



## Curriculum Vitae

# Joana Ferreira Leal

Joana F. Leal completed her PhD in Chemistry in 2017/03/03 by University of Aveiro (PhD grant awarded by National Foundation for Science and Technology (FCT) - 4th position in the national ranking of the area). She concluded her Master in Analytical Chemistry and Quality in 2012/07/26 and her Degree in Biochemistry in 2010/07/28, both by University of Aveiro. Recently, she won a contract as a junior researcher in the national competition to stimulate individual scientific employment - 5th edition (CEEC individual from FCT - 5th position in the national ranking of the area) and is currently working at the Centre of Marine Sciences (Centro de Ciências do Mar - CCMAR, University of Algarve). She integrated the project MAR-01.03.01-FEAMP-0049 (<https://depuratox.ualg.pt/>), published 13 scientific articles and 2 extended abstracts in international peer reviewed journals as first author. Also, she participated in 13 international (8 oral and 5 poster presentations) and 15 national (7 oral and 8 poster presentations) conferences/seminars, and collaborated in the organization of different events. She co-supervised 2 honours degree projects, an integrated master's student, and co-supervised a master. She is a Reviewer Board Member of international peer review journals (in one of them as Topic Editor) and integrates some international networks. She received 1 international award by IHSS (International Humic Substances Society) and another award (1st classified in the R&D category) in the entrepreneurship competition "Ideias em Caixa 2020". Additionally, she co-taught the subject of Laboratory Techniques of Analysis (degree in Biochemistry), in 2022. She works mainly in the areas of Environmental/Aquatic Chemistry, Marine Chemistry, Analytical and Organic Chemistry, and Green Chemistry. Her main research interests are focused on water remediation, aquaculture, marine biotoxins, photodegradation, photocatalysts, antibiotics, metals and real-scale applications. In her professional activities interacted with many collaborators from different areas in co-authorship of scientific papers. Her specific technical skills are HPLC (High Pressure Liquid Chromatography); atomic absorption by graphite and flame; inductively coupled plasma (ICP) with concentric, ultrasonic or hydride generator nebulizer; continuous segmented flow; UV-Vis spectroscopy (liquids and solids); molecular fluorescence; infrared spectroscopy (FTIR); scanning electron microscopy (SEM); determination of carbon in liquid and solid samples and determination of oxidability in acid medium. Preconcentration techniques: solid-phase extraction (SPE) and liquid-liquid dispersive micro extraction (DLLME). Biological/biochemistry techniques: AntibioGrams and ELISA (Enzyme-Linked Immunosorbent Assay). Computer skills: Microsoft Office (domain in Excel, Word and Power Point); ChemBioDraw; Origin8; GraphPad; IBM SPSS Statistics. Personal skills: proactive, competent, responsible and organized.

## Identification

### Personal identification

Full name

Joana Ferreira Leal

Gender

Female

### Citation names

Leal, Joana F.

Leal, J. F.

### Author identifiers

Ciência ID

7816-76B3-F5F5

ORCID iD  
0000-0002-0336-346X

Researcher Id  
AAD-1990-2019

Scopus Author Id  
35096256100

## Email addresses

jfleal@ualg.pt (Professional)

## Addresses

CCMAR - Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, Faro, Portugal (Professional)

## Websites

<https://www.ccmар.ualg.pt/users/joana-leal> (Professional)  
<https://www.ualg.pt/bio/jfleal> (Professional)  
<https://www.researchgate.net/profile/Joana-Leal> (Social media)  
<https://publons.com/researcher/3187544/joana-f-leal/> (Professional)

## Knowledge fields

Exact Sciences - Chemical Sciences  
 Exact Sciences - Chemical Sciences - Analytical Chemistry  
 Exact Sciences - Chemical Sciences - Organic Chemistry  
 Natural sciences - Earth and Environmental Sciences - Environmental Sciences  
 Natural sciences - Biological Sciences - Biochemistry

## Languages

Language	Speaking	Reading	Writing	Listening	Peer-review
Portuguese (Mother tongue)					
English	Upper intermediate (B2)	Advanced (C1)	Advanced (C1)	Upper intermediate (B2)	Upper intermediate (B2)
German	Elementary (A2)	Elementary (A2)	Elementary (A2)	Elementary (A2)	Elementary (A2)

