Personal data

Name and family name	Jaume Puigagut Juarez		
ID number	46768416D	Age	38
Research ID	Researcher ID		
	Código Orcid	0000-0002-8325-8095	

Current professional situation

Body	Universitat Politècnica de Catalunya - Barcelonatech			
Department	Civil and Environmental Engineering			
Address	Jordi Girona 1-3, 08034, Barcelona			
Telephone	0034 934010898	e-mail	Jaume.puigagut@upc.edu	
Position	Associate professor		Since	1/09/2015
Research keywords	Environemntal engineering, Environmental technology, Biological treatment, constructed wetlands, microbial fuel cells			

Formation

Degree	University	Year
Graduate in Biology	Universitat de Barcelona	2001
Master degree	Universitat de Barcelona	2002
PhD in Biology	Universitat de Barcelona	2007

JCR Publications

1. Corbella, C. Uggetti, E. and Puigagut, J. Membrane-less MFC for semi-continuous assessment of treatment efficiency in pilot-scale constructed wetlands. (In prep).
2. Corbella, C. and Puigagut, J. Improving domestic wastewater treatment efficiency with constructed wetlands fuel cells: influence of anode material, organic matter concentration, external resistance and contact time. (In prep)
3. Corbella, C. and Puigagut, J. Novel membrane-less MFC-based biosensor for domestic wastewater COD assessment (In prep)
4. Corbella, C. and Puigagut, J. Microbial fuel cells for clogging assessment in constructed wetlands (In prep)
5. Corbella, C., Steidl, R., Puigagut, J. and Reguera, G. Pure culture studies of the electricigen *Geobacter Lovleyi* identify limitations of microbial fuel cell performance in constructed wetlands (In prep).
6. Uggetti, E., Hughes-Riley, T., Morris, R.H., Newton, M.I., Trabi, C.L., Hawes, P., Puigagut, J. and García, J. Optimization of forced aeration regime to improve treatment efficiency of experimental constructed wetlands. Science of The Total Environment (Submitted).
7. Uggetti, E. and Puigagut. J. Photosynthetic membrane-less microbial fuel cells enhance microalgal biomass concentration. Water Research (Submitted)
8. Corbella, C., Garfí, M. and Puigagut, J. Long-term assessment of best cathode position to maximise microbial fuel cell performance in constructed wetlands. Science of The Total Environment (Submitted)
9. Corbella, C. and Puigagut, J. Microbial fuel cells implemented in constructed wetlands: fundamentals, current research and future challenges. Contributions to Science (Accepted)

10. Labella, A., Caniani, D. Robert H. Morris, T. I. Newton, M. 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.

11. Corbella, C., Guivernau, M., Viñas, M., Puigagut, J.2015. Operational, design and microbial aspects related to power production with microbial fuel cells implemented in constructed wetlands. Water Research, 84, 232-242.

12. Corbella, C. and Puigagut, J. 2015. Effect of primary treatment and organic loading on methane emissions from horizontal subsurface flow constructed wetlands treating urban wastewater. Ecological Engineering, 80, 79-84.

13. Hughes-Riley, T., Newton, M.I., Webber, J.B.W., Puigagut, J., Uggetti, E., Garcia, J., Morris, R.H. 2014. Advances in clog state monitoring for use in automated reed bed installations, Lakes reservoirs and ponds, 8 (1), 52-65.

14. Garfí, A. and Puigagut, J. 2014. Reusing industrial by-products to enhance phosphorus removal in waste stabilization ponds: laboratory approach. Desalination and Water Treatment, 57(4), 1857-1864.

15. Puigagut, J., Chazarenc, F. and Comeau, Y. (2014). Influence of tubificid worms on nutrients fluxes across water-sediment interface of fish farm settling ponds. Knowledge and Management of Aquatic Ecosystems, 413, 12.

16. Corbella, C., Garfí, M., and Puigagut, J., 2014. Vertical redox profiles in treatment wetlands as function of hydraulic regime and macrophytes presence: surveying the optimal scenario for microbial fuel cell implementation. Science of The Total Environment, 470-471, 754-758

17. Garfí, M., Pedescoll, A., Alvarez, E., Puigagut, J., and García, J. 2014. Reliability and economical feasibility of on-line monitoring of constructed wetlands performance. Desalination and Water Treatment, 52 (31-33), 5848-5855.

