



CURRICULUM VITAE (CVA)
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CV date	29/01/2023
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Part A. PERSONAL INFORMATION

First name	Bárbara		
Family name	Ondiviela		
Gender (*)	Female	Birth date	13/01/1974
ID number	20202771P		
e-mail	ondiviela@gmail.com	URL Web	
Open Research and Contributor ID (ORCID)(*)	0000-0001-6902-1166		

(*) Mandatory

A.1. Current position

Position	Researcher		
Initial date	01/05/2011		
Institution			
Department/Center	Environmental Hydraulics Institute Foundation		
Country	Spain	Teleph. number	9421616
Key words	Hydrobiology, marine ecology, habitat suitability, species distribution modelling, marine spatial planning		

A.2. Previous positions (research activity interruptions, art. 45.2.c)

Period	Position/Institution/Country/Interruption cause
2011- Present	Researcher/ Environmental Hydraulics Institute/Spain
01/05/2009- 2011	Postdoctoral Researcher/ Environmental Hydraulics Institute/Spain
01/11/2008-30/04/2009	Postdoctoral researcher/Marine Biological Laboratory /USA
01/01/2007-31/10/2008	Postdoctoral researcher/University of Cantabria/Spain
01/09/2002-31/12/2006	Predocctoral researcher/University of Cantabria/Spain
01/01/1999-31/08/2002	Research assistant/Scientific Association of Marine Studies/Spain
01/05/1999-01/08/1999	Research assistant/University of Iceland/ Iceland
01/10/1997-30/04/1999	Research assistant/Scientific Association of Marine Studies/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Graduate in Marine Sciences	University of las Palmas de Gran Canaria	1992-1997
PhD in Marine Sciences	University of Cantabria	2006

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Bárbara Ondiviela Eizaguirre is PhD in Marine Sciences. She was a postdoctoral research fellow at the Marine Biological Laboratory (USA, Anne Gliblin) and at the University of Cantabria. Since 2009 she is researcher at the Environmental Hydraulics Institute of the University of Cantabria (IHCantabria). Her research has been mainly focused on disciplines such as environmental ecohydraulics laboratory experiments, marine ecology and assessment of the effects of human activities and climate change on coastal ecosystems. This activity has given rise to basic knowledge and significant contributions on the biophysical interrelations in coastal systems, the development of methods and tools for the assessment of water quality in port areas and the conservation status of habitats of European interest and the marine planning. At present her research interests are focused on the ecology of seagrasses; on the use of remote sensing-based techniques to improve our understanding on the role of coastal ecosystems to

face the climate change; and on the development of algorithms for the use of remote sensing in the estimation of carbon sequestration in living biomass of estuarine vegetation. The beginning of these research interests was the European project THESEUS (FP7-ENV-2009-1). This project examined innovative technologies for coastal mitigation and adaptation to climate change, from biological/ physical and field/ laboratory experimentation with coastal ecosystems (Bouma et al., 2014; Hanley et al., 2014; Ondiviela et al., 2014). The contributions of this project were a turning point in her research career and for the last decade, her research interests in this topic have evolved through collaborations with well-known international research centres (e.g. NIOZ, The Netherlands; University of Coimbra; University of Padova; University of Groninge, IMEDEA, etc).

Principal scientist of 10 R&D projects funded by Regional, National and European agencies. She has participated in more than 20 R&D projects at National and European level and in more than 30 projects for knowledge transfer. The topics covered by these projects are different, but between the recent ones the most related to Blue Carbon are the European Projects: -“Adaptation to climate change through management and restoration of European estuarine ecosystems” (LIFE-ADAPTA BLUES); -“Marine biodiversity and ecosystem functioning leading to ecosystem services (MARBEFES)” and at National level -“Environmental restoration beyond biodiversity: how to integrate estuarine ecosystem services into nature-based management (MarshA; IP); -“Advancing the understanding of biological diversity and ecosystem functioning through spectral analysis (DIES; IP)”; and -“Monitoring network to characterise and assess the conservation status of *Zostera noltei* (habitat 1140) in the Atlantic Biogeographical Region (PRADERA, IP)” (publications included in section C). She has also coordinated the drafting of the Technical Bases of the Management Plans of the 21 SACs of the Natura 2000 Network of Cantabria, published as: DECREE 18/2017; Decree 19/2017 and Decree 39/2019.