## Education

	Degree	Classification
2022/05/02 - 2022/05/06 Concluded	Laboratory Aquatic Animal Sciences Course (Curso de Ciências de Animais Aquáticos de Laboratório - CAL-AQUA) (Diploma de especialização)	Approved
	Universidade do Porto Centro Interdisciplinar de Investigação Marinha e Ambiental, Portugal	

2021/05/29 - 2021/07/14 Concluded	Management and entrepreneurship; business plan elaboration (Outros)	
	Divisão de Empreendedorismo e Transferência de Tecnologia (CRIA) da Universidade do Algarve (Entrepreneurship and Technology Transfer Division (CRIA) of the University of Algarve), Portugal	
2019/10/28 - 2019/10/30 Concluded	Advanced training on Liquid Chromatography and Mass Spectrometry Methods in Marine Science (Outros)	
	Centre of Marine Sciences (CCMAR), Portugal	
2018/11/12 - 2018/11/12 Concluded	NP EN ISO/IEC 17025: 2018 - General competence requirements for testing and calibration laboratories (Diploma de especialização)	
	Águas do Algarve S.A., Portugal	
2013/02/01 - 2017/03/03 Concluded	Chemistry (PhD) - Analytical and environmental Chemistry (Doutoramento)	Approved with distinction
	University of Aveiro, Department of Chemistry, Portugal <i>"Photo-degradation of contaminants as a way of remediation of aquaculture's waters"</i> (THESIS/DISSERTATION)	
2015/09/26 - 2016/05/28 Concluded	German free course, level A2 (Curso médio)	18 (0-20)
	University of Aveiro, Department of Languages and Culture, Portugal	
2015/12/11 - 2016/03/11 Concluded	Hazard Analysis and Critical Control Point - HACCP (Diploma de especialização)	10 (0-10)
	Intedya, International Dynamic Advisors, Portugal	
2015/02/23 - 2015/06/04 Concluded	German free course, level A1 (Curso médio)	17 (0-20)
	University of Aveiro, Department of Languages and Culture, Portugal	
2013/02/25 - 2013/06/07 Concluded	Academic English Free Course (Curso médio)	16 (0-20)
	University of Aveiro, Department of Languages and Culture, Portugal	

2010/09/03 - 2012/07/26 Concluded	Analytical chemistry and quality (Master) (Mestrado)  University of Aveiro, Department of Chemistry, Portugal <i>"Photodegradation of flame retardant BDE-209"</i> (THESIS/DISSERTATION)	17 (0-20)
2012/04/27 - 2012/04/30 Concluded	Internal Audits to Quality Management Systems NP EN ISO 9001: 2008. (Diploma de especialização)  SN Formação, Portugal	10 (0-10)
2007/09/17 - 2010/07/28 Concluded	Biochemistry (Graduation) (Licenciatura)  University of Aveiro, Department of Chemistry, Portugal <i>"Photodegradation studies of the flame retardant BDE- 209"</i> (THESIS/DISSERTATION)	15 (0-20)
2008/12/01 - 2009/11/30 Concluded	Research Integration Scholarship - BII (Diploma de especialização)  University of Aveiro, Department of Chemistry, Portugal	

## Affiliation

### Science

	Category Host institution/organization	Employer
2023/03/01 - Current	Researcher (Research) Centre of Marine Sciences (CCMAR), University of Algarve, Portugal	Centre of Marine Sciences (CCMAR), University of Algarve, Portugal
2020/10/12 - 2023/02/28	Contracted Researcher (Research) Centre of Marine Sciences (CCMAR), University of Algarve, Portugal	Universidade do Algarve - Campus de Gambelas, Portugal
2019/01/02 - 2020/04/30	Postdoc (Research)	Centre of Marine Sciences (CCMAR), Portugal

### Others

	Category Host institution/organization	Employer
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2017/07/17 - 2018/12/18	Research/laboratory technician	Águas do Algarve S.A., Portugal
2007/09/17 - 2017/03/03	Student	University of Aveiro, Department of Chemistry, Portugal

