternative treatment for small communities. *Ecological Engineering* 37, 364-371.
- Knowles, P., Dotro, G., Nivala, J. and García, J. (2011). Clogging in subsurface-flow treatment wetlands: Occurrence and contributing factors. *Ecological Engineering* 37, 99-112.
- Llorens, E., Saaltink, M., Poch, M. and García, J. (2011). Bacterial transformation and biodegradation processes simulation in horizontal subsurface flow constructed wetlands using CWM1-RETRASO". *Bioresource Technology* 102, 928-936.
- Llorens, E., Saaltink, M. and García, J. (2011). CWM1 implementation in RetrasoCodeBright: first results using horizontal subsurface flow constructed wetland data. *Chemical Engineering Journal* 166, 224-232.
- Uggetti, E., Ferrer, I., Molist, J. and García, J. (2011). Technical, economic and environmental assessment of sludge constructed wetlands. *Water Research* 45, 573-582.

- Ávila, C., Pedescoll, A., Matamoros, V., Bayona, J.M. and García, J. (2010). Capacity of a horizontal subsurface flow constructed wetland system for the removal of emerging pollutants: an injection experiment. *Chemosphere* 81, 1137-1142.
- Tyroller, L., Rousseau, D.P.L, Santa, S. and García, J. (2010). Application of the gas tracer method for measuring oxygen transfer rates in subsurface flow constructed wetlands. *Water Research* 44, 4217-4225.
- Ruiz, I., Díaz, M.A., Crujeiras, B., García, J. and Soto, M. (2010). Solids hydrolysis and accumulation in a hybrid anaerobic digester-constructed wetlands system. *Ecological Engineering* 36, 1007-1016.
- García, J., Rousseau, D.P.L, Morató, J., Lesage, E., Matamoros, V. and Bayona, J.M. (2010). Contaminant removal processes in subsurface-flow constructed wetlands: a review. *Critical Reviews in Environmental Science and Technology*, 40, 561-661.
- Uggetti, E., Ferrer, I., Llorens, E. and García, J. (2010). Sludge treatment wetlands: A review on the state of the art. *Bioresource Technology* 101, 2905-2912.
- Langergraber, G., Rousseau, D., García, J., Mena, J. (2009): CWM1 – A general model to describe biokinetic processes in subsurface flow constructed wetlands. *Water Sci Technol* 59 (9), 1687-1697.
- Pedescoll, A., Uggetti, E., Llorens, E., Granés, F., García, D. and García, J. (2009). Practical method based on saturated hydraulic conductivity used to assess clogging in subsurface flow constructed wetlands. *Ecological Engineering* 35, 1216–1224.
- Uggetti, E., Llorens, E., Pedescoll, A., Ferrer, I., Castellnou, R. and García, J. (2009). Sludge dewatering and stabilization in drying reed beds: characterization of three full-scale systems in Catalonia, Spain. *Bioresource Technology* 100, 3882-3890.
- Uggetti, E., Llorens, E., Pedescoll, A., Ferrer, I., Castellnou, R. and García, J. (2009). Sludge drying reed beds: a case study. *Journal of Residuals Science and Technology* 6, 57-59.
- Tapia, F., Giacomán, G., Herrera, J., Quintal, C., García, J., and Puigagut, J. (2009). Treatment of swine wastewater with subsurface-flow constructed wetlands in Yucatán, Mexico: influence of plant species and contact time. *Water SA* 35, 335-342.
- Puigagut, J., Salvadó, H. and García, J. (2009). Microfauna community as an indicator of effluent quality and operational parameters in an activated sludge system for treating piggery wastewater. *Water, Air and Soil Pollution* 203, 207-216.
- Seguí, L., Alfranca, O. and García, J. (2009). Techno-economical evaluation of water reuse for wetland restoration: a case study in a Natural Parc in Catalonia, Northeastern Spain. *Desalination* 246, 179-189.
- Llorens, E., Matamoros, V., Domingo, V., Bayona J.M. and García, J. (2009). Water quality improvement in a full-scale tertiary constructed wetland: Effects on conventional and specific organic contaminants. *Science of the Total Environment* 407, 2517-2524.
- Catalan, J., Pla, S., García, J. and Camarero, L. (2009). Climate and CO₂ saturation in an alpine lake throughout the Holocene. *Limnology and Oceanography* 54, 2542-2552.
- Llorens, E., Puigagut, J. and García, J. (2009). Distribution and biodegradability of sludge accumulated in a full-scale horizontal subsurface-flow constructed wetland. *Desalination and Water Treatment* 4, 54-58.
- Ojeda, E., Caldentey, J., Saaltink, M. W. and García, J. (2008). Evaluation of relative importance of different microbial reactions on organic matter removal in horizontal subsurface-flow constructed wetlands using a 2D simulation model. *Ecological Engineering* 34, 65-75.