She has published 38 articles in journals included in the JCR (26 Q1), 4 Books and 8 book chapters (H-index; 16 and 1080 cites). She has Supervised 3 doctoral Thesis (+1 under development) and 10 Master's Theses with official quality awards. She has been part of the evaluation committee of national and international Thesis, and numerous Master Thesis. She is member of the Academic Committee of the PhD Program in Coastal Engineering, Hydrobiology and Management of Aquatic Systems "IH2O". She received the National Environment Award “AQUA”, from the Spanish Ministry of the Environment (2003) for the contribution of her research group to the development of the Environmental design of sanitation systems in coastal areas. And, she has experience in the organization of R&D activities, with an outstanding presence in the Organizing Committee of the XII National Congress of the Iberian Limnology Association (Santander, 2014). She is co-coordinator of the MOOC ROM 5.1 “Water Quality in Port areas” given at the MiriadaX Platform (5,800 students enrolled in 8 editions) and awarded (2014) by Universia Network, Telefónica Learning Services and the Ibero-American General Secretariat. She has participated in different transfer and dissemination projects (e.g. Erasmus+), specialization courses (Erasmus mundus, National Port Administration, AQUALOGY, Port Authority of Gijón) and summer courses (e.g. US American Army).

Part C. RELEVANT MERITS

C.1. Publications

1. ¹Weiss, C.V.C., Menendez, M., **Ondiviela**, B., Guanche, G., Losada, I.J., Juanes, J.A. 2020. Climate change effects on marine renewable energy resources and environmental conditions for offshore aquaculture in Europe. ICES Journal of Marine Science 77(7-8), pp. 3168–3182, doi:10.1093/icesjms/fsaa226 IF: 3.593 (10/115-D1)
2. **Ondiviela**, B., Galván, C., Recio, M. et al. 2020. Vulnerability of *Zostera noltei* to Sea Level Rise: the Use of Clustering Techniques in Climate Change Studies. Estuaries and Coasts. <https://doi.org/10.1007/s12237-020-00742-z>. IF: 2,68 (20/108-Q1).
3. ¹Calleja, F., **Ondiviela**, B., Puente, A., Juanes, J.A. Can seedlings' physiological information improve vegetation distribution predictions at local scales?. Biological Invasions. <https://doi.org/10.1007/s10530-020-02266-w>. IF: 2,89 (12/59-Q1).
4. ¹Calleja, F., **Ondiviela**, B., Galván, C., Recio, M. and J.A. Juanes. 2019. Mapping Estuarine Vegetation Using Satellite Imagery: The case of the invasive species *Baccharis halimifolia* at a Natura 2000 site. Continental Shelf Research, <https://doi.org/10.1016/j.csr.2019.01.002>. IF: 2,3 (24/115-Q1).
5. ²Soissons LM, Haanstra EP, van Katwijk MM, Asmus R, Auby I, Barillé L, Brun FG, Cardoso PG, Desroy N, Fournier J, Ganthy F, Garmendia J-M, Godet L, Grilo TF, Kadel P, **Ondiviela** B, Peralta G, Puente A, Recio M, Rigouin L, Valle M, Herman PMJ and Bouma TJ. 2018. Latitudinal Patterns in European Seagrass Carbon Reserves: Influence of Seasonal Fluctuations versus Short-Term