## Projects

### Contract

	Designation	Funders
2020/09/01 - 2023/02/28	<p>DEPURATOX - Descontaminação de moluscos bivalves, contaminados com biotoxinas marinhas</p> <p><a href="#">MAR-01.03.01-FEAMP-0049</a></p> <p>Principal investigator</p> <p>Centre of Marine Sciences (CCMAR), University of Algarve, Portugal</p>	<p>Operational Program MAR2020, Portugal</p> <p>European Maritime and Fisheries Fund, Belgium</p> <p>European Union, Belgium</p> <p>Portugal 2020, Portugal</p> <p>Concluded</p>

## Outputs

### Publications

Conference abstract	1	<p>Leal, Joana F.; Guerreiro, B.; Amado, Patrícia; Fernandes, A. L.; Barreira, Luísa; Paixão, José António; Cristiano, Maria Lurdes Santos. "Novel saccharinate-based compounds and their potential for multiple, but selective, applications.". Paper presented in <i>XXVII Encontro Nacional da Sociedade Portuguesa de Química/ XXVII National Meeting of the Portuguese Chemical Society, Braga, 2021</i>.</p> <p>Published</p>
	2	<p>Silva, Carla Patrícia; Vânia Calisto; Diana L.D. Lima; Leal, Joana F.; Marta I.S. Veríssimo; Alisa Rudnitskaya; Marta Otero; et al. "Combining sensitive analytical techniques and remediation strategies towards the sustainability of the aquatic environment.". Paper presented in <i>Ciência 2019 (Science 2019), Lisboa, 2019</i>.</p> <p>Published</p>
	3	<p>Fernandes, Inês J.; Leal, Joana F.; Santos, Eduarda B.H.; Esteves, Valdemar I. "Solar Photodegradation of Florfenicol in Aquaculture Effluents: an alternative to prevent environmental contamination". Paper presented in <i>XXVI Encontro Nacional da Sociedade Portuguesa de Química (National Meeting of the Portuguese Chemistry Society), Porto, 2019</i>.</p> <p>Published</p>

- 4 Leal, Joana F.; Henriques, I S; Correia, A.; Santos, E.B.H.; Esteves, V.I.. "Photo-degradation of oxytetracycline in marine aquaculture - use of sunlight to prevent the emergence of bacterial resistance". Paper presented in *2nd AQUAIMPROVE Workshop, Matosinhos*, 2017.  
Published
- 5 Leal, Joana F.; Henriques, I.S.; Correia, A.; Santos, E.B.H.; Esteves, V.I.. "Do by-products of oxytetracycline retain its antibacterial activity after irradiation under sunlight?". Paper presented in *Encontro Luso-Galego de Química (Luso-Galician Chemistry Meeting), Bragança*, 2016.  
Published
- 6 Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Foto-degradação de contaminantes orgânicos em sistemas aquáticos: estudos cinéticos e interações ambientais (Photo-degradation of organic contaminants in aquatic systems: kinetic studies and environmental interactions)". Paper presented in *Encontro Luso-Galego de Química (Luso-Galician Chemistry Meeting), Porto*, 2014.  
Published
- 7 Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Efeito de filtro das Substâncias Húmicas aquáticas: qual o seu papel na foto-degradação solar de contaminantes orgânicos? (Filter effect of aquatic Humic Substances: what is its role in photo-degradation of organic contaminants?)". Paper presented in *10ª Conferência Nacional do Ambiente / XII Congresso Nacional de Engenharia do Ambiente (10th National Conference on the Environment / XII National Congress on Environmental Engineering), Aveiro*, 2013.  
Published
- 8 Leal, Joana Ferreira; Esteves, V.I.; Santos, E.B.H.. "Improvement of a DLLME-HPLC method for the determination of low levels of BDE-209 in water.". Paper presented in *7º Encontro Nacional de Cromatografia (7th National Chromatography Meeting), Porto*, 2012.  
Published
- 9 Leal, Joana Ferreira; Santos, E.B.H.; Esteves, V.I.; Leal, Joana F.. "BDE-209 – Kinetics of photodegradation in ethanol and water; influence of humic substances". Paper presented in *9th International Symposium on Environmental Geochemistry, Aveiro*, 2012.  
Published

