



**Part A. PERSONAL INFORMATION**

CV date	06/11/17
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First and Family name	Isabel Reche Cañabate		
Social Security, Passport, ID number	27513259S	Age	50
Researcher numbers	Researcher ID	K-7120-2014	
	Orcid code	0000-0003-2908-1724	

**A.1. Current position**

Name of University/Institution	University of Granada		
Department	Ecology		
Address and Country	Facultad de Ciencias, Av. Fuente Nueva s/n, 18071 Granada		
Phone number	958241000 Ext 20018	E-mail	<a href="mailto:ireche@ugr.es">ireche@ugr.es</a>
Current position	Associate Professor	From	01/10/2003
Espec. cód. UNESCO	2508.08, 2510.01, 2510.02		
Key words	Limnology, oceanography, dissolved organic matter, C and N biogeochemical cycles, microbial ecology		

**A.2. Education**

PhD	University	Year
Biological Sciences	Granada	1995

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

I have **4 positive evaluations of six-year research periods**(24 years,the last one was obtained for the period from 2010 to 2015) and 5 positive five-year teaching periods (25 years with the last one obtained in 2016).

I have **supervised four PhD students** (Dr. Elvira Pulido-Villena; Dr. Eva Ortega-Retuerta, Dr. Teresa S. Catalá, and Dr. Ignacio P. Mazuecos). Three students got International mention, one extraordinary PhD award and all obtained “sobresaliente”*cum laude*. Currently, I am **supervising three more** PhD students (GemaBatanero, SeyedMohammadSadeghi-Nassaj and Elizabeth León-Palmero).

I have **55 publications in JCR (45 in Q1)**, which have received 1922 (Google scholar) and 1278 (WoS) citations. My **h-index is 27 in Google scholar and 22 in WoS**.

I have been **Principal Investigator of 7 projects** from different organizations and foundations (MEC, MCINN, MINECO, ParquesNacionales, Fundación BBVA, and CEI Biotic Granada).

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

I defended my PhD dissertation at the University of Granada(UGR) in 1995 receiving the extraordinary award for the promotion. I got a **FPU fellowship**to work on microbial food webs and nutrients recycled by zooplankton in alpine lakes. Later, from 1995 to 1998, I was a **Postdoctoral Associate at the Institute of Ecosystem Studies, NY, EEUU** working on bio- and photo-reactivity of dissolved organic matter in temperate lakes with Dr. Michael L. Pace and Dr. Jonathan J. Cole. I returned to Spain with a contract for **reincorporation of doctors** from the Spanish Ministry of Education and Science. Since 1998, I have been linked to the UGR first as an **assistant professor** and since October 2003, when I got my tenure position, as an **associate professor**. At the UGR I has been working on different research lines such as the effects of **atmospheric deposition**, mostly from Saharan origin, on alpine lakes and reservoirs and the role of Saharan dust as a **microbial dispersal vector**. Simultaneously, I have been involved in several oceanographic cruises to Antarctica and the circumnavigation Malaspina 2010 to provide insights into the **nature and role of dissolved organic matter in the open ocean and the global carbon cycle**. More recently, my research has been focused on microbial ecology and biogeochemistry of **wetlands and reservoirs**, particularly their role in the **budgets of green house gases**.



I was a visiting scholar at the **University of California, Berkeley** for one academic year (2016/2017) supported by the Spanish Ministry of Education, Culture and Sport with a grant **Salvador de Madariaga** and a UGR-sabbatical stay.

## PartC. RELEVANT MERITS

### C.1. Publications (recent and related with the application)

Batanero GL, E León-Palmero, L Li, AJ Green, M Rendón-Martos, CA Suttle, **I. Reche**(2017) Flamingos and drought as drivers of nutrients and microbial dynamics in a saline lake **Scientific Reports** 7 (1), 12173. **IF: 4.259 (Q1)**.

Martínez-PérezAM, M Nieto-Cid, H Osterholz, TS Catalá, **I Reche**, et al. (2017) Linking optical and molecular signatures of dissolved organic matter in the Mediterranean Sea. **Scientific Reports** 7 (1), 3436 **IF: 4.259 (Q1)**.

Iuculano F, IP Mazuecos, **I Reche**, S Agustí(2017) Prochlorococcus as a possible source for transparent exopolymer particles (TEP) **Frontiers in Microbiology** 8:10.3389/fmicb.2017.00709 **IF: 4.076 (Q1)**.

Catalá TS, **I Reche**, et al. (2016) Chromophoric signatures of microbial by-products in the dark ocean **Geophysical Research Letters** 43 (14), 7639-7648. **IF: 4.253 (Q1)**.