- Stress and Disturbance Events. *Front. Plant Sci.* 9:88. doi: 10.3389/fpls.2018.00088. *IF.* 4,298 (20/212-D1).
6. ²Soissons, L.M., van Katwijk, M.M., Peralta, G., **Ondiviela**, B., P.M.J., Bouma, T.J. 2018. Seasonal and latitudinal variation in seagrass mechanical traits across Europe: The influence of local nutrient status and morphometric plasticity. *Limnology and Oceanography*, 63(1), pp. 37-46. *IF:* 3,383 (5/63-D1).
 7. **Ondiviela** B., Fernández L., Puente A., García-Castrillo G., Juanes J.A. 2018. Characterization of a resilient seagrass meadow during a decline period. *Sci. Mar.* 82(1): 000-000. doi: <https://doi.org/10.3989/scimar.04616.18A>. *IF:* 1,009 (71/105-Q3).
 8. Álvarez-Martínez, J.M., Jiménez-Alfaro, B., Barquín, J., **Ondiviela**, B., Silió-Calzada, A., Juanes, J.A. 2018. Modelling the area of occupancy of habitat types with remote sensing. *Methods in Ecology and Evolution*, 9(3), pp. 580-593. *IF:* 5,708 (13/153-D1).
 9. ¹Calleja, F., Galván, C., Silió, A. Juanes, J.A., **Ondiviela**, B. 2017. Long-term analysis of *Zostera noltei*: a retrospective approach for understanding seagrasses' dynamics. *Marine Environmental Research*, 130: 93-105. *IF:* 3,159 (11/106-D1).
 10. Lara, J.L.; M. Maza; B. **Ondiviela**; J. Trinogga; I. J. Losada; T.J. Bouma; N. Gordejuela. 2016. Large-scale 3-D experiments of wave and current interaction with real vegetation. Part 1: Guidelines for physical modeling. *Coastal Engineering*, 107, pp. 70-83. *IF:* 2,428 (12/125-D1).
 11. ²Maza, M; J. L. Lara; I. J. Losada; B. **Ondiviela**; J. Trinogga; T.J. Bouma. 2015. Large-scale 3-D experiments of wave and current interaction with real vegetation. Part 2: Experimental analysis. *Coastal Engineering*, 106: 73- 86. *IF:* 2,428 (12/125-D1).
 12. **Ondiviela** B, Recio M, Juanes JA. 2015. A management approach for the ecological integrity of NE Atlantic estuaries. *Ecological Indicators*, 52:105-15. *IF:* 3,19 (52/225-Q1).
 13. **Ondiviela**, B; Losada, I.J; Lara, J.L; Maza, M; Galvan, C; Bouma, T.J; Belzen, J. 2014 The role of seagrasses in coastal protection in a changing climate. *Coastal Engineering*, 87:158-68. *IF:* 2,428 (12/125-D1).
 14. Bouma, T.J.; Jim van Belzen; Thorsten Balke; Zhenchang Zhu; Laura Airoidi; Andrew J. Blight; Andrew J. Davies; Cristina Galvan; Steve J. Hawkins; Simon. P. G. Hoggart; Javier L. Lara; Inigo J. Losada; Maria Maza; Barbara **Ondiviela**; Martin W. Skov; Elisabeth M. Strain; Richard C. Thompson; Shilun Yang; Barbara Zanutigh; Liqun Zhang; Peter M. J. Herman. 2014. Identifying knowledge gaps hampering application of intertidal habitats in coastal protection: opportunities & steps to take. *Coastal Engineering*, 87: 147-157. *IF:* 2,428 (12/125-D1).
- ¹Papers from PhD Thesis (first author) co-directed by Barbara Ondiviela.
²Papers from PhD Thesis (first author) in collaboration with Bárbara Ondiviela.

C.2. Congress

1. **Ondiviela**, B Cristina Galván, María Recio, Inés Mazarrasa, Araceli Puente, José A. Juanes. The history of *Zostera noltei* on the northern coast of Spain: past, present and future. CERF 26th Biennial conference. Coastal and Estuarine Research Federation. 2021
2. **Ondiviela**, B, Inés Mazarrasa, José A. Juanes, María Recio and Max Ricker. Historical ecology of flat oyster in the Atlantic coast of the Iberian Peninsula. NORA 4 conference: Reconnecting across Europe. 2021
3. **Ondiviela**, B; Inigo J. **Losada**; Maria Maza; Javier L. Lara; Tjeerd Bouma; Julianne Trinogga; José A. Juanes; Araceli Puente. Ecohydraulics modelling of living plants for wave and current attenuation: Guidelines and Recommendations. Aquatic Sciences Meeting. Global and regional perspectives association for the sciences of limnology and oceanography (ASLO) Granada. 2015
4. **Ondiviela**, B; Miriam Jiménez; María Recio; Cristina Galván; Araceli Puente; Íñigo Losada. Predictive models for seagrasses distribution in a changing climate. Estuarine Coastal Sciences Association. ECSA 54. Sesimbra (Portugal). 2014.

C.3. Research projects

1. Avanzando en la comprensión de la Diversidad biológica y funcionamiento del ecosistema a través del análisis ESpectral (DIES). Plan de Ciencias Marinas. (Plan de Recuperación, Transformación y Resiliencia). Ministerio de Ciencia e Innovación con fondos de la Unión Europea NextGenerationEU (PRTR-C17.11). 2022-2025. 150.000,00. IP: B. **Ondiviela**.
2. La restauración ambiental más allá de la biodiversidad: como integrar los servicios ecosistémicos estuarinos en la gestión basada en la naturaleza (MarshA). Ministerio de Ciencia e Innovación (TED2021-129973B-I00). Proyectos estratégicos orientados a la transición ecológica y a la transición digital – Plan estatal 2021-2023 (2022-2024). 62.100 €. IP: B. **Ondiviela**, C. Galván