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- Conference paper 1 Leal, Joana F.; Cristiano, Maria Lurdes Santos. Corresponding author: Leal, Joana F.. "Paralytic Shellfish Toxins: a complex group in constant (bio) transformation". Paper presented in *19th International Conference on Harmful Algae, La Paz*, 2021.  
Published · <https://doi.org/10.5281/zenodo.7013465>
- 2 Leal, Joana; Esteves, Valdemar; Santos, Eduarda. "Is ozonation an efficient method for the treatment of marine waters?". Paper presented in *International Meeting on Marine Research 2018, Peniche*, 2018.  
Published · [10.3389/conf.fmars.2018.06.00093](https://doi.org/10.3389/conf.fmars.2018.06.00093)

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- Conference poster 1 Leal, Joana F.; Cristiano, Maria Lurdes Santos. Corresponding author: Leal, Joana F.. "Decontamination of natural aquatic systems from paralytic shellfish toxins (PST) – a molecular perspective.". Paper presented in *8th EuChemS Chemistry Congress (ECC8)*, 2022.

- 2 Leal, Joana F.; Cristiano, M. L. S.. "Structure and toxicity of STX-group toxins". Paper presented in *13th National Organic Chemistry Meeting - 6th National Medicinal Chemistry Meeting*, 2020.
- 3 Fernandes, I.J.; Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Fotodegradação solar do Florfenicol em efluentes de aquacultura: uma alternativa à contaminação ambiental (Solar photodegradation of Florfenicol in aquaculture effluents: an alternative to environmental contamination)". Paper presented in *XXVI Encontro Nacional da Sociedade Portuguesa de Química (National Meeting of the Portuguese Chemistry Society)*, 2019.
- 4 Leal, Joana F.; Neves, M.G.P.M.S.; Marques, P.A.A.P.; Santos, E.B.H.; Esteves, V.I.. "Solar photodegradation of formalin using visible light-active composites.". Paper presented in *6th Portuguese Young Chemists Meeting*, 2018.
- 5 Leal, Joana F.; Henriques, I.S.; Correia, A.; Santos, E.B.H.; Esteves, V.I.. "Atividade antibacteriana dos foto-produtos da oxitetraciclina em aquacultura marinha (Antibacterial activity of oxytetracycline photoproducts in marine aquaculture)". Paper presented in *XI Seminário aquícola nacional (National aquaculture seminar)*, 2016.
- 6 Fernandes, I.J.; Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Foto-degradação do Florfenicol em Sistemas Aquáticos (Photodegradation of Florfenicol in Aquatic Systems)". Paper presented in *XXII Encontro Luso-Galego de Química*, 2016.
- 7 Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Uso da luz solar para a degradação da oxitetraciclina em águas de aquacultura marinha (Use of sunlight for the degradation of oxytetracycline in aquaculture waters)". Paper presented in *X Seminário aquícola nacional (National aquaculture seminar)*, 2016.
- 8 Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Uso da formalina em piscicultura intensiva (Use of formalin in intensive fish farming)". Paper presented in *XV Congreso Nacional / I Congreso Ibérico de Acuicultura (XV National Congress / Iberian Congress of Aquiculture)*, 2015.
- 9 Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Use of sunlight for remediation of aquaculture waters.". Paper presented in *ResearchDay*, 2015.
- 10 Leal, Joana F.; Santos, E.B.H.; Esteves, V.I.. "Filter effect of Aquatic Humic Substances: what is their role in the solar photo-degradation of organic contaminants?". Paper presented in *10ª Conferência Nacional do Ambiente / XII Congresso Nacional de Engenharia do Ambiente (10th National Conference on the Environment / XII National Congress on Environmental Engineering)*, 2013.
- 11 Leal, Joana F.; Filipe, O.M.S.; Lima, D.L.D.; Santos, E.B.H.; Esteves, V.I.. "Poluentes: análise e comportamento ambiental; i) estudos de adsorção em Batch – Tirame; ii) Ensaios imunoenzimáticos (ELISA) - 17a-etinilestradiol (Pollutants: environmental analysis and behavior; i) adsorption studies in Batch - Thiram; ii) Enzyme-linked immunosorbent assay (ELISA) - 17a-ethinylestradiol)". Paper presented in *Ciência 2010 (Science 2010)*, 2010.

