

CURRICULUM VITAE:

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PERSONAL DETAILS

Place and date of birth: Barcelona, Catalonia, Spain March 9th, 1968
Marital status: De facto partner, two sons (15 and 18 years)
Citizenship: Spanish
Languages: Catalan (Native), Spanish and English (Fluent), knowledge of French

ACADEMIC QUALIFICATIONS

2000 Ph.D. in Chemistry, University of Barcelona, Catalonia, Spain
1996 Post-Graduate Studies in Environmental and Pollution Analytical Chemistry, Dept. of Analytical Chemistry, University of Barcelona, Catalonia, Spain
1992 Master in Atmospheric Pollution, Faculty of Chemistry, University of Barcelona, Catalonia, Spain
1991 B.Sc. in Chemistry, Autonomous University of Barcelona, Catalonia, Spain

ACADEMIC AWARDS/FELLOWSHIPS/CONTRACTS

2006 Appointed as a Research Professor, effective October 1st, by ICREA (Institutió Catalana de Recerca i Estudis Avançats)
2005-2006 Ramón y Cajal contract from the Spanish Ministry of Science and Technology
2003-2005 Australian Research Council Discovery Project and Australian Postdoctoral Fellowship
2001-2002 Postdoctoral Fellowship from the Spanish Ministry of Education and Science
1999 Short Stay Fellowship from Generalitat de Catalunya for a 2 months stay at University of British Columbia, Vancouver, Canada.
1998 Short Stay Fellowship from Generalitat de Catalunya for a 3 weeks stay at University of British Columbia, Vancouver, Canada.
1996-1999 Ph.D. Fellowship from Generalitat de Catalunya (Catalan Government)
1995 and 2000 Ph.D. Fellowship from Consejo Superior de Investigaciones Científicas
1992-1993 Scientific Initiation Fellowship from Generalitat de Catalunya (Catalan Government) for a 1-yr stay at the Department of Atmospheric Sciences, University of Arizona, Tucson, EEUU.

RESEARCH EXPERIENCE AND STAYS ABROAD

- 2005-present Research at Dept. of Marine Biology and Oceanography, Institut de Ciències del Mar, CSIC, Barcelona, Catalonia, Spain. Paleoceanography: Reconstruction of different marine environmental parameters in the past, by using deep sea sediments and corals. Calibration of new paleoceanographic proxies. Analysis of the parameters of the carbon system in seawater (fixed stations and in cruises). Manipulation experiments in aquaria. Assessment of the effects of the progressive acidification in the oceans.
- 2005 2 Months at The Australian National University and at Geoscience Australia. Molecular biomarkers in deep sea sediments from the equatorial Pacific Ocean and the Gulf of Carpentaria.
- 2001-2004 3.5 Years of Postdoctoral Research between The Australian National University and Geoscience Australia, Canberra, Australia. Development of marine geochemical proxies of global climate change. Trace elements and isotopic ratios in corals and foraminifera, molecular biomarkers in deep sea sediments. Particular insight in the set-up of analytical techniques for the precise and accurate analysis of the boron isotopic composition of carbonate fossils to be used as a record of past seawater pH.
- 1995-2000 PhD Research at Dept. of Environmental Chemistry, Institute of Chemistry and Environmental Research, CSIC, Barcelona, Catalonia, Spain. Molecular biomarker characterization of deep sea sediments from the South China Sea, South East Pacific, North Atlantic, Mediterranean, California Gulf and Ría de Vigo. Particular emphasis on paleothermometry inferred from the $U^{K}_{,37}$ index. Other biomarkers studied: long chain alkanes, long chain alcohols, long chain alkenones, sterols and fatty acids. Improvement of analytical techniques for organic geochemistry characterisation of marine sediments.
- 1999 2 Months at Dept. of Earth and Ocean Sciences, University of British Columbia, Vancouver, B.C. Canada. Molecular biomarkers in sediments from the South China Sea.
- 1998 3 Weeks at Dept. of Earth and Ocean Sciences, University of British Columbia, Vancouver, B.C. Canada. Molecular biomarkers in sediments from the South China Sea.
- 1994 9 Months at Barcelona Municipal Laboratory, Barcelona, Catalonia, Spain. Analytical setup for the determination of Polycyclic Aromatic Hydrocarbons in Barcelona's urban air.
- 1994 2 Months at Environmental Control Laboratory of the Metropolitan Area of Barcelona, Catalonia, Spain. Analytical setup for the determination of Pesticides and Polycyclic Aromatic Hydrocarbons in tap water from the villages and towns around Barcelona.
- 1992-1993 1 Year at Department of Atmospheric Sciences, University of Arizona, Tucson, US. Research on the OH radical formation and analysis in the troposphere.

SHORT BIOGRAPHY

Born in Barcelona in 1968, I graduated in Chemistry at the Autonomous University of Barcelona in 1991, with a speciality in Organic Chemistry. I obtained my PhD in Chemistry at the University of Barcelona in 2000, doing research in the fields of paleoceanography and paleoclimatology through the study of molecular biomarkers in deep sea sediments. I then spent 4 years of postdoctoral research in Australia, at the Australian National University and Geoscience Australia. There, I developed new methodologies for the elemental and isotopic analysis of marine biogenic carbonates using MC-ICPMS and TIMS. In 2005 I moved to Institut de Ciències del Mar (ICM-CSIC), in Barcelona with a "Ramón y Cajal" contract. In October 2006 I was appointed as ICREA Research Professor.

RESEARCH INTERESTS

I am interested in understanding and quantifying how the marine environment and climate are changing today, in which ways they have changed in the past, and how will they influence marine organisms and ecosystems in the future. To this end, I analyse deep sea sediments and corals as archives of changes in the past, use systems to monitor the present, and run manipulative experiments in aquaria to simulate the future. A main environmental issue that I am currently studying is the progressive acidification of the oceans that is occurring due to the marine absorption of part of the CO₂ that humans are emitting to the atmosphere. I am also setting up culture-based systems to calibrate paleoceanographic proxies in corals, making use of the aquaria facilities at the ICM.

PUBLICATIONS IN SCIENTIFIC JOURNALS, BOOKS AND REPORTS

98. García-Ibáñez, M.I., Guallart, E.F., Lucas, A., Pascual, J., Gasol, J.M., Marrasé, C., Calvo, E. and **Pelejero, C.** (2024). Two new coastal time-series of seawater carbonate system variables in the NW Mediterranean Sea: rates and mechanisms controlling pH changes. *Frontiers in Marine Science*, 11:1348133, doi: 10.3389/fmars.2024.1348133.
97. Rodríguez-Díaz, C.N., Paredes, E., Pena, L.D., Cacho, I., **Pelejero, C.** and Calvo, E. (2024). Nanogram-scale boron isotope analysis through micro-distillation and Nu Plasma 3 MC-ICP-MS. *Talanta*, 269, 125473. <https://doi.org/10.1016/j.talanta.2023.125473>.
96. Galimany, E., Lucas, A., Maynou, F., Solé, M., **Pelejero, C.**, and Ramón, M. (2023). Experimental determination of differential seasonal response in seed of the Manila clam, *Ruditapes philippinarum*, in context of climate change. *Aquaculture*, 576, 739891. <https://doi.org/10.1016/j.aquaculture.2023.739891>.
95. Romera-Castillo, C., Lucas, A., Mallenco-Fornies, R., Briones-Rizo, M., Calvo, E. and **Pelejero, C.** (2023). Abiotic plastic leaching contributes to ocean acidification. *Science of The Total Environment*, 854, 158683. <https://doi.org/10.1016/j.scitotenv.2022.158683>.
94. Kapsenberg, L., Bitter, M. C., Miglioli, A., Aparicio-Estalella, C., **Pelejero, C.**, Gattuso, J.-P. and Dumollard, R. (2022). Molecular basis of ocean acidification sensitivity and adaptation in *Mytilus galloprovincialis*. *iScience*, 25(8), 104677. <https://doi.org/10.1016/j.isci.2022.104677>.
93. Sala, M.M., Peters, F., Sebastián, M., Cardelús, C., Calvo, E., Marrasé, C., Massana, R., **Pelejero, C.**, Sala-Colomina, J., Vaqué, D. and Gasol, J.M. (2022). COVID-19 lockdown moderately increased oligotrophy at a marine coastal site. *Science of The Total Environment*, 151443, <https://doi.org/10.1016/j.scitotenv.2021.151443>.
92. **Pelejero, C.**, Figuerola, B. and Calvo, E. (2022). Ocean acidification: trends, effects and what we have left to learn (J.L. Pelegrí, J.-M. Gili & M.V. Martínez de Albéniz, eds). *The ocean we want: inclusive and*

transformative ocean science. Institut de Ciències del Mar, CSIC, Barcelona, pp 158-160.
<https://doi.org/10.20350/digitalCSIC/14098>

91. Calvo, E. and **Pelejero, C.** (2022). Reconstructing the climate of the past to understand the climate of today and tomorrow (J.L. Pelegrí, J.-M. Gili & M.V. Martínez de Albéniz, eds). The ocean we want: inclusive and transformative ocean science. Institut de Ciències del Mar, CSIC, Barcelona, pp 164-165.
<https://doi.org/10.20350/digitalCSIC/14100>
90. Martínez-Dios, A., **Pelejero, C.**, Cobacho, S., Movilla, J., Dinarès-Turell, J. and Calvo, E. (2021). A 1-million-year record of environmental change in the Central Mediterranean Sea from organic molecular proxies. *Paleoceanography and Paleoclimatology*. 36, e2021PA004289. <https://doi.org/10.1029/2021PA004289>.
89. Zamanillo, M., Ortega-Retuerta, E., Cisternas-Novoa, C., Marrasé, C., **Pelejero, C.**, Pascual, J., Gasol, J.M., Engel, A. and Simó, R. (2021). Uncoupled seasonal variability of transparent exopolymer and Coomassie stainable particles in coastal Mediterranean waters: insights into sources and driving mechanisms. *Elementa: Science of the Anthropocene*. 9, 1, <https://doi.org/10.1525/elementa.2020.00165>.
88. Malits, A., Boras, J.A., Balagué, V., Calvo, E., Gasol, J.M., Marrasé, C., **Pelejero, C.**, Pinhassi, J., Sala, M.M. and Vaqué, D. (2021). Viral-mediated microbe mortality modulated by ocean acidification and eutrophication: Consequences for the carbon fluxes through the microbial food web. *Frontiers in Microbiology* 12, 635821, <https://doi.org/10.3389/fmicb.2021.635821>.
87. Shuttleworth, R., Bostock, H.C., Chalk, T.B., Calvo, E., Jaccard, S.L., **Pelejero, C.**, Martínez-García, A. and Foster, G.L. (2021). Early deglacial CO₂ release from the Sub-Antarctic Atlantic and Pacific oceans. *Earth and Planetary Science Letters* 554, 116649, <https://doi.org/10.1016/j.epsl.2020.116649>.
86. **Pelejero, C.** and Calvo, E. (2021). Beyond global warming: Stressed oceans, globe-wide in the Anthropocene. *Mètode Science Studies Journal*, 11, 165-171, <https://doi.org/10.7203/metode.11.16830>.
85. Dachs, J., Huertas, I.E., Alvarez-Salgado, X.A., Araujo, C., Berdalet, E., Blasco, J., Bravo, A., Calvo, E., Castro, C.G., Coll, M., Farré, M., Figueras, A., Garcés, E., Gili, J.M., Gomez-Figueiras, F., González, A.F., Grimalt, J.O., Hendriks, I.E., Jiménez, B., Marbà, N., Marrasé, C., Padín, X.A., Pascual, S., **Pelejero, C.**, Pérez, F.F., Peters, F., Piña, B., Porte, C., Prego, R., Prieto, L., Rodríguez-Romero, A., Romera, C., Sala, M.M., Solé, M., Tovar-Sánchez, A. and Vila-Costa, M. (2021). Ocean health, in Ocean science challenges for 2030 (A. Pascual & D. Macías, eds.), CSIC Scientific Challenges: Towards 2030, Consejo Superior de Investigaciones Científicas, Madrid, pp. 81–95.
http://libros.csic.es/product_info.php?cPath=164&products_id=1491.
84. Ballabrera, J., Castro, C.G., Alonso-Pérez, F., Álvarez-Salgado, X.A., Basterretxea, G., Calbet, A., Calvo, E., Cermeño, P., Gasol, J.M., Gilcoto, M., Figueiras, F.G., Huertas, I.E., Isern-Fontanet, J., Isla, E., Macías, D., Marbà, N., Marrasé, C., Olivari, M.P., Pascual, A., **Pelejero, C.**, Pelegrí, J.L., Peters, F., Ruiz, S., Sala, M.M., Simó, R., Saiz, E., Tintoré, J., Turiel, A. and Tuval, I. (2021). Ocean variability and climate, in: Ocean science challenges for 2030 (A. Pascual & D. Macías, eds.), CSIC Scientific Challenges: Towards 2030, Consejo Superior de Investigaciones Científicas, Madrid, pp. 35–51.
http://libros.csic.es/product_info.php?cPath=164&products_id=1491.
83. Moreno, A., Giralt, S., Benito, G., Calvo, E., Corella, J.P., Escutia, C., González-Sampéris, P., González-Rouco, F., Grimalt, J.O., Jiménez-Espejo, F.J., Jiménez Cisneros, C., López-Sáez, J.A., Martínez-Ruiz, F., Martrat, B., **Pelejero, C.** and Pey, J. (2021). Past global changes: A context to the Anthropocene, in: Global change impacts (M.B. García & P. Jordano, eds.), CSIC Scientific Challenges: Towards 2030, Consejo Superior de Investigaciones Científicas, Madrid, pp. 21-47.
http://libros.csic.es/product_info.php?products_id=1483.