18. Corbella, C., and Puigagut, J., 2013. Improving the reliability of closed chamber methodologies for methane emissions measurement in treatment wetlands. Water, Science and Technology, 69(9), 2097-2102

19. Puigagut, J., Maltais-Laundry, G., Gagnon, V. and Brisson, J. (2012). Are ciliated protozoa affected by macrophyte species, date of sampling and location in horizontal sub-surface flow constructed wetlands? Wat. Res. 46(9), 3005-3013.

20. Puigagut, J., Angles, H., Chazarenc, F. and Comeau, Y. (2011). Decreasing phosphorus discharge in fish farm ponds by treating the sludge generated with sludge drying beds. Aquaculture, 318 (1-2), 7-14.

21. Pedescoll, A., Corzo, A., Alvarez, E., García, J., 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 (12), 3579–3589.

22. Pedescoll, A., Corzo, A., Alvarez, 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 (2), 372-380.

23. Pedescoll, A., Passos, F., Alba, E., García, J. and Puigagut, J. (2010). Mechanical resistance properties of gravel used in subsurface flow constructed wetlands: implications for clogging. Water Science and Technology, 63(9), 1801–1807.

24. Pedescoll, A., Samsó, R., Romero, E., Puigagut, J. and García, J. (2010). Reliability, repeatability and accuracy of the falling head method for hydraulic conductivity measurements under laboratory conditions. Ecological Engineering, 37(5), 754–757

25. Lefrançois, P., Puigagut, J., Chazarenc, F. and Comeau, Y. (2010). Minimizing phosphorus discharge from aquaculture earth ponds by a novel sediment retention system. Aquaculture Engineering, 43(3), 94-100.

26. Gagnon, V., Maltais-Landry, G., Puigagut, J., Chazarenc, F. and Brisson, J. (2010).Treatment of hydroponics wastewater using constructed wetlands in winter conditions Water, Air and Soil Pollution 212(1-4), 483-490.

27. Puigagut, J. García, J. and Salvadó, H. (2009). Microfauna community as indicator of effluent quality and operational parameters in an activated sludge system for treating piggery wastewater. Water, Air and Soil Pollution 203 (1-4), 207-216.

28. Llorens, E., Puigagut, J. and García, J. (2009). Distribution and biodegradability of sludge accumulated in full-scale horizontal sub-surface flow constructed wetlands. Desalination and water treatment – science and engineering. 4(1-3), 54-58.

29. Tapia González, F., Gíacoman Vallejos, G., Herrera Silveira, J., Quintal Franco, C., García, J. and Puigagut, J. (2009). Treatment of swine wastewater with pilot constructed wetlands in Yucatán, Mexico: influence of plant species and contact time. Water SA. 35(3), 335-342.

30. 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.

31. Puigagut, J., Salvadó, H. and García, J. (2007). Effects of particulate and soluble substrates on microfauna populations and treatment efficiency in activated sludge systems. Water research 41(14), 3168-3176

32. Puigagut, J., Villaseñor, J., Salas, J.J., Becare, 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.

33. Caselles-Osorio, A., Puigagut, J., Segú, E. and García, J. (2007). Solids accumulation in five full-scale subsurface flow constructed wetlands. Water Research 41(6), 1388-1398.

34. 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(8), 1645-1652.

35. Puigagut, J., Salvadó, H. and García, J. (2007). Effect of soluble and particulate compounds on microfauna community in subsurface-flow constructed wetlands". Ecological engineering 29(3), 280-286.

36. Puigagut, J., Salvadó, H. and García, J. (2005). Short-Term Harmful Effects of Ammonia Nitrogen on Activated Sludge Microfauna. Water Research 39(18); 4397–4404.

37. Palomo, A., Salvadó, H., Mas, M., Puigagut, J. Y Gracia, M.P. (2004). Dynamics of nematodes in a high organic loading rotating biological contactors. Water Research 38(10); 2571-2578.