- Journal article
- 1 Joana F. Leal; Gabriel Bombo; Patrícia S. M. Amado; Hugo Pereira; Maria L. S. Cristiano. "Cation-Exchange Resin Applied to Paralytic Shellfish Toxins Depuration from Bivalves Exposed to *Gymnodinium catenatum*". *Foods* (2023): <https://doi.org/10.3390/foods12040768>.  
10.3390/foods12040768
  - 2 Joana F. Leal; Gabriel Bombo; Hugo Pereira; Bernardo Vicente; Ana Amorim; Maria L. S. Cristiano. "Toxin Profile of Two *Gymnodinium catenatum* Strains from Iberian Coastal Waters". *Toxins* (2022): <https://doi.org/10.3390/toxins14110762>.  
10.3390/toxins14110762
  - 3 Joana F. Leal; Maria L. S. Cristiano. "Revisiting the HPLC-FLD Method to Quantify Paralytic Shellfish Toxins: C3,4 Quantification and the First Steps towards Validation". *Toxins* 14 3 (2022): 179-179. <https://doi.org/10.3390/toxins14030179>.  
10.3390/toxins14030179
  - 4 Leal, Joana F.; Cristiano, Maria L. S.. "Marine paralytic shellfish toxins: chemical properties, mode of action, newer analogues, and structure–toxicity relationship". *Natural Product Reports* 39 1 (2022): 33-57. <http://dx.doi.org/10.1039/d1np00009h>.  
Published · 10.1039/d1np00009h
  - 5 Leal, Joana F.; Bruno Guerreiro; Amado, Patrícia S. M.; André L. Fernandes; Barreira, Luísa; J.A. Paixão; Cristiano, Maria Lurdes Santos. Corresponding author: Cristiano, Maria Lurdes Santos. "On the Development of Selective Chelators for Cadmium: Synthesis, Structure and Chelating Properties of 3-((5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl)amino)benzo[d]isothiazole 1,1-dioxide, a Novel Thiadiazolyl Saccharinate". *Molecules* 26 (2021): 1501. <https://doi.org/10.3390/molecules26061501>.  
Published · Open access · 10.3390/molecules26061501
  - 6 Leal, Joana F.; Cruz, Sandra M. A.; Almeida, Bernardo T. A.; Esteves, Valdemar I.; Marques, Paula A. A. P.; Santos, Eduarda B. H.. "TiO<sub>2</sub>-rGO nanocomposite as an efficient catalyst to photodegrade formalin in aquaculture's waters, under solar light". *Environmental Science: Water Research & Technology* 6 4 (2020): 1018-1027. <http://dx.doi.org/10.1039/c9ew00950g>.  
Published · 10.1039/c9ew00950g
  - 7 Leal, Joana F.; Santos, Eduarda B.H.; Esteves, Valdemar I.. "Oxytetracycline in intensive aquaculture: water quality during and after its administration, environmental fate, toxicity and bacterial resistance". *Reviews in Aquaculture* 11 4 (2019): 1176-1194. <http://dx.doi.org/10.1111/raq.12286>.  
Published · 10.1111/raq.12286
  - 8 Leal, Joana; Esteves, V.I.; Santos, E.B.H.. "Solar photodegradation of oxytetracycline in brackish aquaculture water: New insights about effects of Ca<sup>2+</sup> and Mg<sup>2+</sup>". *Journal of Photochemistry and Photobiology A: Chemistry* 372 (2019): 218-225. <http://www.scopus.com/inward/record.url?eid=2-s2.0-85059075491&partnerID=MN8TOARS>.  
Published · 10.1016/j.jphotochem.2018.12.022
  - 9 Leal, J.F.; Neves, M.G.P.M.S.; Santos, E.B.H.; Esteves, V.I.. "Use of formalin in intensive aquaculture: properties, application and effects on fish and water quality". *Reviews in Aquaculture* 10 2 (2018): 281-295. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84995814293&partnerID=MN8TOARS>.  
Published · 10.1111/raq.12160