- Matamoros, V., Caselles-Osorio, A., García, J. and Bayona, J.M. (2008). Behaviour of pharmaceutical products and biodegradation intermediates in horizontal subsurface flow constructed wetland. A microcosms experiment. *Science of the total Environment*, 394, 171-176.
- Matamoros, V., García, J. and Bayona, J.M. (2008). Organic micropollutant removal in a full-scale surface flow constructed wetland fed with secondary effluent. *Water Research*, 42, 653-660.
- García, J., Rousseau, D., Caselles-Osorio, A., Story, A., De Pauw, N. and Vanrolleghem, P. (2007). Impact of prior physico-chemical treatment on the clogging process of subsurface flow constructed wetlands: model-based evaluation. *Water, Air and Soil Pollution*, 185, 101-109.
- Matamoros, V., Puigagut, J., García, J. and Bayona, J.M. (2007). Behaviour of selected priority organic pollutants in horizontal subsurface flow constructed wetlands. A pilot-scale study. *Chemosphere* 69, 1374-1380.
- Puigagut, J., Salvadó, H., Tarrats, X. and García, J. (2007). Effects of particulate and soluble substrates on microfauna populations and treatment efficiency in activated sludge systems. *Water Research* 41, 3168-3176.
- Puigagut, J., Villaseñor, J., Salas, J.J., Bécares, E. and García, J. (2007). Subsurface-flow constructed wetlands in Spain for the sanitation of small communities: a comparative study. *Ecological Engineering* 30, 312-319.
- Caselles-Osorio, A., Porta, A., Porras, M. and García, J. (2007). Effect of high organic loading rates of particulate and dissolved organic matter on the efficiency of shallow experimental horizontal subsurface-flow constructed wetlands. *Water, Air and Soil Pollution* 183, 367-375.
- Caselles-Osorio, A. and García, J. (2007). Impact of continuous and intermittent feeding strategies on the performance of shallow horizontal subsurface-flow constructed wetlands. *Science of the total Environment* 378, 253-262.
- Puigagut, J., Salvadó, H., García, D., Granés, F. and García, J. (2007). Comparison of microfauna communities in full scale subsurface-flow constructed wetlands used as secondary and tertiary treatment. *Water Research* 41, 1645-1652.
- García, J., Capel, V., Castro, A., Ruíz, I. and Soto, M. (2007). Anaerobic biodegradation tests and gas emissions from subsurface flow constructed wetlands. *Bioresource Technology* 98, 3044-3052.
- Caselles-Osorio, A., Puigagut, J., Segú, E., Vaello, N., Granés, F., García, D. and García, J. (2007). Solids accumulation in five full-scale subsurface flow constructed wetlands. *Water Research* 41, 1388-1398.
- Puigagut, J., Salvadó, H. and García, J. (2007). Effect of soluble and particulate organic compounds on microfauna community in subsurface flow constructed wetlands. *Ecological Engineering* 29, 280-286.
- Caselles-Osorio, A. and García, J. (2007). Effect of physico-chemical pre-treatment on the removal efficiency of experimental horizontal subsurface-flow constructed wetlands. *Environmental Pollution* 146, 55-63.
- Caselles-Osorio, A. and García, J. (2006). Performance of horizontal subsurface flow constructed wetlands fed with dissolved or particulate organic matter. *Water Research* 40, 3603-3611.
- García, J., Lundquist, T., Green, B.F., Mujeriego, R., Hernández-Mariné, M. and Oswald, W.J. (2006). Long term diurnal variations on contaminant removal in high rate ponds treating urban wastewater. *Bioresource Technology* 97, 1709-1715.
- Thompson, R., Price, D., Cameron, N., Jones, V., Bigler, C., Rosén, P., Hall, R.I., Catalán, J., García, J., Weckstrom, J. and Korhola, A. (2005). Quantitative calibration of remote mountain-lake sediments as climatic recorders of air temperature and ice-cover duration. *Artic, Antarctic and alpine Research* 37, 626-635.
- Puigagut, J., Salvadó, H. and García, J. (2005). Short-term harmful effects of ammonia nitrogen on activated sludge microfauna. *Water Research* 39, 4397-4404.
- García, J., Aguirre, P., Barragán, J., Mujeriego, R., Matamoros, V. and Bayona, J.M. (2005). Effect of key design parameters on the efficiency of horizontal subsurface flow constructed wetlands: long-term performance pilot study. *Ecological Engineering* 25, 405-418.