38. Puigagut, J., Salvadó, H., Mas, M. And Gracia, M.P. (2004). Ammonia effect on wastewater treatment plant microfauna. Journal of eukariotic microbiology. 51(2):27a

39. Mas, M. Salvadó, H., Puigagut, J. And Gracia. M.P. (2004). Protozoa growth kinetics in an activated sludge systems. Journal of eukariotic microbiology. 51(2):27a-28a

Non- JCR Publications (peer review)

1. E. Uggetti, J. Puigagut, J. García, T. Hughes-Riley, M.I. Newton, R.H. Morris, J.B. Webber. Sensores de resonancia magnética para mejorar la operación de humedales construidos para el tratamiento de agua residual. 2014. Automática e Instrumentación, 459.

2. Puigagut, J., Salvadó, H., Tarrats, X., García, J. (2010) Efecto de los rotíferos lecánidos sobre el tamaño de los fangos de un sistema de fangos activos. Tecnología del agua, 294, 64-68.

3. Uggetti, E., Puigagut, J., García J., Hughes-Riley T., Newton M.I., Morris R.H., Webber, J.B. (2014). Sensores de resonancia magnética para mejorar la operación de humedales construidos. Automática e Instrumentación, 454, 2-4.

Oral communications

1. Corbella, C., Gómez, N. and Puigagut, J. 2015. Novel microbial fuel cell-based biosensor for the assessment of organic loading in constructed wetlands. *Wetland Pollutant Dynamics and Control (WETPOL) York (UK).*
2. Corbella, C. and Puigagut, J. 2015. Microbial fuel cells to improve treatment efficiency in constructed wetlands. *Wetland Pollutant Dynamics and Control (WETPOL) York (UK).*
3. Uggetti, E., Labella, A., Hughes-Riley, T., Morris, R.H., Hawes, P., Puigagut, J., García, J. Improvement of treatment efficiency in intensified experimental constructed wetlands. 6th Wetland Pollutant Dynamics and Control (WETPOL), York, UK. 2015
4. García, J., Samsó, R., Forquet, N., Molle, P., Uggetti, E., Hughes-Riley, T., Morris, R.H., Hawes, P., Puigagut, J. Clogging modeling and smart subsurface flow constructed wetlands. Proceedings of 9th International Workshop on Nutrient Cycling and Retention in Natural and Constructed Wetlands, Třeboň, Czech Republic. 2015
5. Hughes-Riley, T., Newton, M.I., Webber, J.B.W., Puigagut, J., Uggetti, E., Garcia, J., Morris, R.H. 2014, Advances in Automated Reed Bed Installations, 2nd International Conference Water resources and wetlands, Tulcea, Romania. 2014
6. Hawes, P., Hughes-Riley, T., Uggetti, E., Puigagut, J., Garcia, J., Morris, R.H. Clogging measurement, dissolved oxygen and temperature control in a wetland through the development of an Autonomous Reed Bed Installations (ARBI). IWA 14th International Conference on Wetland Systems for Water pollution Control (WETPOL), Shanghai, China. 2014
7. Hughes-Riley, T., Newton, M.I., Webber, J.B.W., Puigagut, J., Uggetti, E., Garcia, J., Morris, R.H., MR Takes To The Marshes Automated Reed Bed Installations, 12th International Bologna Conference on Magnetic Resonance in Porous Media (MRPM12), Wellington, New Zealand. 2014
8. Corbella, C., Guivernau, M., Viñas, M. and Puigagut, J. 2014. Effect of primary treatment on electrogenic bacteria populations colonizing the electrodes of microbial fuel cells implemented in constructed wetlands. IWA 14th International Conference on Wetland Systems for Water pollution Control, Shanghai (China).
9. Corbella, C. and Puigagut, J., 2014. Influence of water level variation within constructed wetlands on power production with microbial fuel cells. IWA 14th International Conference on Wetland Systems for Water pollution Control, Shanghai (China).
10. Corbella, C. and Puigagut, J. 2013. Energy production with microbial fuel cells implemented in horizontal subsurface flow treatment wetlands. In Proceedings of the 5th International Symposium on Wetland Pollutant Dynamics and Control (WETPOL) Nantes (France).
11. Garfi, M., Corbella, C. and Puigagut, J. (2012). The influence of operational and design parameters on vertical redox profiles in sub-surface flow constructed wetlands: surveying the optimal scenario for microbial fuel cell implementation. In: Proceedings of the 13th IWA International Conference on Wetlands Systems for Water Pollution Control, Perth, Australia.
12. Pedescoll, A., Passos, F., Alba, E., García, J., Puigagut, J. (2010). Gravel composition related to clogging development in horizontal subsurface flow constructed wetlands. In: Proceedings of the 12th IWA International Conference on Wetlands Systems for Water Pollution Control, Venice, Italy.