- 10 Leal, J.F.; Henriques, I.S.; Correia, A.; Santos, E.B.H.; Esteves, V.I.. "Antibacterial activity of oxytetracycline photoproducts in marine aquaculture's water". *Environmental Pollution* 220 (2017): 644-649. <http://www.scopus.com/inward/record.url?eid=2-s2.0-85000405825&partnerID=MN8TOARS>.  
Published · 10.1016/j.envpol.2016.10.021
- 11 Leal, J.F.; Esteves, V.I.; Santos, E.B.H.. "Use of sunlight to degrade oxytetracycline in marine aquaculture's waters". *Environmental Pollution* 213 (2016): 932-939. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84977536906&partnerID=MN8TOARS>.  
Published · 10.1016/j.envpol.2016.03.040
- 12 Leal, J.F.; Esteves, V.I.; Santos, E.B.H.. "Does light-screening by humic substances completely explain their retardation effect on contaminants photo-degradation?". *Journal of Environmental Chemical Engineering* 3 4 (2015): 3015-3019. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84920885466&partnerID=MN8TOARS>.  
Published · 10.1016/j.jece.2014.12.025
- 13 Leal, J.F.; Esteves, V.I.; Santos, E.B.H.. "BDE-209: Kinetic studies and effect of humic substances on photodegradation in water". *Environmental Science and Technology* 47 24 (2013): 14010-14017. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84890750461&partnerID=MN8TOARS>.  
Published · 10.1021/es4035254

## Manual

- 1 Leal, Joana F.. *Manual da Qualidade para a determinação de fósforo e azoto em solos agrícolas (Quality Manual for the determination of phosphorus and nitrogen in agricultural soils)*. 2011.  
Published

Thesis /  
Dissertation

- 1 Leal, Joana F.. "Photo-degradation of contaminants as a way of remediation of aquaculture's water". PhD, Universidade de Aveiro Departamento de Química, 2017. <http://hdl.handle.net/10773/22462>.
- 2 Leal, Joana F.. "Photodegradation of BDE-209 flame retardant". Master, Universidade de Aveiro Departamento de Química, 2012. <http://hdl.handle.net/10773/9550>.

## Activities

### Oral presentation

	Presentation title	Event name Host (Event location)
2022/06/01	Toxin profile of two new strains of <i>Gymnodinium catenatum</i> from Iberian coastal waters.	XIV Reunião Ibérica sobre Microalgas Nocivas e Biotoxinas Marinhas IPMA - Instituto Português do Mar e da Atmosfera (Lisboa, Portugal)

2021/10/14	Paralytic Shellfish Toxins: a complex group in constant (bio)transformation	19th International Conference on Harmful Algae (La Paz, Mexico)
2021/07/15	Novel saccharinate-based compounds and their potential for multiple, but selective, applications	XXVII Encontro Nacional da Sociedade Portuguesa de Química/XXVII National Meeting of the Portuguese Chemical Society Sociedade Portuguesa de Química (Braga, Portugal)
2019/07/09	Combining sensitive analytical techniques and remediation strategies towards the sustainability of the aquatic environment	Ciência 2019 (Science 2019) Centro de Congressos de Lisboa (Lisbon, Portugal)
2018/10/24	Photo-degradation of organic contaminants, namely pharmaceuticals, in aqueous matrices: behaviour under complex matrices.	I Workshop on pharmaceuticals in the Environment: Scenarios and Challenges University of Aveiro and CESAM (Aveiro, Portugal)
2018/07/06	Is ozonation an efficient method for the treatment of marine waters?	International Meeting on Marine Research 2018 Marine and Environmental Sciences Centre – MARE, and ESTM from the Polytechnic Institute of Leiria (Peniche, Portugal)
2017/05/24	Use of sunlight to degrade the antibiotic oxytetracycline: bacterial resistance prevention in brackish aquaculture.	III Analytical Chemistry Symposium: alternative technologies for pharmaceuticals removal from water University of Aveiro, Department of Chemistry and CESAM (Aveiro, Portugal)
2017/03/17	Photo-degradation of oxytetracycline in marine aquaculture - use of sunlight to prevent the emergence of bacterial resistance.	2nd Aqua Improve Workshop CIIMAR - Interdisciplinary Centre of Marine and Environmental Research (Matosinhos, Portugal)
2016/11/10	Do by-products of oxytetracycline retain its antibacterial activity after irradiation under sunlight?	XXII Encontro Luso-Galego de Química (XXII Luso-Galician Meeting of Chemistry). Instituto Politécnico de Bragança (Bragança, Portugal)
2016/06	Photo-degradation of organic contaminants in aqueous matrices: behaviour under complex matrices.	SO2S - The Singlet Oxygen Strategy: From Singlet oxygen to Sustainable Oxidation (Gent, Belgium)
2015/09/23	Applying the sunlight to pharmaceuticals removal from aquaculture's waters.	15th EuCheMS International Conference on Chemistry and the Environment