- Matamoros, V., García, J. and Bayona, J.M. (2005). Behavior of selected pharmaceuticals in subsurface flow constructed wetlands. A pilot scale study. *Environmental Science and Technology* 39, 5449-5454.
- Aguirre, P., Ojeda, E., García, J., Barragán, J. and Mujeriego, R. (2005). Effect of water depth on the removal of organic matter in subsurface flow constructed wetlands: impact on sulphate reduction and denitrification. *Journal of Environmental Science and Health* 40, 1457-1466.
- Huang, Y., Ortiz, L., Aguirre, P., García, J., Mujeriego, R. and Bayona J.M. (2005). Effect of design parameters in horizontal flow constructed wetland on the behaviour of volatile fatty acids and volatile alkylsulfides. *Chemosphere* 59, 769-777.
- García, J., Chiva, J., Aguirre, P., Álvarez, E., Sierra, J.P. and Mujeriego, R. (2004). Hydraulic behaviour of horizontal subsurface flow constructed wetlands with different aspect ratio and granular medium size. *Ecological Engineering* 23, 177-187.
- Huang, Y., Latorre, A., Barceló, D., García, J., Aguirre, P., Mujeriego, R. and Bayona, J.M. (2004). Factors affecting linear alkylbenzene removal in subsurface flow constructed wetlands. *Environmental Science and Technology* 38, 2657-2663.
- García, J., Aguirre, P., Mujeriego, R., Huang, Y., Ortiz, L. and Bayona, J.M. (2004). Initial contaminant removal performance factors in horizontal flow reed beds used for treating urban wastewater. *Water Research* 38 (7), 1669-1678.
- García, J., Mujeriego, R., Bourrouet, A., Freixes, A. y Peñuelas, G. (2004). Operation and effluent quality of a small rural WWTP receiving sludge discharges from a WWTP of a slaughterhouse. *Water SA* 30, 197-202.
- Huang, Y., Ortiz, L., García, J., Aguirre, P., Mujeriego, R., and Bayona, J.M. (2004). Headspace solid-phase microextraction characterization of odorous compounds: application to the constructed wetlands treating urban wastewater. *Water Science and Technology* 49 (9), 121-129.
- García, J., Ojeda, E., Sales, E., Chico, F., Píriz, T., Aguirre, P. and Mujeriego, R. (2003). Spatial variations of temperature, redox potential and contaminants in horizontal flow reed beds. *Ecological Engineering* 21, 129-142.
- García, J., Vivar, J., Aromir, M. and Mujeriego, R. (2003). Role of hydraulic retention time and granular medium in microbial removal in tertiary treatment reed beds. *Water Research* 37, 2645-2653.
- Díaz, R., García, J., Mujeriego, R. and Lucas, M. (2003). A quick and low-cost treatment method for secondary effluent nitrate removal through denitrification. *Environmental Engineering and Science* 20, 693-702.
- García, J., Hernández-Mariné, M., and Mujeriego, R. (2002). Analysis of key variables controlling phosphorus removal in high rate oxidation ponds provided with clarifiers. *Water SA* 28, 1-8.
- Bourrouet, A., García, J., Mujeriego, R., and Peñuelas, G. (2001). Faecal bacteria and bacteriophage inactivation in a full-scale UV disinfection system used for wastewater. *Water Science and Technology* 43(10), 187-194.
- García, J., Mujeriego, R., Obis, J.M. and Bou, J. (2001). Wastewater treatment for small communities in Catalonia (Mediterranean Region). *Water Policy : Official journal of the World Water Council* 3, 341-350.
- García, J., Mujeriego, R., Bourrouet, A., Peñuelas, G. and Freixes, A. (2000). Wastewater treatment by pond systems: experiences in Catalonia, Spain. *Water Science and Technology* 42(10-11), 35-42.
- García, J., Mujeriego, R. and Hernández-Mariné, M. (2000). High rate algal pond operating strategies for urban wastewater nitrogen removal. *Journal of Applied Phycology* 12, 331-339.
- García, J., Hernández-Mariné, M. and Mujeriego, R. (2000). Influence of phytoplankton composition on biomass removal from high-rate oxidation lagoons by means of sedimentation and spontaneous flocculation. *Water Environment Research* 72, 230-237.

Cameron, N.G., Birks, H.J.B., Jones, V.J., Berge, F., Catalán, J., Flower, R.J., García, J., Kawecka, B., Koining, K.A., Marchetto, A., Sanchez-Castillo, P., Schmidt, R., Sisko, M., Solovieva N., and Toro., M. (1999). Surface-sediment and epilithic diatom pH calibration sets for remote European mountain lakes (ALPE) Project and their comparison with the Surface Waters Acidification Program (SWAP) calibration set. *Journal of Paleolimnology* 1, 291-317.