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81. Martínez-Dios, A., **Pelejero, C.**, López-Sanz, A., Sherrell, R.M., Ko, S., Häussermann, V., Försterra, G. and Calvo, E. (2020). Effects of low pH and feeding on calcification rates of the cold-water coral *Desmophyllum dianthus*. *PeerJ*. 8, e8236, <https://peerj.com/articles/8236/>
80. Moy, A.D., Palmer, M.R., Howard, W.R., Bijma, J., Cooper, M.J., Calvo, E., **Pelejero, C.**, Gagan, M.K. and Chalk, T.B. (2019). Varied contribution of the Southern Ocean to deglacial atmospheric CO₂ rise. *Nature Geoscience*, 12, 1006-1011, doi: 10.1038/s41561-41019-40473-41569.
79. Tilbrook, B., Jewett, E.B., DeGrandpre, M.D., Hernandez-Ayon, J.M., Feely, R.A., Gledhill, D.K., Hansson, L., Isensee, K., Kurz, M.L., Newton, J.A., Siedlecki, S.A., Chai, F., Dupont, S., Graco, M., Calvo, E., Greeley, D., Kapsenberg, L., Lebec, M., **Pelejero, C.**, Schoo, K.L. and Telszewski, M. (2019). An Enhanced Ocean Acidification Observing Network: From People to Technology to Data Synthesis and Information Exchange. *Frontiers in Marine Science* 6, 337, doi: 10.3389/fmars.2019.00337.
78. de la Fuente, M., Calvo, E., Skinner, L., **Pelejero, C.**, Evans, D., Müller, W., Povea, P. and Cacho, I. (2017). The evolution of deep ocean chemistry and respired carbon in the Eastern Equatorial Pacific over the Last Deglaciation. *Paleoceanography* 32, 1371–1385.
77. Aparicio, F.L., Nieto-Cid, M., Calvo, E., **Pelejero, C.**, López-Sanz, À., Pascual, J., Salat, J., Sánchez-Pérez, E.D., De La Fuente, P., Gasol, J.M. and Marrasé, C. (2017). Wind-induced changes in the dynamics of fluorescent organic matter in the coastal NW Mediterranean. *Science of the Total Environment* 609, 1001-1012.
76. **Pelejero, C.**, Ros, J. D., and Simó, R. (2016). Ecosistemes marins i costaners. In J. Martín-Vide (Ed.), Tercer informe sobre el canvi climàtic a Catalunya (pp. 263–290). Barcelona: Institut d'Estudis Catalans, Generalitat de Catalunya.
75. Ribes, M., Calvo, E., Movilla, J., Logares, R., Coma, R. and **Pelejero, C.** (2016). Restructuring of the sponge microbiome favors tolerance to ocean acidification. *Environmental Microbiology Reports* 8, 536–544.
74. Movilla, J., Calvo, E., Coma, R., Serrano, E., López-Sanz, A. and **Pelejero, C.** (2016). Annual response of two Mediterranean azooxanthellate temperate corals to low-pH and high-temperature conditions. *Marine Biology* 163, doi: 10.1007/s00227-016-2908-9.
73. Aparicio, F.L., Nieto-Cid, M., Borrull, E., Calvo, E., **Pelejero, C.**, Sala, M.M., Pinhassi, J., Gasol, J.M. and Marrasé, C. (2016). Eutrophication and acidification: do they induce changes in the dissolved organic matter dynamics in the coastal Mediterranean Sea? *Science of the Total Environment* 563-564, 179-189.
72. Marañón, E., Balch, W.M., Cermeño, P., González, N., Sobrino, C., Fernández, A., Huete-Ortega, M., López-Sandoval, D.C., Delgado, M., Estrada, M., Álvarez, M., Fernández-Guallart, E. and **Pelejero, C.** (2016). Coccolithophore calcification is independent of carbonate chemistry in the tropical ocean. *Limnology and Oceanography* 61, 1345–1357.
71. Bunse, C., Lundin, D., Karlsson, C.M.G., Akram, N., Vila-Costa, M., Palovaara, J., Svensson, L., Holmfeldt, K., González, J.M., Calvo, E., **Pelejero, C.**, Marrasé, C., Dopson, M., Gasol, J.M. and Pinhassi,

- J. (2016). Response of marine bacterioplankton pH homeostasis gene expression to elevated CO₂. *Nature Climate Change* 6, 483-487.
70. Sala, M.M., Aparicio-Bernat F.L., Balagué, V., Boras J.A., Borrull, E., Cardelús, C., Cros, L., Gomes, A., López-Sanz, A., Malits, A., Martínez, R.A., Mestre, M., Movilla, J., Sarmiento, H., Vázquez-Domínguez, E., Vaqué, D., Pinhassi, J., Calbet, A., Calvo, E., Gasol, J.M., **Pelejero, C.** and Marrasé, C. (2016). Contrasting effects of ocean acidification on the microbial food web under different trophic conditions. *ICES Journal of Marine Science* 73, 670–679.
69. Isari, S., Zervoudaki, S., Peters, J., Papantoniou, G., **Pelejero, C.** and Saiz, E. (2016). Lack of evidence for elevated CO₂-induced bottom-up effects on marine copepods: A dinoflagellate-calanoïd prey-predator pair. *ICES Journal of Marine Science* 73, 650-658.
68. Isari, S., Zervoudaki, S., Saiz, E., **Pelejero, C.**, Peters, J. (2015). Copepod vital rates under CO₂-induced acidification: a calanoïd species and a cycloïd species under short-term exposures. *Journal of Plankton Research* 35, 912–922.
67. Catalá, T.S., Reche, I., Álvarez, M., Khatiwala, S., Guallart, E.F., Benítez-Barrios, V.M., Fuentes-Lema, A., Romera-Castillo, C., Nieto-Cid, M., **Pelejero, C.**, Fraile-Nuez, E., Ortega-Retuerta, E., Marrasé, C. and Álvarez-Salgado, X.A. (2015). Water mass age and ageing driving chromophoric dissolved organic matter in the dark global ocean. *Global Biogeochemical Cycles* 29, 917–934.
66. Baltar, F., Palovaara, J., Vila-Costa, M., Gasol, J.M., Salazar, G., Calvo, E., **Pelejero, C.**, Marrasé, C. and Pinhassi, J. (2015) Response of rare, common and abundant bacterioplankton to anthropogenic perturbations in a Mediterranean coastal site. *FEMS Microbiology Ecology* 91, doi: 10.1093/femsec/fiv058.
65. de la Fuente, M., Skinner, L., Calvo, E., **Pelejero, C.** and Cacho, I. (2015). Increased reservoir ages and poorly ventilated deep waters inferred in the glacial Eastern Equatorial Pacific. *Nature Communications* doi: 10.1038/ncomms8420.
64. Isari S., Zervoudaki S., Saiz E., **Pelejero C.** (2015) Copepod performance under CO₂-induced acidification: the case of *Acartia grani* and *Oithona davisae*, in: Proceedings of the 11th Panhellenic Symposium in Oceanography and Fisheries, “Aquatic Horizons: Challenges & Perspectives” 13-17 May, Mytilene, Lesvos island, Greece, pp. 865-868.
63. Fajar, N.M., Guallart, E.F., Steinfeldt, R., Ríos, A.F., Pelegrí, J.L., **Pelejero, C.**, Calvo, E. and Pérez, F.F. (2015). Anthropogenic CO₂ changes in the Equatorial Atlantic Ocean. *Progress in Oceanography* 134, 256-270.
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- monitor atmospheric CO₂, pH and pCO₂ in the OBSEA submarine observatory. *Instrumentation Viewpoint* 17, 59-60.
58. Calvo, E., Cacho, I., **Pelejero, C.**, Grimalt, J., Mortyn, G., Zahn, R. and Ziveri, P. (2014) Long-term perspectives on ocean and climate dynamics – Three decades of ICP. *PAGES Magazine* 22, 47.
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22. Calvo, E., **Pelejero, C.** and Logan, G. (2003) Pressurized liquid extraction of selected molecular biomarkers in deep sea sediments used as proxies in paleoceanography. *Journal of Chromatography A*, **989**, 197-205.
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14. Grimalt J.O., Calvo E., and **Pelejero C.** (2001). Sea surface paleotemperature errors in $\text{U}^{\text{K}37}$ estimation due to alkenone measurements near the limit of detection. *Paleoceanography* **16**, 226-232.
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6. Cacho I., **Pelejero C.**, Grimalt J. O., Calafat A., and Canals M. (1999). C₃₇ alkenone measurements of sea surface temperature in the Gulf of Lions (NW Mediterranean). *Organic Geochemistry* **30**, 557-566.
5. Wang L., Sarnthein M., Erlenkeuser H., Grimalt J. O., Grootes P., Heilig S., Ivanova E., Kienast M., **Pelejero C.**, and Pflaumann U. (1999). East Asian monsoon climate during the late Pleistocene: High-resolution sediment records from the South China Sea. *Marine Geology* **156**, 243-282
4. Cacho I., Canals M., Grimalt J.O, Calafat A.M. and **Pelejero C.** (1998). Determination of paleo-Sea Surface Temperatures (SST) in the Western Mediterranean: Benefits from the High Frequency Flux Experiment feasibility test; *MTP News*, **6**, 5-6.
3. **Pelejero C.** and Grimalt J. O. (1997). The correlation between the U^k₃₇ index and sea surface temperatures in the warm boundary: The South China Sea. *Geochimica et Cosmochimica Acta* **61**, 4789-4797.
2. **Pelejero C.**, Grimalt J. O., and Cacho I. (1997). Aplicaciones de los biomarcadores moleculares en estudios paleoclimáticos: Las alquenonas y el índice U^k₃₇. *Thalassas* **13**, 49-58.
1. Villanueva J., **Pelejero C.**, and Grimalt J. O. (1997). Clean-up procedures for the unbiased estimation of C₃₇-C₃₉ alkenones sea surface temperatures and terrigenous *n*-alkane inputs in paleoceanography. *Journal of Chromatography* **757**, 145-151.

PARTICIPATION IN FUNDED RESEARCH PROJECTS

Projects with participation as a Chief Investigator, Coordinator or Supervisor:

- 2022 – 2025 ESCACS: Elucidating the Southern Ocean Control of Atmospheric CO₂ using a Selection of paleo-archives and proxies. Spanish Ministry of Science and Innovation. Chief Investigator: **Carles Pelejero** and Eva Calvo
- 2022 – 2025 Consolidated Research Group on Marine Biogeochemistry and Global Change. Generalitat de Catalunya (Catalan Government). Coordinator: **Carles Pelejero**.
- 2022 – 2023 SEApHOREST: Role of sea forests in shaping the response of coastal calcifying organisms to past, present and future global change. Spanish Ministry of Science and Innovation, International Collaboration Project. Researcher: Aurora M. Ricart; Supervisor: **Carles Pelejero**
- 2021 – 2023 MEDALK: Mediterranean Sea natural alkalinisation: a mitigator for ocean acidification? Spanish Ministry of Science and Innovation through the Severo Ochoa award granted to the ICM. Researcher: Maribel García-Ibáñez; Supervisor: **Carles Pelejero**
- 2019 – 2020 ESICOMT: Equipment funding for a semi-preparative HPLC and a single quadrupole GC-MS (EI). Spanish Ministry of Science, Innovation and Universities. Chief Investigator: **Carles Pelejero**
- 2019 – 2022 HICCUP: Human-Induced Changes Compromising the open ocean. Generating Understanding from Paleooceanography. Spanish Ministry of Science, Innovation and

Universities. Chief Investigator: Eva Calvo and **Carles Pelejero**

- 2018 – 2019 Educational activities on ocean protection. Outreach program funded by OCEAN52. Coordinator: **Carles Pelejero**.
- 2017 – 2021 Consolidated Research Group on Marine Biogeochemistry and Global Change. Generalitat de Catalunya (Catalan Government). Coordinator: **Carles Pelejero**.
- 2017 – 2020 EVOMA: The influence of Environmental Variability On Mussel Aquaculture and adaptation in the context of global ocean change. Marie Skłodowska-Curie Individual Fellowships, European Commission Horizon 2020. Researcher: Lydia Kapsenberg; Supervisor: **Carles Pelejero**.
- 2016 – 2019 SCORE: Sediments and cold water Corals to address key questions of the Oceans in the past: two case-study Regions and one Experiment. Spanish Ministry of Economy and Competitiveness. Chief Investigator: **Carles Pelejero**.
- 2014 – 2016 Consolidated Research Group on Marine Biogeochemistry and Global Change. Generalitat de Catalunya (Catalan Government). Coordinator: **Carles Pelejero**.
- 2014 GEODESMO: Registros geoquímicos en el coral de aguas frías *Desmophyllum dianthus* y su relación con la química de las aguas del Fiordo Comau. CSIC, Fundación ENDESA and San Ignacio de Huinay. Chief Investigator: **Carles Pelejero**.
- 2013 – 2015 MANIFEST: Marine Acidification: New Insights From manipulative Experiments on selected Species and paleoceanographic reconstructions over key periods of Time. Spanish Ministry of Economy and Competitiveness. Chief Investigator: **Carles Pelejero**.
- 2011 – 2012 ASPECTS: Ocean acidification and its effects on coral prokaryotes using sequencing techniques. Spanish Ministry of Science and Innovation. Chief Investigator: **Carles Pelejero**.
- 2010 – 2012 ACDC: Atmospheric CO₂. Drivers of past levels and consequences of present emissions. Spanish Ministry of Science and Innovation. Chief Investigators: Eva Calvo and **Carles Pelejero**.
- 2009 – 2013 Consolidated Research Group on Marine Biogeochemistry and Global Change. Generalitat de Catalunya (Catalan Government). Coordinator: **Carles Pelejero**.
- 2008 - 2010 OACIDPPF: Ocean acidification: Present, future and clues from the past. Spanish Ministry of Science and Innovation. Chief Investigator: **Carles Pelejero**.
- 2007 - 2010 ROMIAT: Effects and Response of Marine Organisms to the Imminent Acidification of the Oceans: A Multi-Temporal Study. Spanish Ministry of Education and Science. Chief Investigator: **Carles Pelejero**.
- 2007 – 2008 Changes in marine productivity and in the composition of phytoplanktonic communities as atmospheric CO₂ controllers. Consejo Superior de Investigaciones Científicas. Chief Investigator: **Carles Pelejero**.
- 2005 - 2008 Emergent Research Group on Marine Biogeochemistry and Global Change. Generalitat de Catalunya (Catalan Government). Coordinator: Rafel Simó; Junior Coordinator: **Carles Pelejero**.
- 2003 - 2005 Uptake of atmospheric CO₂ in the oceans and implications for global change: New proxy developments. Australian Research Council. Chief Investigator: **Carles Pelejero**.

2005 - 14CHRONOS (Chronologies from High-ResolutiON Organic Separations): a centre for radiocarbon dating of specific compounds for the environmental and archaeological sciences. Australian Research Council. Funding for purchasing new analytical equipment for the compound specific analysis of ¹⁴C molecular biomarkers. Chief Investigators: Allan Chivas, Christian Turney, Richard Roberts, Colin Murray-Wallace, Leslie Fifield, **Carles Pelejero**, Eva Calvo, Patrick De Deckker, Peter Grave, Arnold Kershaw, Daniel Potts, David Fink and Karl-Heinz Wyrwoll.

Projects with participation as a member of the research team:

2024 – 2027 ONE-BLUE: Integrated approach to assess the levels and impact of cONTaminants of Emerging concern on BLUE health and biodiversity modulated by climate change drivers. EU HORIZON Research and Innovation Actions. Chief Investigator: Marinel·la Farré, IDAEA-CSIC.

2023 – 2025 Aproximaciones científicas en la implementación de Estrategias Marinas: herramientas de gestión. Ministerio para la Transición Ecológica y el Reto Demográfico (MITERD). Plan de Recuperación, Transformación y Resiliencia. Chief Investigator: Emma Huertas, ICMAN-CSIC.

2016 – 2020 CERES: Climate change and European aquatic RESources. EU H2020. Chief Investigator: Myron Peck, University of Hamburg

2015 – 2017 PALEOPARK: Cambios milenarios en los ecosistemas de Parques Nacionales insulares: perturbaciones, resiliencia y tendencias según el archivo de las fanerógamas marinas. Spanish Ministry of Agriculture, Food and Environment. Chief Investigator: Miguel Ángel Mateo, CEAB-CSIC.

2012 – 2013 ECOSER: Estudio del Carbono Orgánico en la SERie temporal histórica de l’Estartit (Noroeste del Mediterráneo). Spanish Ministry of Economy and Competitiveness. Chief Investigator: Celia Marrasé, ICM-CSIC.

2012 – 2013 El planeta azul: desde la prevención hasta la reinserción. Spanish Foundation for Science and Technology (FECYT). Chief Investigator: Álvaro Viudez.

2011 - 2012 Equipment to measure organic compounds of interest in the context of climate change in aquatic systems. Spanish Ministry of Science and Innovation. Chief Investigator: Rafel Simó, ICM-CSIC.