13. Pedescoll, A., Corzo, A., Alvarez, E., Puigagut, J., García, J. (2010). Contaminant removal and clogging development in shallow subsurface flow wetlands: effect of primary treatment and operating strategy. In: Proceedings of the 12th IWA International Conference on Wetlands Systems for Water Pollution Control, Venice, Italy.

14. Puigagut, J., Gagnon, V., Brisson, J. (2009). Effect of the presence of macrophytes on ciliated protozoa in horizontal subsurface-flow constructed wetlands. In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain .

15. Anjab, Z., Chazarenc, F., Puigagut, J., Comeau, Y. (2009). Slag for upgrading phosphorus removal from constructed wetland effluents: effect of slag particle size distribution. . In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain.

16. Gagnon, V., Puigagut, J., Chazarenc, F., Brisson, J. (2009). Influence of plants species on the performance of constructed wetlands for sludge dewatering during the first year of operation. In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain.

17. De Boutray M.L., Puigagut J., Comeau Y. (2008). Influence des microorganismes aquatiques sur les flux de phosphore au sein d'élevages piscicoles en étangs. 23ième Congrès de l'Est du Canada de l'ACQE, Montréal (Canada).

18. Lefrançois P., Puigagut J., Chazarenc F., Comeau Y. (2008). Conception et performance d'un système novateur pour la gestion des rejets piscicoles". 24ième Congrès de l'Est du Canada de l'ACQE, Montréal (Canada).

19. Gagnon, V., Puigagut, J., Chazarenc, F., Brisson, J. (2008). Treatment of hidroponics wastewater using constructed wetlands: the role of plants, season and organic carbon addition. In: Proceedings of the 11th International Conference on Wetland Systems for Water Pollution Control, Indore, India.

20. Garcia, J., Baqué, F., Puigagut, J., Llorens, E. (2008). Biodegradability properties of solids accumulated in a full-scale subsurface flow constructed wetland. In: Proceedings of the 11th International Conference on Wetland Systems for Water Pollution Control, Indore, India.

21. Puigagut, J., Llorens, E., and García, J. (2007). Anaerobic and aerobic biodegradability of the solids accumulated in a full-scale subsurface flow constructed wetland. Congreso Internacional de Tecnologías de Pequeña Escala para la Depuración y Gestión de Aguas Residuales en el Ámbito Mediterráneo (SMALLWAT07), Centro de Nuevas Tecnologías del Agua, Noviembre, Sevilla, España.

22. Pedescoll, A., Uggetti, E., Llorens, E., Puigagut, J., García, J., García, D., and Granés, F. (2007). Linking indirect measures to clogging phenomena in full-scale subsurface flow constructed wetlands. Congreso Internacional de Tecnologías de Pequeña Escala para la Depuración y Gestión de Aguas Residuales en el Ámbito Mediterráneo (SMALLWAT07), Centro de Nuevas Tecnologías del Agua, Noviembre, Sevilla, España.

23. Puigagut, J., Salvadó, H. and García, J. (2006). Study of microfauna in constructed wetlands treating urban sewage at high and low organic loading. XIII Meeting of the Limnological Spanish Association (AEL). Barcelona (Catalunya).

24. Puigagut, J., Villaseñor, J., Salas, J.J., Bécares, E., and García, J. (2006). Subsurface flow constructed wetlands in Spain for the sanitation of small communities: a comparative study. In: Proceeedings of the 10th IWA International Conference on Wetland Systems for Water Pollution Control, Lisboa, Portugal.