Merino, V., García, J., Hernández-Mariné, M. and Fernández, M. (1994). Morphology and ultrastructure of *Gomphoneis rhombica* (Fricke) comb. nov. *Diatom Research* 9, 335-347.

Other articles (last 5 years, titles in the original language, not translated)

Ávila, C., Pelissari, C., Sezerino, P.H., García, J., Garfí, M. (2016). Nature-based solutions for wastewater treatment in peri-urban areas of India: pilot-scale experiments. *Sustainable Sanitation Practice* 25, 60-66.

García, M.J., Ávila, C., García, J., Vasco, V. y Carbonell, J. (2016). Herramienta de cálculo para el dimensionamiento y diseño de sistemas de helófitas en flotación. *iAgua Magazine*, Sep., 56-58.

Ávila, C., Matamoros, V. y García, J. (2016). Depuración natural de aguas residuales. *Investigación y Ciencia*, February 2016.

Uggetti, E., Puigagut, J., García, J., Hughes-Riley, T., Newton, M.J., Morris, R.H. and Webber, J.B. (2014). Sensores de resonancia magnética para mejorar la operación de humedales construidos. *Automática e Instrumentación* 459, 2-4.

Ferrer, I., Passos, F. y García, J. (2013). Producción de biogás a partir de microalgas cultivadas en aguas residuales. *Aguas Residuales.Info*. Publicación en línea:

http://aguasresiduales.info/main/index.php?md_0=4&md_1=&id=5832&pag=1

García, J., Passos, F., Ferrer, I. y Mena, J. (2012). Biocombustibles a partir de microalgas cultivadas en aguas residuales. *Automática e Instrumentación* 437, 48-50

Books and book chapters (last 5 years)

Hawes, P., Hughes-Riley, T., Uggetti, E., Ortega Anderez, D., Newton, M.I., Puigagut, J., García, J. and Morris, R.H. (2016). Clogging measurement, dissolved oxygen and temperature control in a wetland through the development of an autonomous reed bed installation (ARBI). In: *Natural and Constructed Wetlands: Nutrients, Heavy Metals and Energy Cycling and Flow*, Vymazal, J. Ed, Springer, 165-178. ISBN 978-3-319-38926-4.

Uggetti, E., Passos, F., Solé, M., García, J. and Ferrer, I. (2016). Biogas from algae via anaerobic digestion. In: *Algae Biotechnology, Products and Processes*, chapter 11. Bux, F and Chisti, Y. (eds), Springer, 195-216, ISBN 978-3-319-12333-2.

Ávila, C. and García, J. (2015). Pharmaceuticals and personal care products (PPCPs) in the environment and their removal from wastewater through constructed wetlands. In: *Comprehensive Analytical Chemistry, Persistent organic pollutants: Analytical Techniques, Environmental Fate and Biological Effects*, volume 67, chapter 6. Eddy Zeng (Ed.), Elsevier, 195-244. ISBN 978-0-444-63299-9.

Samsó, R., Meyer, D. and García, J. (2015). Subsurface flow constructed wetlands models: Review and prospects. In: *The Role of Natural and Constructed Wetlands in Nutrient Cycling and Retention on the Landscape*, Vymazal, J. Ed, Springer, 149-174. ISBN 978-3-319-08176-2.

Garfí, M., García J. (2013) Wastewater Recharge and Reuse. In: Barreto Dillon, L., Doyle, L. and Langergraber, G. (Editors). *Compendium of Natural Water Systems and Treatment Technologies to cope with Water Shortages in Urbanised Areas in India*. Berlin: epubli GmbH. ISBN 978-3-8442-7111-9.

Garfí, M., García J. (2013) Non-Planted Filters. In: Barreto Dillon, L., Doyle, L. and Langergraber, G. (Editors). *Compendium of Natural Water Systems and Treatment Technologies to cope with Water Shortages in Urbanised Areas in India*. Berlin: epubli GmbH. ISBN 978-3-8442-7111-9.

Garfí, M., García J. (2013) Hybrid Constructed Wetland (HCW). In: Barreto Dillon, L., Doyle, L. and Langergraber, G. (Editors) (2013): Compendium of Natural Water Systems and Treatment Technologies to cope with Water Shortages in Urbanised Areas in India. Berlin: epubli GmbH. ISBN 978-3-8442-7111-9.

Aragón, C., Martín, I., Ávila, C., García, J., Salas, J.J. (2012). Evaluación de la calidad de los lixiviados generados en un humedal para el secado de fangos durante su puesta en marcha. In: López-Geta, Ramos, Fernández and Lorca (Eds.). Instituto Geológico y Minero de España. Madrid: ISBN 978-84-7840-863-4.