2011-2012 New technologies for tracking marine acidification in the protected area of Costa del Garraf. Fundación Biodiversidad. Chief Investigator: Antoni Mànuel, UPC, Vilanova i la Geltrú.

2011-2012 El planeta azul. Spanish Foundation for Science and Technology (FECYT). Chief Investigators: Ismael Mayo and Josep Lluís Pelegrí, ICM-CSIC.

2010 – 2011 TRANCOS: TRÁNsitos a bordo del BIO Sarmiento de Gamboa para la medida de CO₂ y otras variables. Spanish Ministry of Science and Innovation. Chief Investigator: Xosé Antonio Padín, Instituto de Investigaciones Marinas, CSIC, Vigo.

2009 – 2010 ESCLAT: Evolución del sistema del carbono a lo largo de la latitud 8°N del Atlántico. Spanish Ministry of Science and Innovation. Chief Investigator: Eva Calvo, ICM-CSIC.

2008 – 2009 COALA: Study of Mediterranean corals by laser ablation. Spanish Ministry of Science and Innovation. Chief Investigator: Eva Calvo, ICM-CSIC.

2008 – 2012 Circumnavigation Expedition Malaspina 2010: Global Change and Biodiversity Exploration of the Global Ocean. Spanish Ministry of Science and Innovation, Fundación BBVA, CSIC. Chief Investigator: Carlos Duarte, IMEDEA-CSIC.

Projects with participation as a collaborator:

2009 – 2011 Ocean Climate Memory: fluxes of intermediate waters in the Southern Atlantic and their transformation into surface waters in the Equatorial Atlantic (MOC²). Spanish Ministry of Science and Innovation. Chief Investigator: José Luis Pelegrí.

2008 – 2010 *Oculina patagonica* De Angelis 1908, an invasive scleractinian coral in the Mediterranean coasts. Spanish Ministry of Science and Innovation. Chief Investigator: Rafel Coma.

2005 High-resolution record of sea surface temperature changes for the Holocene offshore Kangaroo Island. Australian Institute of Nuclear Science and Engineering. Funding for AMS-¹⁴C datings using planktonic foraminifera from the sediment core MD032611 retrieved South of Australia. Chief Investigator: Patrick De Deckker.

Projects in which I have collaborated without being a formal member of the team:

2004 - 2006 The key role of the Southern Ocean in atmospheric CO₂ sequestration. Australian Research Council. Chief Investigator: Eva Calvo.

2003 - 2005 High-resolution records of climatic change in Australia, both on land and at sea covering the last 20,000 years. Australian Research Council. Chief Investigator: Patrick De Deckker.

1998 - 1999 TEMPUS: Sea Surface Temperature Evolution Mapping Project based on U^{K37} Stratigraphy. European Community. Chief Investigator: Antoni Rosell-Melé.

1996 - 1997 Variability of the glacial climates and abrupt climate changes. European Community. Chief Investigator: Jean Claude Duplessy.

1995 - 1997 Surface ocean paleocirculation recorders. Past natural climate variability in high and middle latitude oceans. European Community. Chief Investigator: Monique Labracherie.

Awards to aid in the organization of conferences and workshops:

2014 ICREA Conference Award to help with the organization of the "ICREA Workshop on Pliocene climate and its implications for the Earth's future". Institució Catalana de Recerca i Estudis Avançats (ICREA). Chief Investigators: Antoni Rosell-Melé and **Carles Pelejero**.

2014 Award to help with the organization of the workshop "Multiproxy approach to the reconstruction of the Pliocene climate". Scientific Committee on Antarctic Research (SCAR), Past Antarctic Ice Sheet Dynamics (PAIS). Chief Investigators: Antoni Rosell-Melé, **Carles Pelejero** and Rob DeConto.

2013 Award to facilitate the attendance of key young researchers to the workshop "Multiproxy approach to the reconstruction of the Pliocene climate". European Geosciences Union (EGU). Chief Investigators: Antoni Rosell-Melé and **Carles Pelejero**.

2013 Award to fund the travel, accommodation and food costs of participants in the workshop "Multiproxy approach to the reconstruction of the Pliocene climate". Past Global Changes (PAGES). Chief Investigators: Antoni Rosell-Melé and **Carles Pelejero**.

- 2013 Award to fund travel grants to PhD students and early postdocs from developing countries to attend the 11th International Conference on Paleoceanography. Past Global Changes (PAGES). Chief Investigator: Eva Calvo.
- 2013 Award to fund travel grants to 3 key contributors to attend the 11th International Conference on Paleoceanography as EGU Ambassadors. European Geosciences Union (EGU). Chief Investigator: Eva Calvo
- 2012 Award to fund travel grants to scientists from developing countries to attend the 11th International Conference on Paleoceanography. Scientific Committee on Oceanic Research (SCOR) Chief Investigator: Eva Calvo.

PRESENTATIONS IN CONFERENCES, WORKSHOPS AND SYMPOSIA AS A FIRST AUTHOR

38. **Pelejero, C.** (2023) Reconnecting with nature: A global view with insight on oceans and climate. 33 IFSCC Congress, 4 – 7 September, Barcelona, Spain. (Invited keynote lecture).
37. **Pelejero, C.** (2022) Antropoceno, la nueva era geológica causada por la huella humana, múltiples factores de estrés sobre el medio marino. COSMETORIUM, 28 - 29 September, Barcelona, Spain. (Invited Oral).
36. **Pelejero, C.**, Martínez-Dios, A., Rodríguez-Díaz, C.N., Cattaneo, A., Movilla, J., Dinarès-Turell, J. and Calvo, E. (2022) New records of environmental change in the central and western Mediterranean Sea from organic molecular proxies. 14th International Conference on Paleoceanography, 29 August - 2 September, Bergen, Norway. (Poster).
35. **Pelejero, C.**, Martínez-Dios, A., Cobacho, S., Movilla, J., Dinarès-Turell, J. and Calvo, E. (2019) A 1-million-year record of environmental change in the central Mediterranean Sea from organic molecular proxies. 13th International Conference on Paleoceanography, 2-6 September, Sydney, Australia. (Poster).
34. **Pelejero, C.**, Martínez-Dios A., Ko, S., Sherrell, R.M., Kozdon, R., López-Sanz, A. and Calvo, E. (2017) Multi-proxy experimental calibration in cold water corals for high resolution paleoreconstructions. American Geophysical Union, Fall Meeting (AGU), 11-15 December. New Orleans, US. (Poster).
33. **Pelejero, C.**, Sherrell, R.M., Fuertes, S., Kozdon, R., López-Sanz, A., Gagnon, A.C., Häussermann, V., Forsterra, G. and Calvo, E. (2017) Experimental paleo-proxy calibration in the cold water coral *Desmophyllum dianthus*. 5th PAGES Ocean Sciences Meeting, 9-13 May, Zaragoza, Spain. (Poster).
32. **Pelejero, C.**, Sherrell, R.M., Fuertes, S., Kozdon, R., López-Sanz, A., Gagnon, A.C., Häussermann, V., Forsterra, G. and Calvo, E. (2016) Experimental proxy calibration in cold water corals. 12th International Conference on Paleoceanography, 29 August – 2 September, Utrecht, The Netherlands. (Poster).
31. **Pelejero, C.**, Movilla, J., Calvo, E., Serrano, E., López-Sanz, A. and Coma, R. (2015) Response of the temperate Mediterranean corals *Astroides calycularis* and *Leptopsammia pruvoti* to warming and acidification. Aquatic Sciences Meeting “Aquatic Sciences: Global and Regional Perspectives – North Meets South”, 22-27 February, Granada, Spain. (Poster).
30. **Pelejero, C.**, Movilla, J., López-Sanz, A. and Calvo, E. (2014) Gaining insight on the acidification problem in the Mediterranean from time-series and manipulation experiments. 2nd International Ocean Research Conference, 16-21 November, Barcelona, Catalonia, Spain. (Oral).

29. **Pelejero, C.** and Calvo, E. (2013) Coral based proxies of ocean acidification and climate change. Sub-session by SCOR-Spain "Marine acidification. State of the question and challenges for international collaboration" in the context of the Symposium on Integrating New Advances in Mediterranean Oceanography and Marine Biology, 26-29 November, Barcelona, Catalonia, Spain. (Invited Oral).
28. **Pelejero, C.** (2012) The threat of Earth's oceans becoming more acidic. 1st International Congress of Biology of Catalonia "Global Questions on Advanced Biology", 9-12 July, Barcelona, Catalonia, Spain. (Invited Oral).
27. **Pelejero, C.**, Movilla, J., Calvo, E., Coma, R., Serrano, E., Ribes, M. and Fernández-Guallart, E. (2011) Insights on ocean acidification from instrumental monitoring and experiments in aquaria. Microbes: ecology and biogeochemistry. First Interlab Banyuls-Barcelona meeting, 28-29 September, Barcelona, Catalonia, Spain. (Oral).
26. **Pelejero, C.**, Movilla, J., Calvo, E., Coma, R., Serrano, E., Ribes, M. and Fernández-Guallart, E. (2011) Insights on ocean acidification from instrumental monitoring and experiments in aquaria. Goldschmidt Conference, 14-19 August, Prague, Czech Republic. (Invited Oral).
25. **Pelejero, C.** (2010) Acidificació oceànica, el germà ocult de l'escalfament global. VII Jornada d'Avenços en Ecologia, 8 October, Blanes, Girona, Catalonia, Spain. (Invited Oral).
24. **Pelejero, C.**, Calvo, E. and Hoegh-Guldberg, O. (2010) Paleo-perspectives on ocean acidification. 10th International Conference on Paleoceanography, 29 August – 3 September, San Diego, US. (Poster).
23. **Pelejero, C.** (2010) Coral reefs and ocean pH: Modern pH variability and paleo-reconstructions for the recent past. Workshop on paleocean acidification and carbon cycle perturbation events, 26 – 28 August, Catalina Island, US. (Invited Oral).
22. **Pelejero, C.** and Calvo, E. (2010) Acidificación oceánica: Impactos en el pasado y consecuencias futuras. XV Seminario Ibérico de Química Marina, 22 – 24 February, Vigo, Spain. (Oral).
21. **Pelejero, C.** (2009).- Acidification and carbon cycling in the oceans: Clues from the past. SOLAS Open Science Conference, 16-19 November, Barcelona, Catalonia, Spain. (Invited plenary presentation).
20. **Pelejero, C.** and Calvo, E. (2008).- Ocean acidification: a view from paleoreconstructions. Regional climate change and impacts. VIth International Conference of the Spanish Association of Climatology, 8-11 October, Tarragona, Catalonia, Spain. (Oral).
19. **Pelejero, C.** and Calvo, E. (2008).- Glimpsing the effects of ocean acidification from paleoreconstructions. British Ecological Society Annual Meeting, 3-5 September, Imperial College of London, UK. (Invited Oral)
18. **Pelejero, C.** and Calvo, E. (2008).- Reconstructing past seawater pH from boron isotopes in carbonates. Effects of climate change on the world's oceans. International Symposium, 19-23 May, Gijón, Spain. (Poster)
17. **Pelejero, C.** and Calvo, E. (2007).- Cyclic interdecadal oscillations in reef water pH over the last three centuries. Atmospheric CO₂ Ocean Acidification and Ecological changes in Planktonic Calcifying Organisms, ESF EuroCLIMATE Workshop, 26-28 September, Barcelona and St. Feliu de Guíxols, Girona, Catalonia, Spain. (Invited oral).

16. **Pelejero C.** and Calvo, E. (2007).- Paleoreconstructions of seawater pH: An overview of findings so far. ICES Workshop on the significance of changing ocean CO₂ and pH in shelf sea ecosystems, 2-4 May, London, UK. (Invited oral).
15. **Pelejero, C.**, Calvo, E., Ribes, M., Simó, R., Jiménez, E., Saló, V., Lana, A., Ruíz, C., Vallina, S. and Vila-Costa, M. (2007).- Research group on marine biogeochemistry and global change: Some highlights and future prospects. Symposium GLOBEC-IMBER, 28-30, March, Valencia, Spain. (Poster).
14. **Pelejero, C.**, Calvo, E., McCulloch, M.T., Marshall, J.F., Gagan, M.K., Lough, J.M. and Opdyke, B.N. (2005).- Preindustrial to modern decadal variability in coral reef pH. European Geosciences Union General Assembly, 24-29 April, Viena, Austria. (Poster)
13. **Pelejero, C.** and Calvo, E. New paleoclimate archives and interactions between climate and the carbon cycle. (2005).- Seminario Acción Especial CLIVAR-España, 14-15 February, Instituto Nacional de Meteorología, Madrid, Spain. (Oral)
12. **Pelejero, C.**, Calvo, E., Logan, G.A., De Deckker, P. and Barrows, T.T. (2004).- Alkenone paleothermometry and phytoplanktonic evolution of the South Tasman Sea during the last four glacial/interglacial cycles. 8th International Conference on Paleoceanography, 5-10 September, Biarritz, France. (Poster)
11. **Pelejero, C.**, Calvo, E., Logan, G.A. and De Deckker, P. (2003).- Marine Isotopic Stage 5e in the Southwest Pacific: Similarities with Antarctica and ENSO inferences. American Geophysical Union, Fall Meeting, 8-14 December. San Francisco, US. (Poster)
10. **Pelejero, C.** Calvo, E., Logan, G.A. and De Deckker, P. (2003).- Synchronous climatic response in the South Pacific and Antarctica during Stage 5e. EuroConference on the Comparison of Ice Core Records with Marine Sediments and Climate Models, 4 - 9 October, Sant Feliu de Guíxols. Girona, Catalonia, Spain. (Poster)
9. **Pelejero, C.** and Grimalt, J.O. (1999).- Paleoclimatic information in the molecular biomarker record of deep sea sediments: Lessons from the South China Sea. 19th International Meeting on Organic Geochemistry, 6-10 September, Istanbul, Turkey. (Oral)
8. **Pelejero, C.**, Grimalt, J.O., Heilig, S., Kienast, M. and Wang, L. (1999).- High resolution U^k₃₇-temperature reconstructions in the South China Sea over the last 200 kyrs. 10th Meeting of the European Union of Geosciences, 28 March - 1 April, Strasbourg, France. (Oral) European Union of Geosciences conference abstracts; EUG 10. Cambridge Publications, Cambridge, United Kingdom, pp. 202.
7. **Pelejero, C.** and Grimalt, J.O. (1997).- The correlation between the U^k₃₇ index and sea surface temperatures in the warm boundary: The South China Sea. 18th International Meeting on Organic Geochemistry, 22-26 September, Maastricht, The Netherlands. (Poster)
6. **Pelejero, C.**, Grimalt, J.O., Sarnthein, M. and Wang, L. (1997).- A description of the paleoclimate in the South China Sea by means of molecular biomarkers in deep sea sediments. 7th Annual V.M. Goldschmidt Conference, 2-6 June, Tucson, Arizona, US. (Oral) Abstracts of the Seventh annual V.M. Goldschmidt conference. Lunar and Planetary Institute, Houston, TX, United States, pp. 161.
5. **Pelejero, C.** and Grimalt, J.O. (1997).- The correlation between the U^k₃₇ index and sea surface temperatures in the warm boundary: The South China Sea. 9th Meeting of the European Union of Geosciences. 23 - 27 March. Strasbourg, France. (Oral).

