

Part A. PERSONAL INFORMATION		CV date		26/3/2019
First and Family name	Ivet Ferrer Martí			
Social Security, Passport, ID number	44196817v	Age	41	
Researcher numbers	Researcher ID	L-4457-2014		
	Orcid code	0000-0002-4568-4843		

A.1. Current position

Name of University	Universitat Politècnica de Catalunya (UPC)		
Department	Department of Civil and Environmental Engineering		
Address and Country	c/ Jordi Girona 1-3, Building D1, 1st floor, office 106c		
Phone number	+34934016463	E-mail	ivet.ferrer@upc.edu
Current position	Associate professor	From	01/05/2011
Espec. cód. UNESCO	Sanitary Engineering (220809), Wastewater technology (330810), Solid waste treatment (330807)		
Palabras clave	Environmental technology, Biological treatments, Anaerobic digestion, Biogas, Wastewater, Organic waste, Sludge, Microalgae		

A.2. Education

PhD	University	Year
Agricultural & Forestry Engineering	Universitat de Lleida	2002, 2004
MSc. Environmental Diagnostics	Cranfield University	2003
Certificate of Pedagogical Aptitude	Universitat Autònoma de Barcelona	2004
Certificate of Proficiency in English	Cambridge University	2005
PhD Environmental Science	Universitat Autònoma de Barcelona	2008

A.3. JCR articles, h Index, thesis supervised...

Six-year research periods: 2 (2004-2009 & 2010-2015)

PhD Thesis supervised: 4 (2011, 2014, 2016, 2018)

Total citations: 1715 (WoS), 2495 (Scopus)

Average citations/year: 274 (WoS), 394 (Scopus)

Articles in Q1: 50

H index: 23 (WoS), 26 (Scopus)

Articles in JCR journals: 62; Other articles: 12; Book chapters: 8

Conference presentations: 47 oral presentations, 24 posters

Invited speaker: 6; Keynote in scientific conference: 1

Scientific committee of conferences: 5

Editor of JCR journals: 4 (Algal Research, New Biotechnology, Molecules, Energies)

Participation in research projects: 24

Principal investigator in research projects: 2 Plan Nacional I+D+i, 1 H2020-MSCA-ITN

Part B. CV SUMMARY (max. 3500 characters, including spaces)

Ivet Ferrer is associate professor at the Department of Civil and Environmental Engineering of the Universitat Politècnica de Catalunya (UPC). She is the coordinator of the Research Group of Environmental Engineering and Microbiology (GEMMA-UPC), a Consolidated Research Group accredited by the Catalan Government (2017 SGR 1029).

Ivet Ferrer is Agricultural Engineer by the University of Lleida. She started her research career doing her Master Thesis on the anaerobic digestion of aquatic plants in 2002 (Dr. Xavier Flotats), which was published as an article (JCR) and presented at an international conference. She obtained a Predoctoral Fellowship (2003-2007) and carried out her PhD Thesis on the thermophilic digestion of sewage sludge, in the framework of a project funded by the Spanish Ministry (REN 2002 / TECNO). In 2008 she obtained her Doctoral Degree in Environmental Sciences by the Universitat Autònoma de Barcelona (Dr. Xavier Font, Dr Felicitas Vázquez). The results were published in 4 JCR articles, 2 technical articles and 7 conference presentations.

In 2009 and 2010 Ivet Ferrer conducted 2 postdoctoral research stays of 4 months in reference research institutions in the field of anaerobic digestion. The first one at the Laboratory of Environmental Biotechnology (LBE-INRA) from Narbonne, France (Dr. Hélène Carrère). And the second one at Wageningen University, The Netherlands (Dr. Jules van Lier, Dr. Jan Weijma), thanks to a mobility fellowship of the Generalitat de Catalunya (2009 BE-2 00163). These collaborations led to 3 JCR articles. The collaboration with the LBE-INRA continued through the ex-change of PhD students and postdoctoral researchers, leading to 6 JCR articles, a book chapter and a Keynote at an international conference. The collaboration with Dr. Jules van Lier continues under the framework of the Super-W Joint Doctorate Program, which involves a PhD student co-tutelle.