25. Matamoros, V., Puigagut, J., García, J., Codony, F., Morató, J. and Bayona, J.M. (2006). Behavior of framework eu directive priority pollutants in subsurface flow constructed wetlands. In: Proceeedings of the 10th IWA International Conference on Wetland Systems for Water Pollution Control, Lisboa, Portugal.

26. Puigagut, J., Villaseñor, J., Salas, J.J., Bécares, E., García, J. (2006). Susurface flow constructed wetlands in Spain for the sanitation of small communities: a comparative study. In: Proceeedings of the 10th IWA International Conference on Wetland Systems for Water Pollution Control, Lisboa, Portugal.
27. Puigagut, J., Salvadó, H y García, J. (2006). Efecto de los compuestos orgánicos solubles y particulados en la comunidad de microorganismos asociada a un humedal construido de flujo subsuperficial. En: Ponencias de la Mesa Española de Tratamiento de Aguas 2006. Universidad de Valencia, Valencia, España..
28. Puigagut, J., Salvadó, H. y García, J, (2005). Changes on microfauna community in experimental subsurface flow constructed wetlands according to the type of organic matter supplied. En: Encuentro Internacional sobre Fitodepuración, Fundación Global Nature, Lorca, España.
29. Mas, M., Salvadó, H., Puigagut, J. and Gracia, M.P. (2002). Filter capacity of three protozoa species isolated from activated sludge process. 4a reunión de la Sociedad Española de Microbiología (SEM). Sevilla (Spain)
30. Puigagut, J., Salvadó, H., Mas, M. and Gracia, M.P. (2002). Analysis of microorganisms community in a SBR system highly loaded in terms of organic matter and ammonia. 4a reunión de la Sociedad Española de Microbiología (SEM). Sevilla (Spain)

Invited communications

1. Puigagut, J., Salvadó, H. and García, J. 2005. Acclimatisation capacity of activated sludge microfauna to ammonia. XX National Meeting of the Spanish Society of Microbiology (SEM). Cáceres (Extremadura) (Spain).
2. Puigagut, J. 2015. Microbial fuel cell implementation in constructed wetlands: current knowledge and future perspectives. 1st Workshop organised by IRSTEA. Lyon (France).

Poster presentation

1. Corbella, C. and Puigagut, J. 2014. Influence of cathode to anode surface ratio on the electrical output generated by MFCs implemented in constructed wetlands during the treatment of domestic wastewater. *In 2nd European meeting of the International Society for Microbial Electrochemistry and Technology*, Alcalà de Henares (Spain).
2. Corbella, C. and Puigagut, J. 2014. Contribution of macrophytes to the electrical output generated by MFCs implemented in constructed wetlands during the treatment of domestic wastewater. *In 2nd European meeting of the International Society for Microbial Electrochemistry and Technology*, Alcalà de Henares (Spain).
3. Corbella, C. and Puigagut, J. 2013. Preliminary results on methane emission from horizontal subsurface flow treatment wetlands as function of primary treatment. . *In Proceedings of the 5th International Symposium on Wetland Pollutant Dynamics and Control (WETPOL) Nantes (France),* 317-318.
4. Corbella, C. and Puigagut, J. (2012). Improving the reliatibility of closed chamber methodologies for methane emissions measurement in constructed wetlands. In: Proceedings of the 13th IWA International Conference on Wetlands Systems for Water Pollution Control, Perth, Australia, Under edition
5. Pedescoll, A., Puigagut, J. and García, J. (2010). Batch operation to improve removal efficiency in subsurface flow constructed wetlands. 1st IWA Spanish Young Water Professionals, June, Barcelona, Spain.
6. Puigagut, J., De Boutray, M.L., Chazarenc, F., Comeau, Y. (2009). Influence of tubificid worms on phosphorus dynamics between sediment and overlaying water in a settling pond. . In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain 434-435.