4. **Pelejero, C.**, Cacho, I. and Grimalt, J.O. (1997).- Changes in $U^{K_{37}}$ sea surface temperature and other lipid-derived proxies in the Alboran Sea. Variability of the Glacial and Interglacial climates and abrupt climatic changes, 16-19 January. Sa Coma, Mallorca, Spain. (Oral)
3. **Pelejero, C.**, Villanueva, J. and Grimalt, J.O. (1996).- Métodos de purificación para la determinación de cetonas insaturadas de C_{37} y *n*-alcanos terrígenos en sedimentos marinos con finalidades de reconstrucción del paleoclima. 8^{as} Jornadas de Análisis Instrumental, 22-25 October, Barcelona, Catalonia, Spain. (Poster)
2. **Pelejero, C.**, Grimalt, J.O., Sarnthein, M. and Wang, L. (1996).- Variations in $U^{K_{37}}$ sea surface temperature and marine/terrestrial biomarkers in the South China Sea during the last 130,000 years. 30th International Geological Congress, 4-14 August, Beijing, China. (Oral)
1. **Pelejero, C.**, Grimalt, J.O., Sarnthein, M. and Wang, L. (1996).- Variations in $U^{K_{37}}$ sea surface temperature and marine/terrestrial biomarkers in the South China Sea during the last 130,000 years. 30th International Geological Congress, 4-14 August, Beijing, China. (Poster)

PRESENTATIONS IN CONFERENCES AND SYMPOSIA AS A CO-AUTHOR

128. Pena, L.D., Campderrós, S., Garcia-Solsona, E., Paredes-Paredes, E., Frigola, J., Rodríguez-Díaz, C.N., Lucas, A., Espinosa, S., Torner, J., Calvo, E., **Pelejero, C.**, Cacho, I. (2024) Geochemical tracers of Mediterranean outflow waters: Nd isotopes, carbon cycle and new export constraints. SIQUIMAR, XXII Seminario Ibérico de Química Marina, 10-12 July, Valencia, Spain. (Oral).
127. Rodríguez-Díaz, C.N., Calvo, E., Paredes, E., Ricart, A.M., Serrano, O., Béjard, T.M., Cacho, I., Lirer, F., Puig, P., Jurikova, H., Masqué, P., Rae, J., Pena, L.D. and **Pelejero, C.** (2024) High-resolution reconstructions of recent Mediterranean Sea water pH and temperature using B isotope and Mg/Ca analyses on foraminifera. Geochemistry Group Research in Progress (GGRiP) meeting 2024, 9 – 11 April, Durham, UK. (Poster, best poster presentation award).
126. Cahill, S., Sanmartí, N., **Pelejero, C.** and Ricart, A.M. (2024) Evaluating the ability of seagrass *Posidonia oceanica* to locally mitigate the effects of ocean acidification: insights from a mesocosms experiment. 2024 World Seagrass Conference and 15th International Seagrass Biology Workshop, 17 – 21 June, Napoli, Italy. (Poster).
125. Ricart, A.M., Findji, I., Asplund, M.E., Gullström, M., Serrano, O., Mateo, M.A., Oikawa, P. and **Pelejero, C.** (2024) Spatial and temporal variations of seawater carbonate chemistry in a seagrass-dominated coastal shallow embayment. 2024 World Seagrass Conference and 15th International Seagrass Biology Workshop, 17 – 21 June, Napoli, Italy. (Poster).
124. Pena, L.D., Campderrós, S., Garcia-Solsona, E., Paredes-Paredes, E., Frigola, J., Rodríguez-Díaz, C.N., Lucas, A., Calvo, E., **Pelejero, C.** and Cacho, I. (2024) Geochemical characterization of Mediterranean Outflow Waters in the modern ocean: Nd isotopes, carbon cycle and new export constraints. EGU General Assembly 2024, 14 – 19 April, Vienna, Austria. (Oral).
123. Calvo, E., Quirós-Collazos, L., Rodrigo-Gámiz, M., Schouten, S., Sinninghe Damsté, J.S., Pena, L.D., Cacho, I. and **Pelejero, C.** (2024) Sea surface temperature variations in the Eastern Equatorial Pacific (ODP Site 1240) over the last 160 kyr from three lipid paleothermometers ($U^{K_{37}}$, $TEX^{H_{86}}$ and LDI). EGU General Assembly 2024, 14 – 19 April, Vienna, Austria. (Poster).
122. Rodríguez-Díaz, C.N., Calvo, E., Paredes, E., Pena, L.D., Puig, P., Cacho, I., Lirer, F. and **Pelejero, C.** (2023) Reconstructing Mediterranean Sea water paleo-pH over different time scales using boron isotopes. XXI INQUA Congress, 14 - 20 July, Rome, Italy. (Poster).
121. García-Ibáñez, M.I., Guallart, E.F., Lucas, A., Pascual, J., Gasol, M.A., Marrasé, C., Calvo, E. and **Pelejero, C.** (2023) Coastal ocean acidification variability in the northwestern Mediterranean Sea. ASLO Aquatic Sciences Meeting, 4 – 9 June, Palma de Mallorca, Spain. (Poster).
120. Rodríguez-Díaz, C.N., Calvo, E., Paredes, E., Pena, L.D., Cacho, I., Lirer, F. and **Pelejero, C.** (2022) $\delta^{11}B$ paleo-pH records in the Mediterranean Sea, with a focus on the anthropogenic ocean acidification and

- glacial/interglacial changes. 14th International Conference on Paleoceanography, 29 August - 2 September, Bergen, Norway. (Poster).
119. Ko, S., Sherrell, R.M., Martínez-Dios, A.M., Lucas, A., Calvo, E. and **Pelejero, C.** (2021) Proxy calibrations in the cold-water coral *Desmophyllum dianthus*. Goldschmidt Conference, 4-9 July, Lyon, France (Poster).
118. Puig-Fàbregas, J., Alcaraz-Rocha, P., **Pelejero, C.**, Calvo, E., Fernández, E. and Sobrino, C. (2021) Different responses of particulate organic and inorganic carbon in acclimated and perturbed *Emiliania huxleyi* under ocean acidification conditions. ASLO 2021 Aquatic Sciences Meeting, 22-27 June, Palma de Mallorca, Spain (Poster).
117. Paredes, E., Pena, L.D., Garcia-Solsona, E., Calvo, E., **Pelejero, C.** and Cacho, I. (2020) Novel isotopic tracers in marine sciences: neodymium and boron analysis at nanogram levels. VII Symposium on Marine Sciences ISMS2020, 1-3 July, Barcelona, Catalonia, Spain. (Poster).
116. Calvo, E., Quirós-Collazos, L., Bostock, H., Schouten, S., Neil, H. and **Pelejero, C.** (2019) Phytoplankton response to increased dust and movement of the Subtropical Front. 13th International Conference on Paleoceanography, 2-6 September, Sydney, Australia. (Poster).
115. Martínez-Dios, A., Ko, S., **Pelejero, C.**, Sherrell, R.M., Lucas, A., Kozdon, R., Martínez-Ruiz, F. and Calvo, E. (2019) Outcomes of a long-term experiment with live specimens of *Desmophyllum dianthus* cold-water corals for proxy calibrations and first paleo-reconstructions in the Mediterranean Sea. 13th International Conference on Paleoceanography, 2-6 September, Sydney, Australia. (Poster).
114. Martínez-Dios, A., Ko, S., **Pelejero, C.**, Sherrell, R.M., Lucas, A., Kozdon, R., Martínez-Ruiz, F. and Calvo, E. (2019) Proxy development in cold-water corals: Experimental calibrations and application to the Mediterranean Sea. Goldschmidt Conference, 18-23 August, Barcelona, Catalonia, Spain. (Poster).
113. Martínez-Dios, A., Ko, S., Sherrell, R.M., **Pelejero, C.**, Kozdon, R., López-Sanz, A., Lucas, A. and Calvo, E. (2018) Ground-truthing paleo-proxy calibrations in *Desmophyllum dianthus* deep-sea corals using long-term aquaria cultures. American Geophysical Union, Fall Meeting (AGU), 10-14 December. Washington D.C., US. (Poster).
112. Pérez-Asensio, J.N., Cacho, I., Pena, L.D., Frigola, J., Sierro, F.J., Calvo, E., **Pelejero, C.**, Checa, H., Asioli, A., Kuhlmann, J. and Huhn, K. (2017) Pleistocene to Holocene paleoceanographic changes in the Mediterranean Sea recorded by benthic foraminifera and their geochemical signature. XXXIII Jornadas de Paleontología, 27-30 September, Cádiz, Spain. (Invited Oral).
111. Sherrell, R.M., Ko, S., Kozdon, R., **Pelejero, C.** and Adkins, J. (2017) Proxy calibration of cultured cold water corals and application to fossil corals from the Southern Ocean. Goldschmidt Conference, 13-18 August, Paris, France. (Poster).
110. Ko, S., Sherrell, R.M., Kozdon, R., **Pelejero, C.**, López-Sanz, À., Martínez-Dios, A., Calvo, E., Bostock, H. and Tracey, D. (2017) Improving proxy calibrations in the deep-sea coral *Desmophyllum dianthus*: nutrients, carbonate ion concentration, and temperatures in past Antarctic Intermediate Waters. Gordon Research Seminar and Gordon Research Conference, 22-28 July, New London, US. (Poster).
109. Sherrell, R.M., Kozdon, R., Ko, S., **Pelejero, C.**, López-Sanz, À., Calvo, E., Bostock, H. and Tracey, D. (2017) High-resolution analysis of deep-sea coral skeletons for trace element paleo-proxies of ocean conditions. HiRes2017, High-Resolution Proxies of Paleoclimate, 18-21 June, University of Wisconsin, Madison, US. (Oral).
108. Ko, S., Sherrell, R.M., Kozdon, R., **Pelejero, C.**, López-Sanz, À., Calvo, E., Bostock, H. and Tracey, D. (2017) Improving proxy calibrations in *Desmophyllum dianthus*: assessment of elemental abundances and distributions using LA-ICPMS. HiRes2017, High-Resolution Proxies of Paleoclimate, 18-21 June, University of Wisconsin, Madison, US. (Poster).
107. Quirós-Collazos, L., Calvo, E., Schouten, S., Pena, L.D., Cacho, I. and **Pelejero, C.** (2017) Comparison of the Eastern Equatorial Pacific UK'37, TEX86 and *Globigerinoides ruber* derived sea temperatures: insights from Termination II. 5th PAGES Ocean Sciences Meeting, 9-13 May, Zaragoza, Spain. (Poster).
106. Calvo, E., Quirós-Collazos, L., Bostock, H., Schouten, S., Neil, H. and **Pelejero, C.** (2017) Ocean productivity across the Subtropical Front over the last deglaciation. 5th PAGES Ocean Sciences Meeting, 9-13 May, Zaragoza, Spain. (Poster).

105. Sherrell, R.M., Kozdon, R. and **Pelejero, C.** (2017) Trace metal composition and growth habit of cultured cold-water coral aragonite: proxy calibration experiments. 5th PAGES Ocean Sciences Meeting, 9-13 May, Zaragoza, Spain. (Poster).
104. Sherrell, R.M., **Pelejero, C.**, Fuertes, S., López-Sanz, À., Calvo, E., Kozdon, R. and Gagnon, A. (2016) Experimental paleo-proxy calibration in cold water corals. 6th International Symposium on Deep-Sea Corals, 11-16 September, Boston, US. (Poster).
103. de la Fuente, M., Calvo, E., Skinner, L., **Pelejero, C.**, Müller, W., Evans, D., Povea, P. and Cacho, I. (2016) The evolution of deep ocean chemistry in the Eastern Equatorial Pacific over the last deglaciation. 12th International Conference on Paleoceanography, 29 August – 2 September, Utrecht, The Netherlands. (Poster).
102. Quirós-Collazos, L., Calvo, E., Schouten, S., Pena, L.D., Cacho, I. and **Pelejero, C.** (2016) Phytoplankton response to changes in the chemistry of Eastern Equatorial Pacific waters during Termination II. 12th International Conference on Paleoceanography, 29 August – 2 September, Utrecht, The Netherlands. (Poster).
101. Calvo, E., Quirós, L., Bostock, H., Schouten, S., Neil, H. and **Pelejero, C.** (2016) Ocean productivity and temperature across the subtropical front, south of New Zealand, over the last deglaciation. 12th International Conference on Paleoceanography, 29 August – 2 September, Utrecht, The Netherlands. (Poster).
100. Isari, S., Zervoudaki, S., Saiz, E. and **Pelejero, C.** (2015) Copepod performance under CO₂-induced acidification: the case of *Acartia grani* and *Oithona davisae*. 11th Panhellenic Symposium on Oceanography and Fisheries, “Aquatic Horizons: Challenges & Perspectives” 13-17 May, Mytilene, Lesvos island, Greece. (Oral).
99. Ribes, M., Calvo, E., Movilla, J., Logares, R., Coma, R. and **Pelejero, C.** (2015) Response of Mediterranean sponges to ocean acidification. Aquatic Sciences Meeting “Aquatic Sciences: Global and Regional Perspectives – North Meets South”, 22-27 February, Granada, Spain. (Oral).
98. Isari, S., Zervoudaki, S., **Pelejero, C.**, Peters, J., Papantoniou, G. and Saiz, E. (2015) Vital rates of marine copepods under ocean acidification scenarios. Aquatic Sciences Meeting “Aquatic Sciences: Global and Regional Perspectives – North Meets South”, 22-27 February, Granada, Spain. (Oral).
97. Calvo, E., Quirós, L., Bostock, H., Neil, H. and **Pelejero, C.** (2015) Sea surface temperature and ocean productivity across the Subtropical Front. Aquatic Sciences Meeting “Aquatic Sciences: Global and Regional Perspectives – North Meets South”, 22-27 February, Granada, Spain. (Poster).
96. Cacho, I., Pena, L., Calvo, E. and **Pelejero, C.** (2015) Last deglaciation changes in the Equatorial upwelling system. Aquatic Sciences Meeting “Aquatic Sciences: Global and Regional Perspectives – North Meets South”, 22-27 February, Granada, Spain. (Poster).
95. de la Fuente, M., Skinner, L., Calvo, E., **Pelejero, C.** and Cacho, I. (2014) Evidence for increased reservoir ages and poorly ventilated deep waters in the glacial Eastern Equatorial Pacific. American Geophysical Union, Fall Meeting (AGU), 15-19 December. San Francisco, US. (Poster).
94. Baltar, F., Palovaara, J., Vila-Costa, M., Salazar, G., Calvo, E., **Pelejero, C.**, Marrasé, C., Gasol, J.M. and Pinhassi, J. (2014) Response of rare versus abundant bacterioplankton to anthropogenic perturbations in a Mediterranean coastal site. 2nd International Ocean Research Conference, 16-21 November, Barcelona, Catalonia, Spain. (Oral).
93. Isari, S., Zervoudaki, S., Peters, J., Papantoniou, G., **Pelejero, C.** and Saiz, E. (2014) Lack of evidence for elevated CO₂-induced bottom-up effects on marine copepods. 2nd International Ocean Research Conference, 16-21 November, Barcelona, Catalonia, Spain. (Oral).
92. Guallart, E.F., Fajar, N.M., Calvo, E., Ríos, A.F., Pérez, F.F. and **Pelejero, C.** (2014) Ocean acidification and calcium carbonate saturation states along the subtropical North Atlantic Ocean. 2nd International Ocean Research Conference, 16-21 November, Barcelona, Catalonia, Spain. (Poster).
91. Guallart, E.F., Fajar, N.M., Calvo, E., Ríos, A.F., Pérez, F.F. and **Pelejero, C.** (2014) Ocean acidification and associated changes in saturation states in the subtropical North Atlantic. Ocean Global Change Biology Gordon Research Conference, Interactive Effects of Multiple Global Change Variables, 6-11 July, Waterville Valley, New Hampshire, US. (Poster).
90. Calvo, E., **Pelejero, C.**, Bostock, H. and Neil, H. (2014) Sea surface temperature and ocean productivity