Stays in Research Centers

BIOMATH, Dept. of Applied Mathematics, Biometrics and Process Control, Faculty of Bioscience Engineering, University of Ghent, Belgium (2005)

Topic: Development of the Project "Wastewater Constructed Wetland Modelling" (Programa de Estancias de Profesores de Universidad en Centros de Enseñanza Superior e Investigación Extranjeros y Españoles)

14 weeks

Grupo de Ingeniería y Gestión Ambiental, Universidad de Antioquia, Medellín, Colombia (2004)

Topic: Participation in the Seminar "Lagunares para el Tratamiento de Aguas Residuales"

2 weeks

Environmental Engineering and Health Sciences Laboratory, University of California, Berkeley, EEUU (2001)

Topic: Project "Research on Advanced Integrated Pond Systems" (Financement by means a Research Project)

15 weeks

Instituto Mexicano de Tecnología del Agua, Cuernavaca, México (1999)

Topic: Course on Design, Construction and Operation of Constructed Wetlands

2 weeks

Facultat de Arquitectura, Urbanismo y Arte. Universidad Nacional de Ingeniería, Lima, Perú (1998)

Topic: Postgraduate Course on Constructed Wetlands as Alternative of Wastewater Treatment

1 week

Facultat de Arquitectura y Urbanismo. Universidad Nacional de San Agustín, Arequipa, Perú (1998)

Topic: Postgraduate Course on Constructed Wetlands as Alternative of Wastewater Treatment

1 week

Environmental Change Research Centre, University College London, Londres, Gran Bretaña (1991)

Topic: Development of the Project "Use of Diatoms as a Tool for Past Climate and Ecosystems Reconstruction" (scholarship of Generalitat de Catalunya)

10 weeks

Contributions in Congresses

(only oral presentations as keynote or invited speaker, titles in the original language, not translated)

Arias, D.M., Uggetti, E. and García, J. (2017). Selection of Cyanobacteria Grown in Wastewater Treatment Systems for Metabolites Production. 2nd International Conference on Air, Water, and Soil Pollution and Treatment (AWSPT'17). April, Barcelona.

García, J. (2016). Nuevas tendencias en humedales artificiales. Jornada Técnica "El Mar Menor: Presente y Futuro". November, Murcia.

García, J. (2016). Role of constructed wetlands in environmental restoration. Conferencia de Clausura del Proyecto LIFE+ ALBUFERA. June, Valencia.

García, J. (2016). Benefits and opportunities of microalgae wastewater treatment systems. European Algae Biomass. April, Berlin, Germany.

García, J. and Pelissari, C. (2016). Constructed wetlands for nitrification and denitrification. Jornada Tècnica InSiTrate: Els nitrats a l'aigua subterrània. Noves solucions per a un problema pendent. Abril, Barcelona.

García, J. and Pelissari, C. (2015). Humedales artificiales para la eliminación de nitratos y microcontaminantes orgánicos. Simposio sobre la creación de filtros verdes para la reducción de la contaminación por efluentes en el Mar Menor. Octubre, Murcia.

Uggetti, E., Garfí, M., Romero, X. and García, J. (2015). Cooperation in water management between urban, rural and industrial stakeholders: from regional water management perspective to local implementation. A case study of water reuse practice in Granollers, Barcelona, Spain. AquaConSoil 2015. June, Copenhagen, Denmark.

García, J. (2014). From wastewater to bioenergy: the sunlight-to-biogas concept. 16th International Biotechnology Symposium and Exhibition (IBS 2014). September, Fortaleza, Brasil.

García, J. (2014). Constructed wetlands for wastewater treatment. Seminar of the Institute of Ecology. September, Xalapa, Mexico.

García, J. (2014). Sludge treatment wetlands: Design, performance and economics. Technical meeting #4: Sludge management in Small Sewage Works. The Wastewater Network. May, Cranfield University, Cranfield, UK.

García, J. (2013). Aiguamolls artificials per a la depuració d'efluents líquids. Bases biològiques de funcionament i tipologies. Jornada Tècnica Aiguamolls Artificials per a la Depuració de Lixiviats de l'Horticultura fora de Sòl. IRTA Cabrils, Barcelona.

Samsó, R. and García, J. (2013). The Cartridge Theory: a conceptual approach to horizontal-flow wetland's functioning. 5th International Symposium on Wetland Pollution Dynamics and Control (WETPOL), October, Nantes, France.

Samsó, R. and García, J. (2013). The Cartridge Theory: a conceptual approach to horizontal-flow wetland's functioning. 8th Workshop Nutrient Cycling and Retention in Natural and Constructed Wetlands, Trebon, Czech Republic.