Ivet Ferrer started and leads the research line on biogas production of the GEMMA-UPC. Initially, she was the PI of 3 projects on biogas production in rural communities of Peru, funded by the Development Cooperation Center of the UPC (2008, 2009, 2010), which have led to 9 JCR articles, 1 peer review article in a journal of teaching innovation (open access) and 8 conference presentations. Subsequently, she was the PI of the BIOALGAS project on the production of biogas from microalgae grown in wastewater treatment systems, which was funded by the Spanish Ministry (CTM2010-17846). The project led to 9 JCR articles, 2 articles in technical journals, 11 conference presentations (1 oral communication award) and 2 PhD Theses. Next, she was the PI of the FOTOBIOGAS project, funded by the Spanish Ministry (CTQ2014-57293-C3-3-R) and coordinated with the EDARSOL project from the University of Almeria (Dr. F.Gabriel Acién). The project led to 11 JCR articles, 1 article in a technical journal, 21 conference presentations (1 oral communication and 2 poster awards) and 2 PhD Theses. Currently, she is the PI of the first European Joint Doctorate of the UPC, Super-W (676070), coordinated by Ghent University (Dr. Gijs du Laing). Between 2014-2018 she has given 5 invited lectures on biogas production (IRTA, Universitat de Vic, Fundación Cajamar, Ghent University) and on treatment wetlands (Catedra DAM). She has been Associate Editor of Algal Research (2015-2016) and Guest Editor of New Biotechnology (2016-2017), Molecules (2017-19) and Energies (2018-19) journals.

Part C. RELEVANT MERITS

C.1. Publications (including books)

Highly cited papers on the WoS (received enough citations as of March/April 2018 to place them in the top 1% of their academic fields based on a highly cited threshold for the field and publication year):

Carrère, H., Antonopoulou, G., Affes, R., Passos, F., Battimelli, A., Lyberatos, G., **Ferrer, I.** (2016) Review of feedstock pretreatment strategies for improved anaerobic digestion: from lab-scale research to full-scale application. *Bioresource Technology*, 199, 386-397.

Matamoros, V., Gutiérrez, R., **Ferrer, I.**, García, J., 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.

Passos, F., Solé, M., García, J., **Ferrer, I.** (2013) Biogas production from microalgae grown in wastewater: effect of microwave pre-treatment. *Applied Energy*, 108, 168-175.

Carrère, H., Dumas, C., Battimelli, A., Batstone, D.J., Delgenès, J.P., Steyer, J-P., **Ferrer, I.** (2010) Pretreatment methods to improve sludge anaerobic degradability: a review. *Journal of Hazardous Materials*, 183, 1-15.

Other articles:

Garfí, M., Castro, L., Montero, N., Escalante, H., **Ferrer, I.** (2019) Evaluating environmental benefits of low-cost biogas digesters in small-scale farms in Colombia: a life cycle assessment. *Bioresource Technology* 274, 541-548

Terumi Arashiro, L., Montero, N., **Ferrer, I.**, Acién, F.G., Gómez, C., Garfí, M. (2018) Life Cycle Assessment of high rate algal ponds for wastewater treatment and resource recovery. *Science of the Total Environment* 622-623, 1118-1130.

Arias, D.M., Solé-Bundó, M., Garfí, M., **Ferrer, I.**, García, J., Uggetti, E. (2018) Integrating microalgae tertiary treatment into activated sludge systems for energy and resource recovery. *Bioresource Technology* 247, 513-519.

Solé-Bundó, M., Eskicioglu C., Garfí, M., Carrère, H., **Ferrer, I.** (2017) Anaerobic co-digestion of microalgal biomass and wheat straw with and without thermo-alkali pretreatment. *Bioresource Technology* 237, 89-98.

Passos, F., **Ferrer, I.** (2014) Microalgae conversion to biogas: thermal pretreatment contribution on net energy production. *Environmental Science and Technology*, 48, 7171-7178.

Passos, F, Uggetti, E., Carrère, H., **Ferrer, I.** (2014) Pretreatment of microalgae to improve biogas production: a review. *Bioresource Technology*, 172, 403-412.