- across the Subtropical Front around New Zealand over the last 30 kyr. INTIMATE Open Workshop, 15-21 June, Zaragoza, Spain. (Oral).
89. Guallart, E.F., Fajar, N.M., Legge, O., Brown, P., **Pelejero, C.**, Messias, M.-J., Schuster, U., Calvo, E., Watson, A., Ríos, A.F., Pérez, F.F. (2014). Trends in anthropogenic CO₂ in water masses of the Subtropical North Atlantic Ocean. XVII Seminario Ibérico de Química Marina, 11-13 June, Las Palmas de Gran Canaria, Spain. (Oral).
 88. Calvo, E., Movilla, J. and **Pelejero, C.** (2014) Response of Mediterranean temperate and cold-water corals to ocean acidification. EGU General Assembly, 27 April - 2 May, Vienna, Austria. (Invited Oral).
 87. Rodrigo-Gámiz, M., Calvo, E., Rampen, S.W., **Pelejero, C.**, Cacho, I., Schouten, S., and Sinninghe Damsté, J.S. (2014) A multi-organic proxy approach for reconstructing sea surface temperatures in the Eastern Equatorial Pacific over the last 40 kyr. GDGT-based proxies: State of the art and future directions, 23-25 April, NIOZ, Texel, The Netherlands. (Poster).
 86. Aparicio-Bernat, F.L., Fernández-González, L., López-Sanz, A., Balagué, V., Calvo, E., **Pelejero, C.** and Marrasé, C. (2013) Temporal dynamics of different fractions of dissolved matter in relation to mixing and biological processes in a NW Mediterranean coastal site. Symposium on Integrating New Advances in Mediterranean Oceanography and Marine Biology, 26-29 November, Barcelona, Catalonia, Spain. (Poster).
 85. Guallart, E.F., Fajar, N.M., Pérez, F.F., Padín, X.A., Vázquez-Rodríguez, M., Calvo, E., Ríos, A.F. and **Pelejero, C.** (2013) Acidification observations in a transoceanic line of the North Atlantic Ocean. EUR-OCEANS hot topics conference - A changing ocean, 6-8 November, Gran Canaria, Spain. (Poster).
 84. Marrasé, C., Calbet, A., Calvo, E., Cros, L., Gasol, J.M., **Pelejero, C.** and Sala, M.M. (2013) Biological modulation of induced pH changes. An experimental study with contrasting plankton communities and trophic conditions. EUR-OCEANS hot topics conference - A changing ocean, 6-8 November, Gran Canaria, Spain. (Poster).
 83. Bramanti, L., Movilla, J., Calvo, E., Gori, A., Dominguez-Carrió, C., Grinyó, J., Lopez-Sanz, A., Martinez-Quintana, A., **Pelejero, C.**, Rossi, S. and Ziveri, P. (2013) Effects of ocean acidification on the precious Mediterranean red coral (*Corallium rubrum*). 40th CIESM Congress, 28 October - 1 November, Marseille, France. (Oral)
 82. Lundin, D., Akram, N., Svensson, L., Palovaara, J., Baltar, F., Vila-Costa, M., Calvo, E., **Pelejero, C.**, Marrasé, C., González, J., Gasol, J.M. and Pinhassi, J. (2013) Comparative metatranscriptomics identify taxonomic dependent strategies for bacterial metabolic functions during phytoplankton bloom senescence. First EMBO Conference on Aquatic Microbial Ecology-SAME13, 8-13 September, Stresa, Italy. (Oral)
 81. Baltar, F., Palovaara, J., Vila-Costa, M., Calvo, E., **Pelejero, C.**, Marrasé, C., Salazar, G., Gasol, J.M. and Pinhassi, J. (2013) Response of rare *vs* abundant bacterioplankton to disturbances in a Mediterranean coastal site. First EMBO Conference on Aquatic Microbial Ecology-SAME13, 8-13 September, Stresa, Italy. (Oral)
 80. Calvo, E., de la Fuente, M., Müller, W., Cacho, I. and **Pelejero, C.** (2013) B/Ca depth profiles of single foraminifera by LA-ICPMS. 11th International Conference on Paleoceanography, 1-6 September, Sitges, Barcelona, Catalonia, Spain. (Poster)
 79. de la Fuente M., Calvo, E., Skinner, L. **Pelejero, C.** and Cacho, I. (2013) Eastern Equatorial Pacific ventilation over the past 30 kyr. 11th International Conference on Paleoceanography, 1-6 September, Sitges, Barcelona, Catalonia, Spain. (Poster). Best Student Poster award.
 78. Rodrigo-Gámiz, M., Calvo, E., Rampen, S.W., **Pelejero, C.**, Cacho, I., Schouten, S., and Sinninghe Damsté, J.S. (2013) Sea surface temperatures in the eastern equatorial Pacific over the last 40 kyr using the novel Long chain Diol Index. 11th International Conference on Paleoceanography, 1-6 September, Sitges, Barcelona, Catalonia, Spain. (Poster).
 77. Legge, O., Fajar, N.M., Fernández-Guallart, E., Brown, P., Messias, M.-J., **Pelejero, C.**, Schuster, U., Calvo, E., Watson, A., Ríos, A.F. and Pérez, F.F. (2013) Trends in anthropogenic carbon in water masses of the Subtropical North Atlantic Ocean along 24.5°N. 9th International Carbon Dioxide Conference, 3-7 June, Beijing, China. (Poster)
 76. Aparicio-Bernat, F.L., Borrull, E., Calvo, E., **Pelejero, C.**, Sala, M.M., Gasol, J.M. and Marrasé, C. (2012)

- DOC variability in relation to microbial communities under different stress conditions of nutrient availability and decreased pH. MESOAQUA International symposium on recent achievements and future directions in aquatic mesocosms research, 16-19 October, Heraklion, Crete, Greece. (Poster).
75. Bramanti, L., Rossi, S., Gouron, M., Movilla, J., Gori, A., Martínez, A., Dominguez-Carrió, C., Grinyó, J., López-Sanz, A., **Pelejero, C.**, Calvo, E., Ziveri, P. (2012) The effects of ocean acidification on the precious Mediterranean red coral. Third International Symposium on the Ocean in a High-CO₂ World, 24-27 September, Monterey, California, US. (Oral).
74. Movilla, J., **Pelejero, C.**, Coma, R., Gori, A., Calvo, E., Orejas, C., López-Sanz, A., Serrano, E., Fernández-Guallart, E., Grinyó, J., Domínguez, C. and Ribes, M. (2012) Acidification response of Mediterranean Sea temperate and cold-water corals from mid- to long-term experiments. Third International Symposium on the Ocean in a High-CO₂ World, 24-27 September, Monterey, California, US. (Poster).
73. Fajar González, N.M., Fernández-Guallart, E., Legge O., **Pelejero, C.**, Shuster, U., Calvo, E., Watson, A., Ríos, A.F. and Pérez, F.F. (2012) Trends in the anthropogenic CO₂ along the 24.5°N. The 15th Biennial Challenger Conference for Marine Science on 'Ocean challenges in the 21st century', 3-6 September, Norwich, UK. (Oral).
72. De la Fuente, M., Calvo, E., Müller, W., Cacho, I., Povea, P. and **Pelejero, C.** (2012) Foraminiferal B/Ca ratios measured by Laser Ablation-ICPMS. 11th European Workshop on Laser Ablation, 19-22 June, Oviedo, Spain. (Poster).
71. De la Fuente, M., Calvo, E., Müller, W., Cacho, I., Povea, P. and **Pelejero, C.** (2012) Assessing the potential of foraminiferal B/Ca ratios by Laser Ablation-ICPMS in paleoreconstructions. ESF Research Conference on Modes of Variability in the Climate System: Past-Present-Future, 27 May – 1 June, Obergurgl, Austria. (Poster).
70. Movilla, J., Gori, A., Orejas, C., López-Sanz, A., Grinyó, J., Domínguez-Carrió, C., Calvo, E. and **Pelejero, C.** (2012) Response of four species of Mediterranean cold-water corals exposed to a future low-pH scenario. 5th International Symposium on Deep-Sea Corals, 2 – 7 April, Amsterdam, The Netherlands. (Poster).
69. Fernández-Guallart, E., Pérez, F.F., Padín, X.A., Vázquez-Rodríguez, M., Fajar-González, N.M., Calvo, E., **Pelejero, C.** and Ríos, A.F. (2012) Spatial and temporal changes in the subtropical North Atlantic along 24.5°N in terms of pH and other variables of the CO₂ system. General Assembly of the European Geosciences Union, 22-27 April, Vienna, Austria. (Poster).
68. Fajar González, N.M., Fernández-Guallart, E., Pérez, F.F., Fernández-Caminals, P., Castaño Carrera, M., Pelegrí, J.L., **Pelejero, C.**, Calvo, E. and Ríos, A.F. (2011) Changes in the Equatorial Atlantic Ocean in terms of oxygen and carbon system variables. Ocean deoxygenation and implications for marine biogeochemical cycles and ecosystems, 24-26 October, Toulouse, France. (Poster).
67. Belmar, M.B., Fernández-Guallart, E., Olariaga, A., Fuentes, V., Movilla, J., López-Sanz, A., Calvo, E. and **Pelejero, C.** (2011) Future efforts to elucidate the effects of pH on jellyfish blooms. Workshop on acidification in aquatic environments, 27-29 September, Tromsø, Norway. (Poster).
66. Calvo, E., **Pelejero, C.**, Pena, L.D. and Cacho, I. (2011) Productivity and circulation changes during the last deglaciation from biomarkers and Nd isotopes. Goldschmidt Conference, 14-19 August, Prague, Czech Republic. (Oral).
65. Movilla, J., Orejas, C., Gori, A., Fernández-Guallart, E., López-Sanz, A., Grinyó, J., Bramanti, L., Domínguez, C., Martínez, A., Calvo, E. and **Pelejero, C.** (2011) Growth rates of Mediterranean Cold Water Corals under different pH scenarios: an experimental approach. HERMIONE annual meeting, 11–15 April, Estepona, Málaga, Spain. (Oral).
64. Calvo, E., **Pelejero, C.**, Pena, L.D., Cacho, I. and Logan, G. (2010) Eastern Equatorial Pacific productivity and related-CO₂ changes during the last deglaciation. 10th International Conference on Paleooceanography, 29 August – 3 September, San Diego, US. (Poster).
63. Vázquez-Domínguez, E., Duró, A., Pérez, F.F., Escánez, J., **Pelejero, C.**, Calvo, E. and Pelegrí, J.L. (2010) Effects of CO₂ acidification on the microplankton food web structure and function, and on the nutrient cycling of the Central Atlantic Ocean. BODYSIZE in a changing World, 3rd Workshop of the ESF Research Networking Programme SIZEMIC, 21-22 June, Barcelona, Catalonia, Spain. (Poster).
62. Cacho, I., Pena, L., Calvo, E. and **Pelejero, C.** (2009). Could glacial-interglacial variability in the Eastern

- Equatorial upwelling system contribute to atmospheric CO₂ changes? SOLAS Open Science Conference, 16-19 November, Barcelona, Catalonia, Spain. (Invited plenary presentation).
61. Calvo, E., **Pelejero, C.**, Pena, L.D., Cacho, I., and Logan, G.A. (2009) Eastern Equatorial Pacific productivity and related-CO₂ changes during the last deglaciation. SOLAS Open Science Conference, 16-19 November, Barcelona, Catalonia, Spain. (Poster).
 60. Movilla, J., Calvo, E., **Pelejero, C.**, Ribes, M. and Coma, R. (2009) Ocean acidification in the Mediterranean Sea: Starting new instrumental time-series and experiments with corals in aquaria. SOLAS Open Science Conference, 16-19 November, Barcelona, Catalonia, Spain. (Poster).
 59. Pelegrí, J.L., Calvo, E., Emelianov, M., García-Olivares, A., Gourrion J., Machín, F., Marrasé, C., Mourre, B., Nieves V., Piera, J., **Pelejero, C.**, Salat, J., Salvador, J., Turiel, A. and Viudez, A. (2009).- Oceanographic cruise along 8°N in spring 2010. Tropical Atlantic Meeting and PIRATA-14 SSC/PRB Meeting, 2-6 February. Toulouse, France. (Poster).
 58. Pena, L.D., Cacho, I., Calvo, E., **Pelejero, C.**, Ferretti, P. and Hall, M. (2008).- ENSO-like variability in the Eastern Equatorial Pacific at orbital and millennial time-scales: high-low latitude teleconnections. American Geophysical Union, Fall Meeting (AGU), 15-19 December. San Francisco, US. (**Oral Invited**).
 57. Cacho I., Pena, L.D., Ferretti, P., Calvo, E., **Pelejero, C.** and Hall, M. (2008).- Tropics-to-High latitude tele-connections during past rapid climate changes: the seasonality paradox. American Geophysical Union, Fall Meeting (AGU), 15-19 December. San Francisco, US. (Poster).
 56. Cacho, I., Pena, L.D., Calvo, E., Ferretti, P., **Pelejero, C.** and Hall, M. (2008).- Tropics-to-High latitude tele-connections during glacial terminations based in a multi-proxy study from the Eastern Equatorial Pacific. Quaternary Climate: From Pole to Pole. Epica Open Science Conference, 10-13 November, Venice, Italy. (**Oral Invited**).
 55. Movilla, J., Calvo, E., **Pelejero, C.**, Coma, R. and Ribes, M. (2008).- Assessing the ocean acidification problem in the Mediterranean from instrumental time-series of pH and coral cultures. Regional climate change and impacts. VIth International Conference of the Spanish Association of Climatology, 8-11 October, Tarragona, Catalonia, Spain. (Oral).
 54. Pena, L.D., Cacho, I., Calvo, E., **Pelejero, C.**, Ferretti, P. and Hall, M. (2008).- High-low latitudes teleconnections during glacial Terminations associated with the ENSO-like variability. SCOR 50th Anniversary Symposium and SCOR General Meeting. 20-24 October, Woods Hole, US. (Poster)
 53. Calvo, E., **Pelejero, C.**, Pena, L. and Cacho, I. (2008).- Eastern Equatorial Pacific climate variability for the last glacial cycle. Effects of climate change on the world's oceans. International Symposium, 19-23 May, Gijón, Spain. (Poster).
 52. Movilla, J., Calvo, E., **Pelejero, C.**, Ribes, M. and Coma, R. (2008).- A multi-temporal approach to tackle the ocean acidification problem. Insights from coral cultures and instrumental time-series of pH. Effects of climate change on the world's oceans. International Symposium, 19-23 May, Gijón, Spain. (Poster).
 51. Calvo, E. and **Pelejero, C.** (2007).- Ocean acidification: a view from reconstructions of past seawater pH. Symposium GLOBEC-IMBER, 28-30, March, Valencia, Spain. (Oral).
 50. Pena, L.D., Calvo, E., Cacho, I., Eggins, S. and **Pelejero, C.** (2005) Post-depositional Mn-Mg-rich carbonates: Implications for foraminiferal Mg/Ca paleothermometry. American Geophysical Union, Fall Meeting, 5-9 December, San Francisco, US. (Oral)
 49. Pena, L.D., Calvo, E., Cacho, I., Eggins, S. and **Pelejero, C.** (2005) Post-depositional Mn-Mg-rich carbonates: Implications for foraminiferal Mg/Ca paleothermometry. Biogeochemical Controls on Paleooceanographic Climate Proxies, 3-4 October, London, UK. (Poster)
 48. Calvo, E., Marshall, J., **Pelejero, C.**, McCulloch, M.T., Lough, J. and Gagan, M.K. (2005) 300 Years of decadal sea surface temperature and salinity variability in the Coral Sea. General Assembly of the European Geosciences Union, 24-29 April, Viena, Austria. (Oral)
 47. Pena, L.D., Calvo, E., Cacho, I., Eggins, S. and **Pelejero, C.** (2004) Implications of Mn-Mg-rich contaminant phases for Mg/Ca past temperatures reconstruction. American Geophysical Union, Fall Meeting, 8-14 December. 13-17 December, San Francisco, US. (Poster)