7. Puigagut, J and García, J. (2005). The study of microfauna community in subsurface flow constructed wetland according to the sort of organic matter supplied (soluble/particulate). In: Proceedings of the International Symposium on Wetland Pollutant Dyanamics and Control, Ghent University, Ghent, Belgium.
8. Puigagut, J., Salvadó, H., Mas, M. and Gracia, M.P. Amonia effect on wastewater treatment plant microfauna. (2003). 4ème Biennale de parasitologie & 41ème Réunion du Groupement des Protistologues de Langue Française. Clermont-Ferrand (France).
9. Mas, M., Puigagut, J., Salvadó, H., and Gracia, M.P. (2003). Protozoa growth kinetics in an activated sludge system. 4ème Biennale de parasitologie & 41ème Réunion du Groupement des Protistologues de Langue Française. Clermont-Ferrand (France).
10. Palomo, A., Salvadó, H., Mas, M., Puigagut, J. Y Gracia, M.P. (2003). Dinámica de las comunidades de Namatodos en un sistema de biodiscos. XV reunión de la sociedad española de historia natural. A Coruña (Galicia)..

Congress proceedings derived publications

1. Corbella, C., Gómez, N. and Puigagut, J. 2015. Novel microbial fuel cell-based biosensor for the assessment of organic loading in constructed wetlands. *Wetland Pollutant Dynamics and Control (WETPOL) York (UK), 246-247.*
2. Corbella, C. and Puigagut, J. 2015. Microbial fuel cells to improve treatment efficiency in constructed wetlands. *Wetland Pollutant Dynamics and Control (WETPOL) York (UK), 242-243.*
3. Corbella, C., Guivernau, M., Viñas, M. and Puigagut, J. 2014. Effect of primary treatment on electrogenic bacteriapopulations colonizing the electrodes of microbial fuel cells implemented in constructed wetlands*. In IWA 14th International Conference on Wetland Systems for Water pollution Control.* Shanghai (China) (page not defined).
4. Corbella, C. and Puigagut, J., 2014. Influence of water level variation within constructed wetlands on power production with microbial fuel cells. *IWA 14th International Conference on Wetland Systems for Water pollution Control.* Shanghai (China). (page not defined).
5. Corbella, C. and Puigagut, J. 2013. Preliminary results on methane emission from horizontal subsurface flow treatment wetlands as function of primary treatment. *. In Proceedings of the 5th International Symposium on Wetland Pollutant Dynamics and Control (WETPOL) Nantes (France),* 317-318.
6. Corbella, C. and Puigagut, J. 2013. Energy production with microbial fuel cells implemented in horizontal subsurface flow treatment wetlands. In Proceedings of the 5th International Symposium on Wetland Pollutant Dynamics and Control (WETPOL) Nantes (France),129-130.
7. Garfi, M., Corbella, C. and Puigagut, J. (2012). The influence of operational and design parameters on vertical redox profiles in sub-surface flow constructed wetlands: surveying the optimal scenario for microbial fuel cell implementation. In: Proceedings of the 13th IWA International Conference on Wetlands Systems for Water Pollution Control, Perth, Australia, (not page defined)
8. Corbella, C. and Puigagut, J. (2012). Improving the reliatibility of closed chamber methodologies for methane emissions measurement in constructed wetlands. In: Proceedings of the 13th IWA International Conference on Wetlands Systems for Water Pollution Control, Perth, Australia, (not page defined)
9. Pedescoll, A., Passos, F., Alba, E., García, J., Puigagut, J. (2010). Gravel composition related to clogging development in horizontal subsurface flow constructed wetlands. In: Proceedings of the 12th IWA International Conference on Wetlands Systems for Water Pollution Control, Venice, Italy, 790-797.

10. Pedescoll, A., Corzo, A., Alvarez, E., Puigagut, J., García, J. (2010). Contaminant removal and clogging development in shallow subsurface flow wetlands: effect of primary treatment and operating strategy. In: Proceedings of the 12th IWA International Conference on Wetlands Systems for Water Pollution Control, Venice, Italy, 798-800.

11. Puigagut, J., Gagnon, V., Brisson, J. (2009). Effect of the presence of macrophytes on ciliated protozoa in horizontal subsurface-flow constructed wetlands. In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain 115-116.