Catala, T. S.; Reche I et al.(2016) Drivers of fluorescent dissolved organic matter in the global epipelagic ocean **Limnology & Oceanography** 61: 1101-1119 **IF: 3.383 (Q1)**.

Catalá T.S.; **Reche I.**; et al. (2015) Turnover time of fluorescent dissolved organic matter in the dark global ocean. **Nature comms** 6:5986 DOI: 10.1038/ncomms6986. Quality description: This is a journal of the Springer-Nature group, ranked in 3<sup>rd</sup> position in Multidisciplinary Sciences, only after Nature and Science, with a **IF = 11.329 (Q1)**. Google scholar citations: 26.

Mladenov N, R Sommaruga, R Morales-Baquero, I Laurion, L Camarero, MC Diéguez, A Camacho, A Delgado, O Torres, Z Chen, M Felip, **I Reche** (2011). Dust inputs and bacteria influence dissolved organic matter in clear alpine lakes. **Nature comms** 2:405 | DOI: 10.1038/ncomms1411. Quality description: *Nature communications* is a journal of Springer Nature group ranked in 3<sup>rd</sup> position in Multidisciplinary Science only after Nature and Science, with an **IF = 7.396 (Q1)**. Google scholar citations: 70.

Hervàs A, L Camarero, **Reche I**, and Casamayor EO (2009). Viability and potential for immigration of airborne bacteria from Africa that reach high mountain lakes in Europe. **Environmental Microbiology** 11: 1612-1623. Quality description: This article was published in *Environmental Microbiology* with an **IF = 6.240 (Q1)** and it had a big repercussion in the scientific community and was reviewed by Caroline Ash's in **Science Editor's choice** "Microbiology: Aeolian Microbes" (<http://science.sciencemag.org/content/324/5930/twil.full> Science 324(5930): 989-991, May 22, 2009). Google scholar citations: 104.

**Reche I.**, Ortega-Retuerta E, Romera O, Pulido-Villena E; Morales-Baquero R and Casamayor EO. (2009) Effects of Saharan dust inputs on bacterial activity and community composition in Mediterranean lakes and reservoirs. **Limnology & Oceanography** 54: 869-879. Quality description: This article was published in a top journal in Limnology with an **IF = 3.545 (Q1)**. This article had a big repercussion in the scientific community and I was invited to comment it in the **SILNews** of the



- Society International of Limnology (SIL) 54 (June 2009) <http://limnology.org/publications/sil-news/>. Google scholar citations: 76.
- Morales-Baquero, R. E. Pulido-Villena, **I. Reche** (2006) Atmospheric inputs of phosphorus and nitrogen to Southwest Mediterranean region: biogeochemical response of high mountain lakes. **Limnology & Oceanography** 51: 830-83. Quality description: This article was published in a top journal in Limnology with an **IF = 3.287 (Q1)**. Google scholar citations: 128.
- Bhattachan A., **I. Reche**, P. D'Odorico (2016) Soluble ferrous iron (Fe (II)) enrichment in airborne dust **JGR- Atmospheres** DOI: 10.1002/2016JD025021 **IF = 3.454 (Q1)**.
- Peter H, Hörtnagl P, **Reche I** and Sommaruga R (2014) Bacterial diversity and composition during rain events with and without Saharan dust influence reaching a high mountain lake in the Alps. **Environmental Microbiology Reports** 6(6), 618–624 doi:10.1111/1758-2229.12175 Google scholar citations: 26 **IF = 3.363 (Q2)**
- Morales-Baquero R., Pulido-Villena & **Reche I.** (2013) Chemical signature of Saharan dust on dry and wet atmospheric deposition in the south-western Mediterranean region **Tellus B**, 65, 18720, <http://dx.doi.org/10.3402/tellusb.v65i0.18720> Google scholar citations: 20
- de Vicente I., Ortega-Retuerta E., Morales-Baquero R. & **Reche I.** (2012) Contribution of dust inputs to dissolved organic carbon and water transparency in Mediterranean reservoirs **Biogeosciences**, 9, 5049–5060 doi:10.5194/bg-9-5049-2012 Google scholar citations: 20
- Mladenov N, L. Alados-Arboledas, F.J. Olmo, H. Lyamani, A. Delgado, A. Molina, **I. Reche** (2011) Applications of optical spectroscopy and stable isotope analyses to organic aerosol source discrimination in an urban area **Atmospheric Environment** 45 (2011) 1960-1969. doi:10.1016/j.atmosenv.2011.01.029 Google scholar citations: 21
- Mladenov N, **Reche I**, Olmo FJ, Lyamani H, Alados-Arboledas L (2010) Relationships between spectroscopic properties of high altitude organic aerosols and sun photometry from ground-based remote sensing **JGR-Biogeosciences** doi:10.1029/2009JG000991 Google scholar citations: 22
- Mladenov N, López-Ramos J, McKnight DM, **Reche I** (2009) Alpine lake optical properties as sentinels of dust deposition and global change. **Limnology and Oceanography** 54 2386–2400. Google scholar citations: 32
- Pulido-Villena E., **Reche I.**, Morales-Baquero R. (2008). Evidence of an atmospheric forcing on bacterioplankton and phytoplankton dynamics in a high mountain lake. **Aquatic Sciences** 70: 1 – 9. Google scholar citations: 32
- Mladenov N, Pulido-Villena E, Morales-Baquero R, Ortega-Retuerta E, Sommaruga R, **Reche I.** (2008) Spatiotemporal drivers of dissolved organic matter in high alpine lakes: role of Saharan dust inputs and bacterial activity. **JGR-Biogeosciences** 113, G00D01, doi:10.1029/2008JG000699. Google scholar citations: 29.
- Pulido-Villena E, **Reche I.**, Morales-Baquero R. (2006). Atmospheric deposition of calcium over Southwest Mediterranean region: impact on high mountain lakes. **Global Biogeochemical Cycles** 20, GB2012, Google scholar citations: 46