García, J. and Samsó, R. (2013). Water reuse for environmental restoration in Granollers. Seminario Técnico GT3 – Sud'Eau-2, September, Granollers, Spain.

Ferrer, I., Passos, F., Gutiérrez, R. and García, J. (2013). Depuración de aguas residuales mediante microalgas y producción de biogás. III Solabias, April, David, Panamá.

García, J. (2013). Projectes europeus: casos d'èxit i de fracàs. Jornada Grup ConnectEU: col.laboració internacional públic-privada en RDI: una eina per impulsar la competitivitat de les empreses. Catalan Institute for Water Research Foundation (ICRA), February, Girona, Spain.

García, J. (2013). Aiguamolls artificials per a la depuració d'efluents líquids. Bases biològiques de funcionament i tipologies. Jornada Tècnica Aiguamolls Artificials per a la Depuració de Lixiviats de l'Horticultura fora de Sòl. IRTA Cabrils, Barcelona.

Samsó, R. and García, J. (2013). The Cartridge Theory: a conceptual approach to horizontal-flow wetland's functioning. 5th International Symposium on Wetland Pollution Dynamics and Control (WETPOL), October, Nantes, France.

Samsó, R. and García, J. (2013). The Cartridge Theory: a conceptual approach to horizontal-flow wetland's functioning. 8th Workshop Nutrient Cycling and Retention in Natural and Constructed Wetlands (NCR), Trebon, Czech Republic.

García, J. and Samsó, R. (2013). Water reuse for environmental restoration in Granollers. Seminario Técnico GT3 – Sud'Eau-2, September, Granollers, Spain.

Ferrer, I., Passos, F., Gutiérrez, R. and García, J. (2013). Depuración de aguas residuales mediante microalgas y producción de biogás. III Solabias, April, David, Panamá.

9. García, J. (2013). Projectes europeus: casos d'èxit i de fracàs. Jornada Grup ConnectEU: col.laboració internacional públic-privada en RDI: una eina per impulsar la competitivitat de les empreses. Catalan Institute for Water Research Foundation (ICRA), February, Girona, Spain.

García, J. (2012). Constructed wetlands and algal cultures as a tool for sustainability in the water sector. Workshop Sustainable water treatment technologies: achievements, perspectives, constraints. Catalan Institute for Water Research Foundation (ICRA), December, Girona, Spain.

García, J. (2012). Constructed wetlands and algal cultures as a tool for sustainability in the water sector. Workshop Sustainable water treatment technologies: achievements, perspectives, constraints. 15 Encontro de Engenharia Sanitaria e Ambiental, October, Évora, Portugal.

Samsó, R. and García, J. (2012). Towards a theory of constructed wetland functioning and with the help of mathematical models. SWS 2012, European Chapter Meeting, Aarhus University, Denmark.

García, J. (2011). Humedales artificiales horizontales: fundamentos, criterios de diseño y características de su explotación y mantenimiento. Jornadas de Saneamiento en el Medio Rural, Diputación de La Coruña, Diciembre, La Coruña, España.

García, J. (2011). Tratamiento de fangos de EDAR mediante humedales artificiales. Jornadas de Saneamiento en el Medio Rural, Diputación de La Coruña, Diciembre, La Coruña, España.

Samsó R. and García, J. (2011). Functions and values of the created wetland in Can Cabanyes Natural Area (Granollers). Local Info Day: Water in Projects of Environmental Restoration, Marzo, Granollers, Barcelona, España.

Nivala, J., Knowles, P., Dotro, G., Nivala, García, J. and Wallace, S. (2011). Clogging in subsurface-flow treatment wetlands: assessment, management and modeling. 3rd International Congress SMALLWAT11, Centro de Nuevas Tecnologías del Agua, Noviembre, Sevilla, España.

García, J. (2010). Humedales construidos para la depuración de aguas. II Congreso de Biotecnología Ambiental y Algal. Sociedad Latinoamericana de Biotecnología Ambiental y Algal, Diciembre, Cancún, Mexico.

Pedescoll, A. and García, J. (2009). Investigations on clogging in Catalonia. Specialist Workshop on Constructed Wetlands Clogging. Aston University, Birmingham, UK.

García, J. (2008). O uso de humedais artificiais na depuração de augas residuais urbanas. Fundamentos. Experiencias en Catalunya. Jornadas Técnicas sobre Saneamiento Sostenible no Medio Rural de Galicia.

García, J. (2007). Humedales construidos para la depuración de aguas y la restauración ambiental. Congreso Internacional de Paisaje, Territorio y Desarrollo (GEA XXI), Marzo, Valencia, España.