12. Anjab, Z., Chazarenc, F., Puigagut, J., Comeau, Y. (2009). Slag for upgrading phosphorus removal from constructed wetland effluents: effect of slag particle size distribution. . In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain 145-146.

13. Gagnon, V., Puigagut, J., Chazarenc, F., Brisson, J. (2009). Influence of plants species on the performance of constructed wetlands for sludge dewatering during the first year of operation. In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain 173-174.

14. Puigagut, J., De Boutray, M.L., Chazarenc, F., Comeau, Y. (2009). Influence of tubificid worms on phosphorus dynamics between sediment and overlaying water in a settling pond. . In: Proceedings of the 3rd Wetland Pollutant Dynamics and Control (WETPOL), Barcelona, Spain 434-435.

15. Gagnon, V., Puigagut, J., Chazarenc, F., Brisson, J. (2008). Treatment of hidroponics wastewater using constructed wetlands: the role of plants, season and organic carbon addition. In: Proceedings of the 11th International Conference on Wetland Systems for Water Pollution Control, Indore, India, 123-130.

16. Garcia, J., Baqué, F., Puigagut, J., Llorens, E. (2008). Biodegradability properties of solids accumulated in a full-scale subsurface flow constructed wetland. In: Proceedings of the 11th International Conference on Wetland Systems for Water Pollution Control, Indore, India, 415-418.

17. Puigagut, J., Villaseñor, J., Salas, J.J., Bécares, E., and García, J. (2006). Subsurface flow constructed wetlands in Spain for the sanitation of small communities: a comparative study. In: Proceeedings of the 9th IWA International Conference on Wetland Systems for Water Pollution Control, Lisboa, Portugal, 1223-1234.

18. Matamoros, V., Puigagut, J., García, J., Codony, F., Morató, J. and Bayona, J.M. (2006). Behavior of framework eu directive priority pollutants in subsurface flow constructed wetlands. In: Proceeedings of the 10th IWA International Conference on Wetland Systems for Water Pollution Control, Lisboa, Portugal, 559-566.

19. Puigagut, J., Villaseñor, J., Salas, J.J., Bécares, E., García, J. (2006). Susurface flow constructed wetlands in Spain for the sanitation of small communities: a comparative study. In: Proceeedings of the 10th IWA International Conference on Wetland Systems for Water Pollution Control, Lisboa, Portugal, 1223-1233

20. Puigagut, J., Salvadó, H y García, J. (2006). Efecto de los compuestos orgánicos solubles y particulados en la comunidad de microorganismos asociada a un humedal construido de flujo subsuperficial. En: Ponencias de la Mesa Española de Tratamiento de Aguas 2006. Universidad de Valencia, Valencia, España, 87-92.

21. Puigagut, J and García, J. (2005). The study of microfauna community in subsurface flow constructed wetland according to the sort of organic matter supplied (soluble/particulate). In: Proceedings of the International Symposium on Wetland Pollutant Dyanamics and Control, Ghent University, Ghent, Belgium.

22. Puigagut, J., Salvadó, H. y García, J, (2005). Changes on microfauna community in experimental subsurface flow constructed wetlands according to the type of organic matter supplied. En: Encuentro Internacional sobre Fitodepuración, Fundación Global Nature, Lorca, España.

Books and book chapters

1. Hawes, P., Hughes-Riley, T., Uggetti, E., Ortega Anderez, D., Newton, M.I., Puigagut, J., Garcia, J., Morris, R.H. Clogging measurement, dissolved oxygen and temperature control in a wetland through the development of an Autonomous Reed Bed Installation (ARBI), submitted.

2. Puigagut, J., Caselles-Osorio, A., Vaello, N. and García, J. (2008). Fractionation, biodegradability and particle-size distribution of organic matter in horizontal subsurface-flow constructed wetlands. In: Nutrient Cycling and Retention in Natural and Constructed Wetlands, Vymazal, J. Ed., Springer, 289-297. ISBN 978-1-4020-8234-4.

3. Salvadó, H., Puigagut, J. (2007). Scaling-up of predation enhancement groute. In: Comparative evaluation of sludge reduction routes, Ginested, P. Ed., IWA Publishing, 52-54. ISBN 1-84339-123-6.