46. Calvo, E., Marshall, J., **Pelejero, C.**, McCulloch, M.T., Lough, J. and Gagan, M.K. (2004) Decadal climate variability in the western Coral Sea since 1710 A.D. 8th International Conference on Paleoceanography, 5-10 September, Biarritz, France. (Poster)
45. Pena, L.D., Cacho, I., Calvo, E., Eggins, S., **Pelejero, C.**, and Shackleton, N.J. (2004) Rapid temperature oscillations in the eastern equatorial Pacific during the last deglaciation and the Holocene. 8th International Conference on Paleoceanography, 5-10 September, Biarritz, France. (Poster)
44. Pena, L.D., Cacho, I., Calvo, E., **Pelejero, C.** and Eggins, S. (2004) Characterisation of trace element distribution within foraminiferal tests: implications for past temperature reconstructions. European Geosciences Union, 1st General Assembly, 25-30 April, Nice, France. (Poster)
43. Pena, L.D., Calvo, E., Cacho, I., Eggins, S. and **Pelejero, C.** (2004) Implications of Mn-Mg-rich contaminant phases for Mg/Ca past temperature reconstructions. Foraminiferal Mg/Ca Workshop, ICP VIII, 5-10 September, Biarritz, France. (Poster)
42. Pena, L.D., Cacho, I., Calvo, E., **Pelejero, C.**, Ferreti, P. and Shackleton N.J. (2004) Isotopes and Mg/Ca results from the Late Pleistocene in Site 1240. Some methodological concerns. ODP Leg 202 Post-cruise meeting, 16-18 April, Tai-Pei, Taiwan. (Oral)
41. Calvo, E., Marshall, J., **Pelejero, C.**, McCulloch, M.T., Lough, J. y Gagan, M.K. (2003) 280-Year Long Sr/Ca and $\delta^{18}\text{O}$ records from Flinders Reef, Western Coral Sea. American Geophysical Union, Fall Meeting, 8-14 December. San Francisco, US. (Poster)
40. Calvo, E., **Pelejero, C.**, Logan, G. and De Deckker, P. (2003) Phytoplankton community changes in the Southern Ocean during Glacial times. EuroConference on the Comparison of Ice Core Records with Marine Sediments and Climate Models, 4-9 October, Sant Feliu de Guíxols, Girona, Catalonia, Spain. (Oral)
39. Calvo, E., **Pelejero, C.**, Logan, G. and De Deckker, P. (2003) Phytoplankton community changes in the Southern Ocean during Glacial times. EuroConference on the Comparison of Ice Core Records with Marine Sediments and Climate Models, 4-9 October, Sant Feliu de Guíxols, Girona, Catalonia, Spain. (Poster)
38. Kienast, M., Hanebuth, T.J.J., **Pelejero, C.** and Steinke, S. (2003) Synchronicity of Meltwater Pulse 1a and the Bølling warming: New evidence from the South China Sea. EGS-AGU-EUG Joint Assembly, 6-11 April, Nice, France. (Poster)
37. Álvarez, M.C., Flores, J.A., Sierro, F.J., Diz, P., Francés, G., **Pelejero, C.** and Grimalt, J.O. (2003) Millennial surface water dynamics in the Ria de Vigo during the last 3000 years as revealed by coccolithophores and biomarkers. EGS-AGU-EUG Joint Assembly, 6-11 April, Nice, France. (Poster)
36. Álvarez, M.C., Flores, J.A., Sierro, F.J., Diz, P., Francés, G., **Pelejero, C.** and Grimalt, J.O. (2003) Respuesta de las asociaciones de coccolitofóridos a las variaciones climáticas en la Ría de Vigo durante los últimos 3000 años. 4^º Simposio sobre el Margen Continental Ibérico Atlántico, 7-10 July, Vigo, Spain. (Poster).
35. Kienast, M., Hanebuth, T.J.J., **Pelejero, C.** and Steinke, S. (2002) Synchronicity of the Bølling warming in the South China Sea (SCS) and Greenland: Implications for the regional diversity of deglacial warming, SCS reservoir ages, and the timing of MWP 1a. 12th Annual V.M. Goldschmidt Conference, August 18-23, 2002 Davos, Switzerland. (**Oral Invited**)
34. Theron, R., Flores, J.A., Sierro, F.J., **Pelejero, C.**, Grimalt, J.O. and Vaquero, M. (2002) Using data mining and visualization techniques for the reconstruction of ocean paleodynamics. International Geoscience & Remote Sensing Symposium, 24th Symposium on Remote Sensing, 24-28 June, Toronto, Canada. (Oral)
33. Kienast, M., Calvert, S.E., **Pelejero, C.** and Grimalt, J.O. (2001) Is $\delta^{13}\text{C}_{\text{org}}$ a reliable proxy for palaeo- CO_2 ? American Geophysical Union, Fall Meeting (AGU), 10-14 December. San Francisco, US. (Oral)
32. Flores, J.A., Theron, R., Sierro, F.J., **Pelejero C.** and Grimalt J.O. (2001) Reconstruction of surface water dynamics in the China Sea during the last 130,000 yrs using coccolithophores and biomarkers: Application of data mining and visualization techniques. 7th International Conference on Paleoceanography, 15-20 September, Sapporo (Japan). (Poster).

31. Calvo, E., **Pelejero, C.**, Herguera, J.C., Palanques, A. and Grimalt, J.O. (2001) Alkenone measurements of sea surface temperature in the Southeastern Subtropical Pacific Ocean over the last 400 kyr. 11th Meeting of the European Union of Geosciences. 16 - 22 April, Strasbourg (France). (Oral)
30. Kinkel, H., Pancost, R., **Pelejero, C.**, Grimalt, J.O. and Kienast, M. (2000) Using alkenone $\delta^{13}\text{C}$ to reconstruct glacial/interglacial $p\text{CO}_2$ changes: a case study from the South China Sea. EGS XXV General Assembly. 25 – 29 April, Nice (France). (Oral)
29. Alvarez, M.C., Flores, J.A., Sierro, F.J., Fuertes, M.A., **Pelejero, C.** and Francés, G. (2000) Evolución de los coccolitofóridos durante los últimos 3000 años en la Ría de Vigo. I Congreso Ibérico de Paleontología. XVI Jornadas de la Sociedad Española de Paleontología, 12-14 octubre, Évora (Portugal) (Poster)
28. Chaler, R., Grimalt, J.O., **Pelejero, C.** and Calvo, E. (2000) Sensitivity effects in UK'37 estimation by chemical ionization mass spectrometry. Local Meeting on the Mass Spectrometry Group, November, Barcelona (Spain).(Oral)
27. Kienast, M., **Pelejero, C.**, Wang, L. and Grimalt, J.O. (1999) The flooding of Sundaland during the last deglaciation: Imprints in hemipelagic sediments from the southern South China Sea. American Geophysical Union, Fall Meeting (AGU), 13-17 December. San Francisco, US (Oral)
26. Calvo, E., Grimalt, J.O., **Pelejero, C.**, Plaza, A. and Palanques, A. (1999) The origin of organic carbon in deep sea sediments over glacial to interglacial periods: Inferences from the study of molecular biomarkers. 19th International Meeting on Organic Geochemistry, 6-10 September, Istanbul (Turkey). (Oral)
25. Cacho, I., Grimalt, J.O., **Pelejero, C.**, Saffi, L. and Shackleton, N. (1999) Sea surface temperature changes in the western Mediterranean during the Holocene. EU Workshop Holocene Ocean Instability. 6- 8 May, University of Kiel (Germany). (Oral).
24. Cacho, I., Grimalt, J.O., **Pelejero, C.** and Shackleton, N. (1999) Millennial scale climatic changes in the Alboran Sea during the last 53 kyr (MD952043 site). EU Workshop Holocene Ocean Instability. 6- 8 May, University of Kiel (Germany). (Oral).
23. Cacho, I., Grimalt, J.O., **Pelejero, C.**, Canals, M., Sierro, F.J., Flores, J.A. and Shackleton, N.J. (1999) Millennial scale climatic changes in the W-Mediterranean Sea. Implications for the ocean-atmosphere connections. 10th Meeting of the European Union of Geosciences. 28 March - 1 April, Strasbourg (France). (Oral).
22. Calvo, E., Grimalt, J.O., Labeyrie, L., Villanueva, J., Boelaert, A. and **Pelejero, C.** (1999) New findings on the precessional forcing of productivity in the N. Atlantic over the last 260 kyrs. 10th Meeting of the European Union of Geosciences. 28 March - 1 April, Strasbourg (France). (Oral)
21. Calvo, E., Grimalt, J.O., **Pelejero, C.**, Herguera, J.-C., Flores, J.-A. and Sierro, F.-J. (1999) First C_{37} alkenone record of sea surface temperature and productivity in the Southeastern Subtropical Pacific Ocean over the last 400,000 years. 10th Meeting of the European Union of Geosciences. 28 March - 1 April, Strasbourg (France). (Poster).
20. Francés, G., Diz, P., **Pelejero, C.**, Alejo, I., Grimalt, J.O. and Vilas, F. (1998) Sea level rise and mass-water dynamics in the Ria of Vigo (NW Spain) during the Holocene. 15th International Sedimentological Congress; Sedimentology at the dawn of the third millennium, 12-17 April, Alicante (Spain). (Oral).
19. Wang, L., Sarnthein, M., Erlenkeuser, H., Grootes, P.M., Grimalt, J.O. and **Pelejero, C.** (1998) East Asian monsoon and climate tele-connections to global climate change during the last 40,000 years. 6th International Conference on Paleoceanography, 23-28 August, Lisbon (Portugal). (Oral Invitada).
18. Calvo, E., Grimalt, J.O., Labeyrie L., Villanueva, J., Boelaert, A., Revel, M., **Pelejero, C.** and Cortijo, E. (1998) New insights into North Atlantic biomarker derived temperatures and paleoproductivities. 6th International Conference on Paleoceanography, 23-28 August, Lisbon (Portugal). (Poster).
17. Cacho, I., Grimalt, J.O., Canals, M., Sierro, F.J., Flores, J.A., **Pelejero, C.** and Shackleton, N.J. (1998) A molecular biomarker study of the Alboran Sea during the last 50 kyr; Mediterranean - North Atlantic connections. 6th International Conference on Paleoceanography, 23-28 August, Lisbon (Portugal). (Poster). **Received student best poster award.**

16. Sierro, F.J., Barcena, M.A., Flores, J.A., Cacho, I., **Pelejero, C.**, Grimalt, J.O. and Shackleton, N. J. (1998) Origin of the youngest western Mediterranean organic-rich layer: Productivity or stagnation?. 6th International Conference on Paleoceanography, 23-28 August, Lisbon (Portugal). (Poster).
15. Diz, P., Francés, G., **Pelejero, C.**, Alejo, I., Grimalt, J.O. and Vilas, F. (1998) How old is the upwelling phenomena in the West Iberian margin?. 6th International Conference on Paleoceanography, 23-28 August, Lisbon (Portugal). (Poster).
14. Chaler, R., **Pelejero, C.**, Calvo, E. and Grimalt, J.O. (1998) Evaluation of different methods of positive chemical ionization to the analysis of paleoclimatic compounds by GC-MS. 25 Aniversario - 27 Reunión Científica del Grupo de Cromatografía y Técnicas Afines, 8-10 July, Lugo (Spain). (Poster)
13. Cacho, I., **Pelejero, C.**, Grimalt, J.O., Canals, M. and Calafat, A. (1998) Determination of paleo-Sea Surface Temperatures (SST) in the western Mediterranean Sea: Benefits from the HFF Experiment feasibility test. 2nd Annual Scientific and Technical Workshop - MTPII MATER-WP 2. 29-30 June, Perpignan. France (Oral).
12. Grimalt, J.O., Labeyrie, L., Villanueva, J., Calvo, E., Boelaert, A., Revel, M., **Pelejero, C.**, and Cortijo, E. (1998) Heinrich-related sea surface temperature changes in the North Atlantic Ocean. PAGES Open Science Meeting, Past Global Changes and their Significance for the Future. 20-23 April, Senate House, University of London, U.K. (Poster).
11. Kienast, M., Grootes, P., **Pelejero, C.**, Wang, L. and Sarnthein, M. (1997) A large river in Glacial Sundaland: Hemipelagic sediments from the southern South China Sea. American Geophysical Union, Fall Meeting (AGU), 8-12 December. San Francisco, US (Poster).
10. Heilig, S., Ivanova, E., **Pelejero, C.**, Grimalt, J., Erlenkeuser H., Pflaumann, U., Wang, L. and Sarnthein, M. (1997) Paleoceanography in the South China Sea east of Vietnam during the last 220,000 years. American Geophysical Union, Fall Meeting (AGU), 8-12 December. San Francisco, US (Poster).
9. Cacho, I., **Pelejero, C.**, Grimalt, J.O., and Shackleton (1997) Climatic changes in the Alboran Sea during the last 50 ky related to the North Atlantic dynamics. Joint meeting on North-South Climatic Connection and Carbon Cycle over the last 250 kyr. 15-18 October, Wengen (Switzerland). (Oral).
8. Grimalt, J.O., Villanueva, J., Revel, M., **Pelejero, C.** and Labeyrie, L. (1997) C₃₇ alkenone measurements of SST and productivity in the North Atlantic. Joint meeting on North-South Climatic Connection and Carbon Cycle over the last 250 kyr. 15-18 October, Wengen (Switzerland). (Oral).
7. Bentaleb, I., **Pelejero, C.** and Grimalt, J.O. (1997) Short term variability of euphotic zone particulate sterols and alkenones in open northwestern mediterranean waters. 18th International Meeting on Organic Geochemistry, 22-26 September, Maastricht (The Netherlands). (Poster)
6. Cacho, I., **Pelejero, C.** Grimalt, J.O. and Canals, M. (1997) Thermal and productivity patterns of the Alboran Sea surface waters over the last 40 ky BP. 9th Meeting of the European Union of Geosciences. 23 - 27 March. Strasbourg (France). (Oral).
5. Ivanova, E., Heilig, S., Wang, L., Pflaumann, U., Sarnthein, M. and **Pelejero, C.** (1997) Paleoceanography of the South China Sea off Vietnam during the last 250,000 years. 9th Meeting of the European Union of Geosciences. 23 - 27 March. Strasbourg (France). (Oral).
4. Revel, M., **Pelejero, C.** and Grimalt, J.O. (1997) Paleotemperature and paleoproductivity in the mid North Atlantic Ocean (preliminary results from IMAGES core C37). Variability of the Glacial and Interglacial climates and abrupt climatic changes, 16-19 January. Sa Coma, Mallorca, Spain. (Oral)
3. Wang, L., Pflaumann, U., Sarnthein, M., Grootes, P., Erlenkeuser, H., Jian, Z., Wang, P., **Pelejero, C.** and Grimalt, J.O. (1996) Monsoon climatic change during the last 40,000 years; high-resolution sediment records in the South China Sea. American Geophysical Union, Fall Meeting, 8-12 December, San Francisco, US (Oral)
2. Sarnthein, M., Wang, L., Heilig, S., Lin, H., Ivanova, E., Jian, Z., Kienast, M., **Pelejero, C.** and Pflaumann, U. (1996) Response of east asian monsoonal climate to orbital forcing and fluctuations of the ocean salinity conveyor belt: High-resolution sediment records from the South China Sea. 30th International Geological Congress, 4-14 August, Beijing, China. (Oral)
1. Cacho, I., **Pelejero, C.**, Grimalt, J.O., Sierro, F.J., Flores, J.A., Henriksson, A. and Canals, M. (1996) Paleotemperature and paleoproductivity reconstruction of the Alboran Sea based on molecular biomarkers: Preliminary results. Paleoclimatology and Paleoceanography of Europe and the North

Atlantic between 60,000 and 25,000 bp (oxygen isotope stage 3). 8-10 July. Univ. of Cambridge. Cambridge, UK. (Poster).