University of Leipzig (Leipzig,  
Germany)

2015/06/26	Photodegradation of emerging contaminants: effect of organic matter	II Analytical Chemistry Symposium University of Aveiro, Department of Chemistry and CESAM (Aveiro, Portugal)
2014/11/27	Photodegradation of organic contaminants in aquatic systems: kinetic studies and environmental interactions	XX Encontro Luso-galego De Química (XX Portuguese-Galician Meeting of Chemistry) University of Porto (Porto, Portugal)
2014/09/04	Does light-screening by Humic Substances completely explain the retardation effect on contaminants photo-degradation?	17th Meeting of the International Humic Substances Society, Natural Organic Matter: Structure-Dynamics-Innovative applications (Ioanina, Greece)
2014/07/18	Photo-degradation of oxytetracycline as a way of remediation of aquaculture's water	International Congress of Water, Waste and Energy Management Superior Engineering Institute of Porto (Porto, Portugal)
2012/01/10	Improvement of a DLLME-HPLC method for the determination of low levels of BDE-209 in water	7º Encontro Nacional de Cromatografia (7th National Meeting of Chromatography) Portuguese Chemical Society (Porto, Portugal)

## Supervision

	Thesis Title Role	Degree Subject (Type) Institution / Organization
2022/05/01 - 2023/02/28	Descontaminação de moluscos bivalves, contaminados com biotoxinas marinhas (Decontamination of bivalve molluscs, contaminated with marine biotoxins) Co-supervisor	(Other) Universidade do Algarve, Portugal
2016/09 - 2017/07	Estudo de foto-sensibilizadores para degradação de formalina, com radiação solar (Study of photo-sensitizers for degradation of formalin with solar radiation). Co-supervisor	Biotechnology (Degree) University of Aveiro, Department of Chemistry, Portugal
2015/09 - 2016/07	Foto-degradação do florfenicol em sistemas aquáticos (Photodegradation of Florfenicol in aquatic systems). Co-supervisor	Biotechnology (Degree) University of Aveiro, Department of Chemistry, Portugal

## Event organisation

	Event name Type of event (Role)	Institution / Organization
2023/01 - 2023/02	Workshop for public presentation of the main results of the DEPURATOX project. (2023/02/28 - 2023/02/28) Workshop (Co-organisor)	
2017 - 2020	Support to the organization of the National Aquaculture seminars. (2017 - 2020) Conference (Member of the Organising Committee)	APA - Associação Portuguesa de Aquacultores, Portugal
2018/02 - 2018/03	Support to the organization of Desafios da água - o ciclo urbano da água (Water challenges - the Urban Water Cycle) (2018/03/01 - 2018/03/02) Congress (Member of the Organising Committee)	Águas do Algarve S.A., Portugal
2009 - 2012	Support to the organization of the Junior Chemistry Olympiads. (2009 - 2012) Member of the Organising Committee	Universidade de Aveiro, Portugal

## Event participation

	Activity description Type of event	Event name Institution / Organization
2019/02/18 - 2019/02/20	Participation in the Epigenetic Chemical Biology (EpiChemBio) COST Scientific Workshop Meeting	Epigenetic Chemical Biology COST Scientific Workshop COST - European Cooperation in Science and Technology organization, Portugal
2016/09/15 - 2016/09/17	Dissemination of scientific knowledge to the non-scientific community, through demonstrations and distribution of pamphlets on photochemistry applied to the removal of antibiotics in natural waters. Exhibition	Techdays Aveiro University of Aveiro, Department of Chemistry, Portugal Universidade de Aveiro Centro de Estudos do Ambiente e do Mar, Portugal

## Jury of academic degree

	Theme Role	Candidate name (Type of degree) Institution / Organization
2016/07/12	Fotodegradação do Florfenicol em sistemas aquáticos (Photodegradation of Florfenicol in aquatic systems). Supervisor	Inês de Jesus Fernandes (Other) University of Aveiro, Department of Chemistry, Portugal