Morales-Baquero, R., E. Pulido-Villena, O. Romera, E. Ortega-Retuerta, JM Conde-Porcuna, C. Pérez-Martínez & I. Reche (2006). Significance of atmospheric deposition to freshwater ecosystems in the Southern Iberian Peninsula. *Limnetica*, 25(1-2): 171-180. Google scholar citations: 6.

## C.2. Research projects and grants (only in the last 5 years)

- 1. Wetlands and reservoirs as drivers of carbon and nitrogen cycles: climatic implications** (HERA) CGL2014-52362R. Principal Investigator: Isabel Reche Cañabate. Ministry of Economy and Competitiveness. Universidad de Granada. From 01/01/2015 to 31/12/2018. Economical budget: 175000 €
- 2. Integrated multitrophic aquaculture: diversification of marine resources, environmental conservation and technological bioprospective.** CEI BioTic P-BS-46. Principal Investigator: Isabel Reche Cañabate. Campus de Excelencia Internacional BioTic Granada. From 01/06/2014 to 31/12/2014. Economical budget: 21 500€
- 3. Effects of the greater flamingo on microbial metacommunity in saline inland waters: dispersal and guantrophication** (FLAMENCO). CGL2010-15812. Principal Investigator: Isabel Reche Cañabate. Ministry of Science and Innovation. From 01/01/2011 to 31/12/2014. Economical budget: 153 670 €
- 4. Circumnavigation Expedition Malaspina 2010: Global Change and Biodiversity Exploration of the Global Ocean.** CSD2008-00077. Principal Investigator: Carlos M. Duarte Quesada. Ministry of Science and Innovation. From 15/12/2008 to 15/12/2014. Economical budget: 4 350 000 €
- 5. Advances in scientific promotion and international integration of atmospheric aerosol samplings from Sierra Nevada.** Principal Investigator: Rafael Morales-Baquero. Campus de Excelencia Internacional BioTic Granada. From 19/04/2012 to 19/04/2013. Economical budget: 15 000€

## C.5, C.6, C.7... (e. g., Institutional responsibilities, memberships of scientific societies...)

1. I am member of the **Association of the Sciences of Limnology and Oceanography**.
2. Organization of "**Ciclo de Conferencias sobre Biodiversidad y Conservación**" at the Faculty of Sciences of the University of Granada for 12 years.
3. Organization (chairman) along with with Dr. Natalie Mladenov of "**International Training Workshop on Organic Matter Characterization Using Spectroscopic Techniques**" 2010 in Granada.
4. Organization of "**Seminario Acuicultura: Investigación, Desarrollo e Innovación**". Campus de Excelencia Internacional del Mar-CEIMAR. Granada 7 to 17 April 2014
5. Organization (chairman) along with Dr. Michael Pace of **ASLO 2015 Meeting Aquatic Sciences: Global and regional perspectives- North meets south**. Granada
6. Organization of "**Exposición fotográfica y Ciclo de Conferencias. Expedición Malaspina. Un mar de datos**". Granada, 22 February -30 March 2015