C.2. Research projects and grants

Title: SuPER-W: Sustainable Product, Energy and Resource Recovery from Wastewater (676070)

Funding entity: H2020-MSCA-ITN-2015 (European Joint Doctorates)

Duration: 2016 –2020

PI: **Ivet Ferrer**; Coordinator: Gijs du Laing (UGent)

Budget: 495,745 € (UPC subproject)

Title: INCOVER: Innovative Eco-Technologies for Resource Recovery from Wastewater (689242)

Funding entity: European commission (H2020)

Duration: 2016 –2019

PI: Joan García; Coordinator: Juan Antonio Alvarez (AIMEN)

Budget: 807,500 € (UPC subproject)

Water Industry Awards 2018 Winner

Title: FOTOBIOGAS: Producción de biogas a partir del tratamiento de aguas residuales empleando consorcios de microalgas y bacterias en fotobioreactores cerrados (CTQ2014-57293-C3-3-R)

Funding entity: Ministerio de Economía y Competitividad (MINECO)

Duration: 2015 - 2017

PI: **Ivet Ferrer**; Coordinator: Francisco Gabriel Acien (Universidad de Almería)

Budget: 118.580 € (UPC subproject)

Title: NaWaTech: Natural Water Systems and Treatment Technologies to cope with Water Shortages in Urbanised Areas in India (308336)

Funding entity: EU FP7

Duration: 2012 –2015

PI: Joan García; Coordinator Mirko Hanel (ttz)

Budget: 181.189 € (UPC subproject)

Title: SWINGS: Safeguarding Water resources in INdia with Green and Sustainable technologies (308502)

Funding entity: EU FP7

Duration: 2012 –2015

PI: Joan García; Coordinator: Juan Antonio Alvarez (AIMEN)

Budget: 264.231 € (UPC subproject)

Title: BIOALGAS: Producción de biogás a partir de biomasa algal procedente de lagunas de alta carga para la depuración de aguas residuales (CTM2010-17846)

Funding entity: Ministerio de Economía y Competitividad (MINECO)

Duration: 2011 - 2013

PI: **Ivet Ferrer**

Budget: 83.490 €

C.3. Contracts

Title: Life Cycle Assessment of a new urban waste management model based in 4 containers

Funding company: URBASER

Duration: 2015 –2015

PI: Marianan Garfi

Budget: 22.000 €

C.4. PhD Thesis supervision

Passos, F. Microalgae conversion to biogas: Pretreatment methods to improve the anaerobic digestion of microalgal biomass grown in wastewater treatment Systems, 2010-2014, 10 JCR articles, Professor at the Federal University of Minas Gerais (Brazil)

Gutiérrez, R. Microalgae harvesting in wastewater treatment plants: Application of natural techniques for an efficient flocculation, 2013-2016, 6 JCR articles, Technical director of the Water Department in the company Rubatec (Barcelona)

Solé, M. Strategies to enhance microalgae anaerobic digestion in wastewater treatment systems: Pretreatments and co-digestion, 2013-2018, 7 JCR articles (+ 3 submitted), Project engineer at the company INYPSA (Barcelona)

C.5. Member of Scientific Committee

2nd IWA Conference on Algal Technologies for Wastewater Treatment and Resource Recovery (Valladolid, 2019)

The 2nd International Conference on Anaerobic Digestion technology: Sustainable Alternative Bioenergy (SAB) for a Stable Life (Chiang Mai, Thailand, 2017)

Chair, 10th International Society for Environmental Biotechnology Conference (Barcelona, 2016)

2nd Young Algaeneers Symposium (Narbonne-Montpellier, France, 2014)

C.6. Editor of JCR Journals

Guest Editor of a Special Issue for Energies (MDPI), included in the JCR (2018-2019)

Guest Editor of two Special Issues for Molecules (MDPI), included in the JCR (2017-2019)

Guest Editor of a Special Issue for New Biotechnology (Elsevier), included in the JCR (2016)

Associate Editor of Algal Research (Elsevier), included in the JCR (2015-2016)

C.7. Awards

BIORESTEC 2018 Impactful Research Award of Bioresource Technology to the top 20 cited papers published in 2015 and 2016, counting citations in 2017. (2018)

Top 3 of the poster awarding, 1st IWA Conference on Algal Technologies for Wastewater Treatment and Resource Recovery, March, Delft, The Netherlands. (2017)

Best Oral Communication Award, IV Latinamerican Congress of SOLABIAA (Sociedad Latinoamericana de Biotecnología Ambiental y Algal), Florianópolis, Brazil. (2015)

Best Oral Communication Award on the Most Innovative Topic of Research, III International Symposium on Organic Matter Management and Compost Use in Horticulture, Murcia. (2015)

Certificate of excellence in reviewing in recognition to an outstanding contribution to the Journal ALGAL RESEARCH. (2013)

UPC Extraordinary Doctoral Award to the PhD Thesis of my student Enrica Uggetti. (2013)

Best Contribution Award, 12th IWA International Conference on Wetland Systems for Water Pollution Control, Venice, Italy. (2010)