## Association member

	Society Organization	Role
2021/02/12 - Current	Sustainable and Smart Aquaculture Collaborative Laboratory (S2AQUAcoLAB)	Researcher
2019/02 - Current	e-COST - European Cooperation in Science and Technology	Member
2019/01 - Current	CCMAR - Centre of Marine Sciences	Collaborator (PhD)
2016 - Current	European Chemical Society (EuChemS)	Member
2010 - Current	Sociedade Portuguesa de Química (Portuguese Society of Chemistry) - SPQ	Member
2014 - 2020	International Humic Substances Society - IHSS	Member
2008/12/01 - 2018/12/30	CESAM - Center for Environmental and Marine Studies	Collaborating member

### Course / Discipline taught

	Academic session	Degree Subject (Type)	Institution / Organization
2022/12 - 2022/12	Co-teaching of the subject Laboratory Techniques of Analysis (degree in Biochemistry)	Biochemistry (Licenciatura)	Universidade do Algarve Faculdade de Ciências e Tecnologia, Portugal

### Interview (newspaper / magazine)

	Activity description	Newspaper / Forum
2023/03/07	International news on chemical solutions to decrease toxicity in marine aquatic systems (water and bivalves) containing biotoxins.	The Portugal News
2023/03/06	National news on chemical solutions to decrease toxicity in marine aquatic systems (water and bivalves) containing biotoxins.	Sul Informação
2023/01/10	International news on Paralytic Shellfish Toxins	Ipacuicultura
2021/08/23	Una iniciativa para luchar contra las infecciones causadas en peces y moluscos bivalvos de acuicultura premiada por "Ideas em Caixa" de la Universidad de Algarve	Ipac acuicultura
2016/04/21	News on the solar photodegradation as a way to remediate aquaculture water.	Jornal da Economia do Mar (Journal of the Economy of the Sea)

2016/04/20	News on the solar photodegradation as a way to remediate aquaculture water.	Diário de Notícias
2016/04/11	International news on the solar photodegradation as a way to remediate aquaculture water.	IPAC acuicultura
2016/04/08	International news on the solar photodegradation as a way to remediate aquaculture water.	AQUAHOY Portal de Información en Acuicultura

### Interview (tv / radio show)

	Program	Theme
2016/11/18 - 2016/11/18	RTP Notícias	Luz solar é solução para destruir antibiótico em aquacultura marinha (Sunlight is a solution to destroy antibiotics in marine aquaculture)
2016/05/05 - 2016/05/05	Mentes que Brilham	Uso da radiação solar para fotodegradar antibióticos em aquacultura marinha (Use of solar radiation to photodegrade antibiotics in marine aquaculture)

### Journal scientific committee

	Journal title (ISSN)	Publisher
2019/11/22 - Current	Water (2073-4441)	MDPI AG
2019/08/12 - Current	International Journal of Environmental Research and Public Health (1660-4601)	MDPI AG
2021 - 2021	Aquacultural Engineering (0144-8609)	Elsevier
2020 - 2020	Environmental Pollution (0269-7491)	Elsevier

### Mentoring / Tutoring

	Topic	Student name
2022/03 - 2022/04	Biotoxinas marinhas: origem, identificação e impactos na saúde pública (Marine biotoxins: origin, identification and impacts on public health)	Liliana Ribeiro Fernandes

## Distinctions

### Award

2021 1st classified in the R&D category, in the entrepreneurship competition "Ideias em Caixa"  
 Universidade do Algarve, Portugal  
 Caixa Geral de Depositos, Portugal  
 Comissão de Coordenação e Desenvolvimento Regional do Algarve, Portugal  
 ANJE Associação Nacional de Jovens Empresários, Portugal  
 IAPMEI, I.P. - Agência para a Competitividade e Inovação, Portugal  
 Instituto do Emprego e Formação Profissional, Portugal  
 NERA – Associação Empresarial da Região do Algarve, Portugal

2014 Travel award by the work "Does light-screening by Humic Substances completely explain the retardation effect on contaminants photo-degradation?"  
 International Humic Substances Society – IHSS , Greece

2013 PhD scholarship  
 National Foundation for Science and Technology - FCT, Portugal

2008 Research Integration Scholarship - BII  
 National Foundation for Science and Technology - FCT, Portugal

## Title

2022 Junior researcher (CEEC individual - 5th ed.)  
 Fundação para a Ciência e a Tecnologia, Portugal