García, J. (2005). La depuración en pequeños municipios. Seminario Tratamiento de Augas Residuais en Zonas Húmidas Construidas, Noviembre, Universidade da Coruña, Santiago de Compostela, España.

García, J. (2005). El papel de los humedales en la restauración. Seminario Tratamiento de Augas Residuais en Zonas Húmidas Construidas, Noviembre, Universidade da Coruña, Santiago de Compostela, España.

García, J. (2003). Design key factors of horizontal flow constructed wetlands. International Seminar on the Use of Aquatic Macrophytes for Wastewater Treatment in Constructed Wetlands, Mayo, Instituto da Agua, Lisboa Portugal.

García, J., Aguirre, P., Álvarez, E., Mujeriego, R., Bayona, J.M. and Ortiz, L. (2002). Design of horizontal subsurface flow constructed wetlands. Congreso Internacional de Tecnologías de Pequeña Escala para la Depuración y Gestión de Aguas Residuales en el Ámbito Mediterráneo, Centro de Nuevas Tecnologías del Agua, Marzo, Sevilla, España.

García, J. (2001). Reutilització Planificada d'Aigües Residuals. Jornades Tècniques de Gestió Sostenible de l'Aigua, Octubre, Manresa, España.

García, J. (2001). Reutilització Planificada d'Aigües Residuals. Jornades sobre l'Aigua i el Medi, Institut d'Estudis Catalans, Mayo, Barcelona, España.

Doctoral Dissertations Supervised

Gutiérrez, R. (May 2016). Microalgae Harvesting in Wastewater Treatment Plants. Flocculation Strategies to Improve Biomass Recovery.

Excellent (Codirección with Dr. Ivet Ferrer and Dr. Uggetti)
School of Civil Engineering, Technical University of Catalonia.

Passos, F. (Diciembre 2014). Microalgae Conversion to Biogas.

Excellent (Codirection with Dr. Ivet Ferrer)
School of Civil Engineering, Technical University of Catalonia.

Samsó, R. (Marzo 2014). Numerical Modelling of Constructed Wetlands for Wastewater Treatment.

Excellent

School of Civil Engineering, Technical University of Catalonia. This thesis received the 2014 Catalan Government Award for the best research work on environment (14,000 €).

Ávila, C. (December 2013). Effect of Design and Operational Factors on the Removal Efficiency of Emerging Organic Contaminants in Constructed Wetlands for Wastewater Treatment.

Excellent (Codirection with Dr. Josep M. Bayona)

School of Civil Engineering, Technical University of Catalonia
This thesis received the UPC Extraordinary Doctorate Award (2015)

Uggetti, E. (September 2011). Sewage Sludge Treatment in Constructed Wetlands. Technical, Economic and Environmental Aspects applied to Small Communities of the Mediterranean Region.

Excellent (Codirection with Dr. Ivet Ferrer)

School of Civil Engineering, Technical University of Catalonia
This thesis received the UPC Extraordinary Doctorate Award (2013)

Pedescoll, A. (November 2010). Clogging in Horizontal Subsurface Flow Constructed Wetlands. Measures, Design Factors and Prevention Strategies.

Excellent (Codirection with Dr. Jaume Puigagut)

School of Agricultural Engineering, Technical University of Catalonia
This thesis received the UPC Extraordinary Doctorate Award (2013)

Puigagut, J. (December 2007). Microfauna Communities in Biological Wastewater Treatment Systems

Excellent (Codirection with Dr. Humbert Salvadó)

Faculty of Biology, University of Barcelona

Caselles-Osorio, A. (February 2007). Influence of the Characteristics of the Organic Matter on the Efficiency of Horizontal Subsurface-Flow Constructed Wetlands

Excellent

School of Agricultural Engineering, Technical University of Catalonia

Bourrouet, A. (Febrero 2000). Los Sistemas de Lagunaje para la Depuración de las Aguas Residuales Urbanas: Parámetros de Diseño, de Explotación y de Inactivación bacteriana y Vírica

Excellent (Codirection with Dr. Rafael Mujeriego)

Civil Engineering School, Technical University of Catalonia

Comitees and International Representations

Member of Journal Editorial Boards

Special Issue Editor of the journal Ecological Engineering 50, Research and innovation on ecotechnologies applied to improve wastewater treatment efficiency (2013).

Special Issue Editor of the journal Ecological Engineering 37 (5), Advances in Pollutant Removal Processes and Fate in Natural and Constructed Wetlands (2011).

Managing Editor of the journal Desalination and Water Treatment (from September 2009). Included in ISI database.

Member of the Editorial Board of Revista Latinoamericana de Biotecnología Ambiental y Algal (from January 2009).

Member of the Editorial Board of Ecological Engineering (from August 2007). Included in ISI database.