3. Marine biodiversity and ecosystem functioning leading to ecosystem services (MARBEFES) (Grant 101060937). Horizon Europe (Call HORIZON-CL6-2021-BIODIV-01-03) – European Union. (2022-2026). IP: J.M. Węśławski (IO-PAN). 15.107.310 €.
4. Hybrid modeling of macroalgae distribution in a changing environment: the integration of dispersal strategies as biotic predictors (C3N-PRO). Ministerio de Ciencia e Innovación, Programa Estatal de I+D+i Orientada a los Retos de la Sociedad (PID2019-105503RB-I00). 2020-2022. 100.000,00 €. IP: J.A. Juanes and B. **Ondiviela**.
5. Seguimiento del estado de conservación de los sistemas dunares cantábricos mediante el empleo de sensores remotos (SANDS). Fundación Biodiversidad (Ministerio de Agricultura, Pesca y Alimentación). 2021. IP: Bárbara **Ondiviela**. 59.754 €.
6. ADAPTA BLUES: Adaptation to Climate Change through management and restoration of estuarine ecosystems”. FIHAC. EU LIFE Program. (01/07/2019-30/06/2024). IP: Jose A. Juanes. 2.193.891 €.
7. Los satélites como centinelas para la detección y seguimiento de la vegetación invasora en la región Cantábrica (INVASAT). Fundación Biodiversidad (Ministerio de Agricultura, Pesca y Alimentación). 2020-2021. IP: Bárbara **Ondiviela**. 80.784,00 €.
8. Adaptation to climate change through management and restoration of European estuarine ecosystems (LIFE ADAPTA BLUES). Program LIFE-Climate Change Adaptation (LIFE18 CCA/ES/001160) (2019-24). IP: J.A. Juanes (UC). 2.100.000 €.
9. Red de seguimiento para caracterizar y evaluar el estado de conservación de las praderas de *Zostera noltei* (hábitat 1140) en la Región Biogeográfica Atlántica: Diseño y puesta en marcha (PRADERA). Fundación Biodiversidad (Ministerio de Agricultura, Alimentación y Medio Ambiente). (2018-2019). IP: Bárbara **Ondiviela**. 49.487,18 €.
10. Cartografía y evaluación espacio temporal de las praderas de *Nanozostera noltii* (hábitat 1140) en la costa cantábrica (NANO). Fundación Biodiversidad (Ministerio de Agricultura, Alimentación y Medio Ambiente). (2015-2016). IP: Bárbara **Ondiviela**. 83.139,6 €.
11. Integration of human activities in the conservation objectives of the Natura 2000 Network in the littoral of Cantabria (LIFE-CONVIVE). Program LIFE-Nature-UE. (Ref. LIFE14 NAT/ES/001213) (2015-19). IP: J.A. Juanes (UC). 1.325.000 €.
12. Innovative technologies for safer European coasts in a changing climate (THESEUS). FP7 Program UE. (2009-13). IP: Iñigo Losada (UC) (Coordinadora Europea: B. Zanuttigh, Univ Bolonia). 359.344 €.

C.4. Contracts, technological or transfer merits

1. Development of the systematic monitoring program of the coastal water bodies of Cantabria. Consejería Medio Ambiente, Gobierno de Cantabria. (2016-2017). IP: José A. Juanes. 142.802€.
2. Studies for drafting the management plans for the Natura 2000 Network in Cantabria. Consejera de Ganadería, Pesca y Desarrollo Rural. (2014-2016). IP: José A. Juanes. 600.000€
3. Implementation of the Management Plans for the aquatic Special Areas for Conservation (Natura 2000 Network) in Cantabria. Consejería de Desarrollo Rural, Ganadería, Pesca y Biodiversidad. Gobierno de Cantabria. (2009-2012). IP: José A. Juanes. 422.216 €.
4. Regional study of the effects of climate change on the coast of Latin America and the Caribbean. Naciones Unidas, Comisión Económica para América Latina y el Caribe (CEPAL). (2009-2010). IP: Iñigo Losada.
5. Guanache, R., Jurado, A., **Ondiviela**, B., Juanes J.A. Dispositivo flotante offshore de acuicultura para el cultivo de diversas especies de peces. **Patente** de Invención con examen: ES 2 578 429 B2. País: España. 18/04/2017. Entidad titular: Universidad de Cantabria (30%)/ Fundación IH de Cantabria (30%) /TACSA (40%).