ORGANIZATION OF CONFERENCES

5. Organizer of the session titled “Responses of marine organisms to ocean acidification, interactions with other stressors and biogeochemistry”, of the ASLO Aquatic Sciences Meeting, Aquatic Sciences: Global And Regional Perspectives – North Meets South, held in Granada, Spain, 22-27 February 2015 (<http://www.sgmeet.com/aslo/granada2015/sessionschedule.asp?SessionID=032>)
4. Member of the organizing and scientific committee of the “ICREA Workshop on Pliocene climate and its implications for the Earth's future”, held in Barcelona, Catalonia, 16-19 September 2014 (jornades.uab.cat/plioclim/).
3. Member of the organising and scientific committee of the 11th International Conference on Paleoceanography, held in Barcelona-Sitges, Catalonia, 1-6 September 2013 (www.icp2013.cat).
2. Member of the steering committee of the ICES Workshop on the significance of changing ocean CO₂ and pH in shelf sea ecosystems, 2-4 May 2007, London (UK).
1. Co-chair of session number 9 on “Long-term large-scale observations of changes in reef communities II: 1) Ecological effects of ocean acidification and bleaching, 2) Remote sensing and macroecological approaches to monitoring” of the 6th European Coral Reef Conference 2006 organized by the International Society for Reef Studies (ISRS). 19-22 September 2006, Bremen, Germany.

HOSTED SABBATICAL VISITS

- 1/2017 – 6/2017: Michael DeGrandpre, Professor at University of Montana, US, ocean acidification and monitoring systems
- 9/2016 – 8/2017: Kristin Orians, Professor at the University of British Columbia, Canada, sources and cycling of trace elements in the global ocean
- 1/2012 – 8/2012: Robert Sherrell, Professor at Rutgers University, US, calibration of paleoceanographic proxies in deep sea corals

SUPERVISION OF POSTDOCS, STUDENTS AND TECHNICIANS

- 12/2024 – Present: Jonah Diaz Cruz, BSc in Biology, trained as a technician in the setup and monitoring of experiments in mesocosms, manipulating environmental parameters including pH and contaminants of emerging concern (CECs), and in the precise analysis of pH and alkalinity in seawater.
- 12/2024 – Present: Sinéad Cahill Pasquina, BSc in Biology, research in the context of her PhD thesis on “Evaluating seagrass ecosystems as nature-based solutions against global change”. Co-supervised jointly with Aurora M. Ricart (ICM). Funded by CSIC. Ascribed to the PhD Program in Ecology of the University of Barcelona.
- 6/2024 – 8/2024: Inés Alonso, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography and HPLC, clean up and sampling of foraminifera from marine

sediments and Posidonia mats) and field trip sampling for seawater chemical analyses.

- 12/2023 – Present: Alejandra Sánchez Roda, BSc in Environmental Sciences, research in the context of her PhD thesis on “Paleoreconstructions of pH and pCO₂ in the Southern Ocean over glacial/interglacial timescales using boron isotopes”. Co-supervised jointly with Eva Calvo (ICM). Funded by Spanish MICINN. Ascribed to the PhD Program in Marine Sciences of the Polytechnic University of Catalonia.
- 7/2023 – Present: Sergi Trias, PhD on Earth and Marine Science, trained as a technician in techniques for the analysis of pH and alkalinity in the laboratory, in the logistics for sampling in coastal time-series and in submersible autonomous moored instruments for pH measurements.
- 6/2023 – 8/2023: Martina Arasa, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography and HPLC, clean up and sampling of foraminifera from marine sediments and Posidonia mats).
- 4/2023 – Present: Ángela de Domingo, BSc in Environmental Sciences, trained as a technician in techniques for the analysis of pH, alkalinity and O₂ in the laboratory, and in the set-up of manipulation experiments in aquaria.
- 1/2023 – Present: Laia Millach, PhD in Microbiology, trained as technician on molecular biomarkers analyses by HPLC, GC-FID and GC-MS, with a Personal Técnico de Apoyo contract.
- 6/2022 – Present: Aurora Martínez Ricart, PhD in Ecology, International Collaboration Project Postdoctoral Researcher, doing research on the role of sea forests in shaping the response of coastal calcifying organisms to global change
- 12/2021 – 12/2023: Maribel García Ibáñez, PhD in Oceanography, Severo Ochoa Postdoctoral Researcher, doing research on Mediterranean Sea natural alkalisation.
- 7/2021 – 4/2023: Elisa Fernández Guallart, PhD in Marine Sciences, trained as a technician in gas and liquid chromatographic techniques for the purification and analysis of molecular biomarkers in deep sea sediments.
- 10/2020 – 3/2021: Laia Millach, PhD in Microbiology, training stay on molecular biomarkers analyses by HPLC, GC-FID and GC-MS.
- 10/2020 – Present: César Rodríguez, B.Sc. in Geology, research in the context of his PhD thesis on “Records of paleo-pH in the Mediterranean Sea”. Co-supervised jointly with Eva Calvo (ICM). Funded by Spanish MICINN. Ascribed to the PhD Program in Earth Sciences of the University of Barcelona.
- 7/2019 – 9/2019: Araceli Luque, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography, sampling cruises).
- 5/2019 – 9/2019: Sergi Matas, BSc student on Biochemistry, supervision of his experimental research on molecular biomarkers in deep sea sediments from the Algerian Margin in the context of his Bachelor's Degree Final Project.
- 5/2019 – 8/2019: Eugen Cotei, BA student on Earth and Oceanographic Sciences with Hispanic Studies, training stay on manipulation experiments in aquaria (cold water corals and mussels), molecular biomarkers in deep sea sediments and coastal seawater sampling fieldtrips.
- 10/2018 – 5/2019: Claudia Aparicio, BSc in Environmental Sciences, training stay on manipulation experiments in aquaria (cold water corals and mussels), mussel larvae imaging using SEM, molecular biomarkers in deep sea sediments and coastal seawater sampling fieldtrips.

- 9/2018 – 10/2018: Stanley Ko, PhD graduate student in the Graduate Program in Oceanography at Rutgers, The State University of New Jersey, training stay on manipulation experiments in aquaria with cold water corals, molecular biomarkers in deep sea sediments and coastal seawater sampling fieldtrips.
- 7/2018 – 8/2018: Joan Roig, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography, sampling cruises).
- 7/2018 – 8/2018: Marina Pascual, BSc student on Marine Sciences, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography, sampling cruises).
- 2/2018 – 10/2018: Sara Cobacho, BSc in Biology, supervision of her experimental research on a paleoceanographic reconstruction in the Strait of Sicily for the last 420.000 years in the context of her MSc Thesis. Co-supervised jointly with Eva Calvo (ICM).
- 4/2018 – 9/2022: Arturo Lucas, BSc in Environmental Sciences, trained as a technician in techniques for the analysis of pH, alkalinity and O₂ in the laboratory, in chromatographic techniques for the analysis of molecular biomarkers in deep sea sediments and in the set-up of manipulation experiments in aquaria.
- 11/2017 – 1/2020: Lydia Kapsenberg, PhD in Ecology, Evolution and Marine Biology, Marie-Curie Postdoctoral Researcher, doing research on the impact of changes in seawater chemistry in mussel physiology and the potential for local management of ocean change.
- 7/2016 – 8/2017: Eric Moran, BSc student on Environmental Sciences, training stay on manipulation experiments in aquaria (cold water corals and mussels), molecular biomarkers in deep sea sediments and coastal seawater sampling fieldtrips.
- 6/2016 – 7/2017: Ignacio Martín, BSc student on Chemistry, training stay on the analysis of nutrients nutrients in seawater and molecular biomarkers in deep sea sediments using gas chromatography.
- 4/2017 – 2/2022: Ariadna Martínez-Dios, B.Sc. in Geography, research in the context of her PhD thesis on “Deciphering the past from the combination of deep sea sediment cores and cold water corals as paleoarchives”. Co-supervised jointly with Eva Calvo (ICM). Funded by Spanish MINECO. Ascribed to the PhD Program in Marine Sciences of the Polytechnic University of Catalonia.
- 10/2016 – 2/2017: Jon Magnusson, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography, sampling cruises).
- 7/2016 – 9/2016: Núria Trilla, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography, sampling cruises).
- 1/2016 – 10/2016: Sara Fuertes, BSc in Biology, supervision of her experimental research on ocean acidification and paleo-proxy calibration in cold water corals and coccolithophores in the context of her MSc Thesis.
- 7/2015 – 9/2015: Ethan Coll, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography, sampling cruises).
- 10/2014 – 9/2015: Jorge Prieto, BSc in Biology, supervision of his experimental research on ocean acidification and cold water corals in the context of his M. Sc. Thesis.

- 9/2014 – 12/2014: Carla Elias, BSc student on Environmental Biology, training stay on a variety of experimental and analytical techniques (manipulation experiments in aquaria, gas chromatography, sampling cruises).
- 2/2014 – 6/2022: Lucía Quirós-Collazos, BSc in Physics, research in the context of her PhD thesis “Paleoclimate study of the Pacific Ocean equatorial upwelling during the last 160.000 years through molecular biomarkers”. Co-supervised jointly with Eva Calvo (ICM). Funded by Spanish MINECO. Ascribed to the PhD Program in Marine Sciences of the Polytechnic University of Catalonia.
- 11/2012 – 4/2013: Alicia Martínez, Graduate student on Environmental Sciences, training stay on experimental techniques for the assessment of ocean acidification effects in marine organisms, with insight on jellyfish.
- 12/2011 – 9/2012: Angela Lafuente, BSc in Biology, supervision of her experimental research on ocean acidification and deep sea corals in the context of her M. Sc. Thesis. Co-supervised jointly with Eva Calvo (ICM).
- 11/ 2011- 9/2012: Almudena Trapero, BSc in Chemistry, supervision of her experimental research on ocean acidification and coccolithophores in the Catalan Sea in the context of her M. Sc. Thesis. Co-supervised jointly with Lluïsa Cros (ICM).
- 11/ 2010 – 5/2018: Àngel López, BSc in Biology, being formed as a technician in techniques for the analysis of pH, alkalinity and O₂ in the laboratory, in chromatographic techniques for the analysis of molecular biomarkers in deep sea sediments and in the set-up manipulation experiments in aquaria.
- 9/ 2010 – 2/2016: Elisa Fernàndez-Guallart, BSc in Biology, research in the context of her PhD thesis on “Spatiotemporal variability of the carbonate system in the North Atlantic Ocean”. Co-supervised jointly with Fiz F. Pérez (IIM-CSIC, Vigo). Funded by CSIC. Ascribed to the PhD Program in Oceanography of Universidad de Las Palmas de Gran Canaria.
- 2/ 2010 – 8/2010: Elisa Fernàndez-Guallart, BSc in Biology, doing a training stage on techniques for the analysis of pH and alkalinity both in the laboratory and in the field, and participating in oceanographic cruises.
- 7 - 11/ 2009: Cristina Bajet, BSc in Environmental Sciences, training stay on techniques for the analysis of pH and alkalinity both in the laboratory and in the field, and on experimental work in aquaria.
- 1 - 12/ 2009: Francesca Iuculano, BSc in Biology, supervision of her experimental research on ocean acidification and microbes in the context of her M. Sc. Thesis.
- 1 - 12/ 2009: Patricia Povea, BSc in Geology, formed as a technician in geochemical and sedimentological techniques, in the separation and identification of foraminifera from deep sea sediments, and in chromatographic techniques for the analysis of molecular biomarkers.
- 2/ 2008 – 2/2011: Pilar Fernández-Vallejo, BSc in Chemistry, formed as a technician in techniques for the analysis of pH and alkalinity in the laboratory, in sample clean-up methods for boron isotopes analyses, and in chromatographic techniques for the analysis of molecular biomarkers in deep sea sediments.
- 9/ 2007 - 2/2016: Juancho Movilla, BSc in Biology, research in the context of his PhD thesis on "Effects of Ocean Acidification on Mediterranean Corals". Co-supervised jointly with Eva Calvo (ICM). Funded by Spanish MICINN. Ascribed to the PhD Program in Oceanography of Universidad de Las Palmas de Gran Canaria.

ONGOING PHD THESES

- Started Dec. 2024 Sinéad Cahill Pasquina, BSc in Biology, PhD thesis on “Evaluating seagrass ecosystems as nature-based solutions against global change”. Co-supervised jointly with Aurora M. Ricart (ICM). Funded by CSIC. Ascribed to the PhD Program in Ecology of the University of Barcelona.
- Started Dec. 2023 Alejandra Sánchez Roda, BSc in Environmental Sciences, PhD thesis on “Paleoreconstructions of pH and pCO₂ in the Southern Ocean over glacial/interglacial timescales using boron isotopes”. Co-supervised jointly with Eva Calvo (ICM). Funded by Spanish MICINN. Ascribed to the PhD Program in Marine Sciences of the Polytechnic University of Catalonia.
- Started Oct. 2020 César Rodríguez, B.Sc. in Geology, PhD thesis on “Records of paleo-pH in the Mediterranean Sea”. Co-supervised jointly with Eva Calvo (ICM). Funded by Spanish MICINN. Ascribed to the PhD Program in Earth Sciences of the University of Barcelona.