Member of the editorial board of the book Aquarec. (2007). Water Reuse System (Management Manual). European Commission, Brussels. 646 pág. ISBN 92-79-01934-1.

Member of Scientific Committees of Conferences

9th International Conference on Environmental Engineering and Management (ICEEM09), Circular economy and Environmental Sustainability (Bologna, Italia, Setiembre 2017).

7th Wetland Pollutant Dynamics and Control Symposium WETPOL 2017 (Bozeman, Montana, Agosto 2017).

2nd EWA Spring Conference: Sanitation Approaches and the Sustainable Development Goals (Lisboa, Portugal, Mayo 2017).

2nd International Conference on Air, Water, and Soil Pollution and Treatment (AWSPT'17) (Barcelona, Abril 2017).

IV Congreso de Biotecnología Ambiental y Algal (Florianópolis, Brasil, Noviembre 2015). Sociedad Latinoamericana de Biotecnología Ambiental y Algal.

16th International Biotechnology Symposium and Exhibition (Fortaleza, Brasil, Setiembre 2014). International Union of Pure and Applied Chemistry (IUPAC).

III Congreso de Biotecnología Ambiental y Algal (David, Panamá, Abril 2013). Sociedad Latinoamericana de Biotecnología Ambiental y Algal.

3rd International Congress "SmallWat11" Tratamiento de Aguas Residuales en Pequeñas Colectividades. (Sevilla, November 2010). Centro de Nuevas Tecnologías del Agua.

II Congreso de Biotecnología Ambiental y Algal (Cancún, Mexico, December 2010). Sociedad Latinoamericana de Biotecnología Ambiental y Algal.

12th International Conference on Wetland Systems for Water Pollution Control (Venice, Italy, October 2010). International Water Association.

11th International Conference on Wetland Systems for Water Pollution Control (Indore, India, November 2008). International Water Association.

2nd International Congress "SmallWat07" Tratamiento de Aguas Residuales en Pequeñas Colectividades. (Sevilla, November 2007). Centro de Nuevas Tecnologías del Agua.

International Conference on Multiple Roles of Wetlands (Legnaro, June 2007). International Water Association.

10th International Conference on Wetland Systems for Water Pollution Control (Lisboa, September 2006). International Water Association.

Jornada Técnica Humedales Construidos para la Depuración de Aguas Residuales (Granollers, Julio 2004). Universidad Politécnica de Catalunya.

Experience in Organisation of R+D Activities

Chair of the Organising Committee of the 10th International Society for Environmental Biotechnology (ISEB) (June 2016), Barcelona.

Co-chair of the Modelling Constructed Wetlands with BIO_PORE (COMSOL Multiphysics™) and the HYDRUS Wetland Module Seminar (York, Setiembre 2015).

Chair of the Organising Committee of the 1st NaWaTech International Workshop (November 2013), Barcelona.

Chair of the Organising Committee of Sludge Treatment Wetlands Seminar, Vic, Barcelona, June 2010.

Chair of the Organising Committee of the 3rd Wetland Pollutant Dynamics and Control Symposium WETPOL 2009, Barcelona, September 2009.

Chair of the Organising Committee of the Jornada Técnica de Humedales Construidos para la Depuración de Aguas Residuales, Granollers, Barcelona, July 2004.

Chair of the Organising Committee of the seminar on Lagunares para el tratamiento de aguas residuales. Grupo de Ingeniería y Gestión Ambiental, Universidad de Antioquia, Medellín, Colombia, October 2005.

Special Honours and Awards

Leader of the Action Group NatureWAT - Nature-based technologies for innovation in water management of the Water European Innovation Partnership (2014-).

Academic Director of the AGBAR-UPC graduate in management and operation of water treatment plants (2011-15).

2. Best 2 papers presented in the 12th IWA International Conference on Wetland Systems for Water Pollution Control, October, Venice, Italy. (2010). [Pedescoll, A., Corzo, A., Álvarez, E., Puigagut, J. and García, J. Contaminant removal and clogging development in shallow subsurface flow constructed wetlands: effect of primary treatment and operating strategy] and [Uggetti, E., Ferrer, I., Llorens, E. and Garcia J. Economic analysis and life cycle approach to compare constructed wetlands and conventional treatments for sludge management].

Award for the Intensification of Research Activity, I3 Program, Department of Education and Science Department of Innovation, Universities and Companies of the Generalitat de Catalunya. 30,000 €/year for 3 years. (2008-2010).

3 research sections (six-year terms) valued positively (CNEAI and AGAUR, Field Engineering and Architecture): 1994-2001, 2002-2007, 2008-2013.

Accreditation of "Advanced Research" of the Quality Assurance Agency for the University System of Catalonia (2007).