National and International projects

Name of the project: Ecotechnologies for water treatment and recovery of resources
Role in the project: Researcher
Body where project took place: Technical University of Catalonia - Department of Civil and Environmental Engineering
Funding body or bodies: Spanish Ministry of Science
Code according to the funding body: EUIN2013-51166
Start date: 01/01/2014 Duration of the project: 3 years
Total amount: 24.000

Name of the project: Autonomous Reed Bed Installations
Role in the project: Researcher
Body where project took place: Technical University of Catalonia - Department of Civil and Environmental Engineering
Funding body or bodies: European Comission
Code according to the funding body: FP7-606326-ARBI
Start date: 01/09/2013 Duration of the project: 2 years
Total amount: 503,429

Name of the project: Safeguarding Water resources in INdia with Green and Sustainable
Your role in the project: Researcher
Body where project took place: Technical University of Catalonia - Department of Civil and Environmental Engineering
Funding body or bodies: European Comission
Code according to the funding body: FP7-308502-SWINGS
Start date: 01/09/2012 Duration of the project: 3 years - 5 months – 28 days
Total amount: 264,231

Name of the project: FP7-308336-NaWaTech - Natural Water Systems and Treatment Technologies to cope with Water Shortages in Urbanised Areas in India
Your role in the project: Researcher
Body where project took place: Technical University of Catalonia - Department of Civil and Environmental Engineering
Funding body or bodies: European Comission - FP7
Start date: 01/07/2012

Name of the project: Microbial fuel cells implemented in constructed wetlands for energy production and treatment improvement
Role in the project: Principal Investigator
Body where project took place: Technical University of Catalonia - Department of Civil and Environmental Engineering
Funding body or bodies: Ministerio de Ciencia e Innovación (MICINN)
Code according to the funding body: CTM2010-17750
Start date: 01/01/2011 Duration of the project: 4 years
Total amount: 90,750

Name of the project: Water.cat - catalan r&d network for water technologies
Your role in the project: Researcher
Body where project took place: Technical University of Catalonia - Department of Civil and Environmental Engineering
Funding body or bodies: ACC10, Generalitat de Catalunya
Code according to the funding body: XCEU10-2-0001
Start date: 27/12/2010 Duration of the project: 2 years - 5 days
Total amount: 9,000

Awards

- 2013. Best work presented at the 5th International Symposium on Wetland Pollutant Dynamics and Control. Title: Preliminary results on methane emissions from constructed wetlands as function of primary treatment.
- 2012. National award (Awarded by the Generalitat de Catalunya) for the best research project on environment. Title of the project: Power production with microbial fuel cells implemented in constructed wetlands for the treatment of domestic wastewater". Award: 30.000 euros.
- 2010. Superior paper award given by the International Aquacultural Society. Paper awarded: Minimizing phosphorus discharge from aquaculture earth ponds by a novel sediment retention system. Aquacultural Engineering, Vol. 43:94-100.
- 2007. 2nd best annual work on activated sludge microbiology given by the Scientific Society on Bioindication (GBS). Tittle: Effect of Lecanidae rotifers on the floc size distribution in activated sludge systems.

Scientific and organizing comitees

- 2016. 10th International Society for Environmental Biotechnology (ISEB) conference.
- 2014. IWA 14th International Conference on Wetland Systems for Water pollution Control
- 2013. 5th International Symposium on Wetland Pollutant Dynamics and Control.
- 2009. 3rd Wetland Pollutant Dynamics and Control Symposium.

PhD thesis supervision

- **2015 – present (on goin)**. Electrocoagulation/electroflotation applied to algal-based treatment systems: design and operational aspects towards biomass recovery optimization. Student: Fatine Ezbakhe
- **2011 – present (on going).** Microbial fuel cells implemented in constructed wetlands: design aspects and applications. Student: Clara Corbella.

- **2006 – 2010**. Clogging in Horizontal Subsurface Flow Constructed Wetlands. Mesures, design factors and prevention strategies. Student: Anna Pedescoll. Mark: Exellent *Cum Laude*