DEFENDED PHD THESES

- Jun. 2022 Lucía Quirós-Collazos, B.Sc. in Physics, PhD Thesis “Paleoclimate study of the Pacific Ocean equatorial upwelling during the last 160.000 years through molecular biomarkers”. Supervised by Carles Pelejero and Eva Calvo. PhD in Marine Sciences by the Polytechnic University of Catalonia.
- Feb. 2016 Juancho Movilla, B.Sc. in Biology, PhD Thesis “Effects of Ocean Acidification on Mediterranean Corals”. Supervised by Carles Pelejero and Eva Calvo. PhD in Oceanography by the Universidad of Las Palmas de Gran Canaria.
- Feb. 2016 Elisa F. Guallart, B.Sc. in Biology, PhD Thesis “Spatiotemporal variability of the carbonate system in the North Atlantic Ocean”. Supervised by Carles Pelejero and Fiz F. Pérez. PhD in Oceanography by the Universidad of Las Palmas de Gran Canaria.

DEFENDED MASTER THESES

- Oct. 2018 Sara Cobacho, B.Sc. in Biology, M. Sc. Thesis on “Paleoclimatic reconstruction of the last 420 kyr in the Strait of Sicily”. Co-supervised jointly by Carles Pelejero and Eva Calvo. University of Barcelona, Catalonia, Spain. Ascribed to the M. Sc. Program in Marine Sciences, Oceanography and Marine Environmental Management.
- Oct. 2016 Sara Fuertes, B.Sc. in Biology, M. Sc. Thesis on “Experiments with marine organisms to calibrate proxies of interest in paleoceanography and assess effects from environmental stressors”. Supervised by Carles Pelejero. University of Barcelona, Catalonia, Spain. Ascribed to the M. Sc. Program in Marine Sciences, Oceanography and Marine Environmental Management.
- Sep. 2015 Jorge Prieto, B.Sc. in Biology, M. Sc. Thesis on “An experimental approach to study cold-water corals, with insight on key biogeochemical processes and their potential as recorders of the paleoenvironment”. Supervised by Carles Pelejero. University of Barcelona, Catalonia, Spain. Ascribed to the M. Sc. Program in Marine Sciences, Oceanography and Marine Environmental Management.
- Sep. 2012 Angeles Lafuente, B.Sc. in Biology, M. Sc. Thesis on “Protein and lipid quantification of four Mediterranean cold-water corals in a simulated scenario of acidification”. Co-supervised jointly by Carles Pelejero and Eva Calvo (ICM). University of Barcelona, Catalonia, Spain. Ascribed to the M. Sc. Program in Marine Sciences, Oceanography

and Marine Environmental Management.

- Sep. 2012 Almudena Trapero, B.Sc. in Chemistry, M. Sc. Thesis on “Estudio biométrico estacional de *Emiliania huxleyi* en la bahía de Blanes y su relación con los cambios en la acidez de las aguas”. Co-supervised jointly by Carles Pelejero and Lluïsa Cros (ICM). University of Barcelona, Catalonia, Spain. Ascribed to the M. Sc. Program in Marine Sciences, Oceanography and Marine Environmental Management.
- Dec. 2009 Francesca Iuculano, B. Sc. in Biology, M. Sc. Thesis on “Effects of higher pCO₂ / lower pH on dynamics of marine heterotrophic bacterioplankton”. Co-supervised jointly by Carles Pelejero and Josep Gasol (ICM). University of Trieste, Italy. Ascribed to the M. Sc. Program in Marine Biology of the University of Trieste.
- Jul. 2009 Juancho Movilla, B. Sc. In Biology, M.Sc. Thesis on “Evaluación de la acidificación en el Mediterráneo mediante series temporales de pH y experimentos con corales”. Co-supervised jointly by Carles Pelejero and Eva Calvo (ICM). Institut de Ciències del Mar, CSIC. Ascribed to the PhD Program in Oceanography of the Universidad de Las Palmas de Gran Canaria.

MEMBER OF EXAMINATION BOARDS

- Jul. 2020 PhD thesis, Pablo Rodríguez Ros: “Modelling of isoprene distribution and cycling in the ocean”, Institut de Ciències del Mar, CSIC, ascribed to the PhD program in Marine Sciences of the Universitat Politècnica de Catalunya.
- Nov. 2017 PhD thesis, Òscar Rama Corredor: “Biomarcadors paleoclimàtics a la conca de la Guaiana (Atlàntic tropical occidental)”, Institut de Diagnosi Ambiental i Estudis de l’Aigua, CSIC, ascribed to the PhD program in Marine Sciences of the Universitat Politècnica de Catalunya.
- Mar. 2016 PhD thesis, Carmen Herrero Navarro: “Relaxation models applied to paleoclimate dynamics”, Institut de Ciències del Mar, CSIC, ascribed to the PhD program in Oceanography of the Universidad de Las Palmas de Gran Canaria.
- Jan. 2016 PhD thesis, Leticia Franco Vidal: “Variabilidad estacional del sistema carbonato en un transecto costero del Atlántico templado así como su estudio y relación con el conjunto de cocolitofóridos en un área mediterránea oceánica”, Instituto Español de Oceanografía, IEO, Gijón, ascribed to the PhD program in Biología Aplicada a la Sostenibilidad de los Recursos Naturales of the Universidad de Oviedo.
- Mar. 2015 PhD thesis, Sarah-Jeanne Royer: “Links between dimethylated sulfur and phytoplankton photophysiology in the surface ocean: geographic patterns and short-term variability”, Institut de Ciències del Mar, CSIC, ascribed to the PhD program on Marine Sciences of Universitat de Barcelona.
- Jul. 2012 AEI (Research Accreditation), María de la Fuente, Institut de Ciències del Mar, CSIC and Universidad de las Palmas de Gran Canaria.
- Jul. 2012 AEI (Research Accreditation), Miguel Ángel San Antolín, Institut de Ciències del Mar, CSIC and Universidad de las Palmas de Gran Canaria.
- Jun. 2012 PhD thesis proposal, Melissa Acevedo: “Biología, ecología y ecofisiología de la cubomedusa *Carybdea marsupialis*”, Institut de Ciències del Mar, CSIC, ascribed to the PhD program on Marine Sciences of Universitat Politècnica de Catalunya.
- Feb. 2012 MSc thesis, Carmen Herrero Navarro: “Simulations of glacial/interglacial cycles with simple box-models. The ocean CO₂ source during deglaciations”, Institut de Ciències del Mar, CSIC and Universidad de las Palmas de Gran Canaria.

- Feb. 2012 MSc thesis, Adrián Martínez Asensio: "Calibration of a wind wave hindcast (1958-2008) in the Western Mediterranean using buoy data", Institut de Ciències del Mar, CSIC and Universidad de las Palmas de Gran Canaria.
- Nov. 2009 PhD thesis, Marcos Vázquez Rodríguez: "CO₂ antropogenico en el Atlantico", Instituto de Investigaciones Marinas, CSIC, Universidad de Vigo.
- Jul. 2009 Advanced Studies Degree (DEA), Juancho Movilla: "Evaluación de la acidificación en el Mediterráneo mediante series temporales de pH y experimentos con corales", Institut de Ciències del Mar, CSIC and Universidad de las Palmas de Gran Canaria.
- Sep. 2008 Advanced Studies Degree (DEA), Aránzazu Lana: "Marine biogenic aerosols, their precursors and influence in the clouds microphysics at a global scale", Institut de Ciències del Mar, CSIC, and Universitat Politècnica de Catalunya.
- Jun. 2002 Honors thesis, Elsie Gretton: "Palaeoceanographic Changes Offshore New Caledonia for the Past 140,000 Years", Department of Geology, The Australian National University.

MEMBER OF PhD THESIS PROGRESS MONITORING COMMISSIONS

- 2013 Patricia Povea de Castro, "Teleconnexions Atmosfera-Oceà durant el Pleistocè inferior al Pacífic Equatorial", directed by Isabel Cacho, from Departament d'Estratigrafia, Paleontologia i Geociències Marines of Facultat de Geologia, Universitat de Barcelona.
- 2013 Sara Jeanne Royer, "Evaluación in situ de la modulación de la exposición a la radiació solar por la mezcla superficial en el océano" directed by Rafel Simó, from Institut de Ciències del Mar, CSIC.

SUPPORT OF COMMUNITY SCIENCE

- Dec. 2022 Invited virtual talk "Antropoceno, la nueva época geológica causada por la huella humana; múltiples factores de estrés sobre el medio marino" in the event "Voces Verdes. Encuentro de alternativas para enfrentar el cambio climático", organized by Cooperación Española Cultura / El Salvador and the Spanish Embassy at El Salvador.
- Jul. 2022 Tour through the aquaria facilities at the ICM, with insight on manipulation experiments with cold water corals, for a group of international ERASMUS+ undergraduate students doing a stay in Barcelona hosted by the University of Barcelona.
- Dec. 2020 Lecturer of a class on ocean acidification impacts for students of the Degree in Marine Sciences (fourth year) and the Master Degree on Marine Sciences: Oceanography and Marine Sciences Management of the University of Barcelona.
- Nov. 2020 Talk on the International Space Station at the El Farell School (Elementary, 11 to 12 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- May. 2020 Talk on the job as a scientist at Institut d'Educació Secundària Marta Mata (High School, 12 to 13 years old). Montornès del Vallès, Barcelona.
- Feb. 2020 Lecturer of a theory and practical course on 'Mediterranean ecosystems: biological impacts on marine ecosystems, responses to global warming' for High School and University teachers organized by the Seminari Permanent de Ciències Naturals. Institut de Ciències de l'Educació, UAB, Casa Convalescència de l'Hospital de St. Pau, Barcelona.
- Nov. 2019 Talks and workshops on sundials at the El Farell School (Elementary, 10 to 11 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- Jun. 2019 Invited talk "Examples from a user: Applications in the study of the oceans" in the inauguration of the LIRA – PANTHALASSA clean lab and MC-ICPMS facilities at the

Faculty of Earth Sciences of the University of Barcelona.

- May. 2019 Invited talk "Walter Munk and Wallace Broecker, two giants of oceanography and climatology", together with Emili García, at Institut de Ciències del Mar, CSIC, Barcelona.
- Apr. 2019 Talks and workshops on "Oceans exploration. Diving in a submarine: there is also life in the dark" at the El Farell School for kids (3 to 12 years old, teachers and adults), using the movable replica of submarine JAGO, from Institut de Ciències del Mar. Caldes de Montbui, Barcelona.
- Jan. 2019 Lecturer of a class on paleoceanography and ocean acidification for students of the MSc in Applied Climatology and Media of the Faculty of Geography of University of Barcelona.
- Dec. 2018 Lecturer of a class on ocean acidification impacts for students of the Degree in Marine Sciences (fourth year) of the University of Barcelona.
- Nov. 2018 Talks and workshops on sharks, echinoderms, Water Planet and ocean plasticization at the El Farell School (Elementary, 9 to 11 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- Nov. 2018 Talk on 'Our (ir)responsibilities with Water Planet' at Les Cases dels Mestres with students from Institut d'Educació Secundària Manolo Hugué and Pic del Vent (High School, 15-16 years old), on the occasion of the 'Science Day at Schools'. Caldes de Montbui, Barcelona.
- Nov. 2017 Talks and workshops on changes in state and experiments with dry ice at the El Farell School (Elementary, 7 to 11 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- Jul. 2017 Lecturer of the class 'Oceans turning sour and breathless in the Anthropocene' and supervision of students on the topic "Anthropogenic effect (warming, acidification, deoxygenation, changes in primary production)" in the context of the 2017 edition of the Ramon Margalef Summer Colloquia organized at Institut de Ciències del Mar focused on "Spatial and temporal patterns in physical-biological oceanic processes: from scale interaction to the rise of the living ocean".
- Mar. 2017 Talk and debate on ocean acidification with high capacity students from ALCA Col·legi Jardí (High School, 12-15 years old), Granollers, Barcelona, at Institut de Ciències del Mar, Barcelona.
- Nov. 2016 Talks and workshops on ocean circulation and jellyfish at the El Farell School (Elementary, 5 to 10 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- Oct. 2016 Talk on science and ethics focused on climate change and the oceans at Institut d'Educació Secundària El Sui (High School, 14-15 years old), Cardedeu, Barcelona.
- Oct. 2016 Talk on science and ethics focused on climate change and the oceans at Institut d'Educació Secundària Can Puig (High School, 14-15 years old), Sant Pere de Ribes, Barcelona.
- Jan. 2016 Lecturer of a theory and practice class on ocean acidification in the context of the Master Degree on Marine Sciences: Oceanography and Marine Sciences Management, organized by University of Barcelona.
- Nov. 2015 Talks and workshops on earth sciences, climate change and ocean acidification at the El Farell School (Elementary, 5 to 10 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- Feb. 2015 Lecturer of a theory and practice class on ocean acidification in the context of the Master Degree on Marine Sciences: Oceanography and Marine Sciences Management, organized by University of Barcelona.
- Jan. 2015 Talk on 'The current climate crisis and the geological record' and round table in the context

- of the 15th meeting of environment and earth sciences high school teachers. Cosmocaixa, Barcelona.
- Nov. 2014 Talks and workshops on marine and climate change research at the El Farell School (Preschool and Elementary, 3 to 10 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- May 2014 Invited talk on the pH time-series of Medes Islands at the headquarters of the Parc Natural del Montgrí, les Illes Medes i el Baix Ter, L'Estartit, Girona.
- Mar. 2014 Lecturer of a class on ocean acidification for students of the Degree on Environmental Sciences (fourth year) of the Autonomous University of Barcelona.
- Jan. 2014 Lecturer of a theory and practice class on ocean acidification in the context of the Master Degree on Marine Sciences: Oceanography and Marine Sciences Management, organized by University of Barcelona.
- Nov. 2013 Talk on marine research and ocean acidification at Institut d'Educació Secundària Investigador Blanxart (High School, 14-15 years old), on the occasion of the 'Science Day'. Terrassa, Barcelona.
- Nov. 2013 Talks and workshops on marine research and ocean acidification at the El Farell School (Preschool and Elementary, 3 to 10 years old), on the occasion of the 'Science Day'. Caldes de Montbui, Barcelona.
- Jun. 2013 Informative conference on ocean acidification research and geoengineering for a group of industrial engineers from Barcelona. Institut de Ciències del Mar, CSIC, Barcelona.
- Feb. 2013 Lecturer of several classes on climate variability and ocean acidification in the context of the subject "Chemistry of Marine Systems" included in the Doctorate program on Oceanography organized by the University of Las Palmas de Gran Canaria.
- Jan. 2013 Lecturer of a theory and practice class on ocean acidification in the context of the Master Degree on Marine Sciences: Oceanography and Marine Sciences Management, organized by University of Barcelona.
- Jun. 2012 Jury member of the 'Mostra de Recerca Jove a BCN 2012' award winners, amongst the best research projects of high-school students from Barcelona city. Organized by 'Consorti d'Educació' and 'Institut d'Educació' of Barcelona town hall.
- Feb. 2012 Lecturer of several classes on climate variability and ocean acidification in the context of the subject "Chemistry of Marine Systems" included in the Doctorate program on Oceanography organized by the University of Las Palmas de Gran Canaria.
- Nov. 2011 Organizer of a workshop and display on ocean acidification for high school students at ICM, in the occasion of the Science Week and also commemorating the International Year of Chemistry.
- Jul. 2011 Round of interviews on ocean acidification and the instrumental time-series of L'Estartit in the context of an outreach DVD addressed to high-school students being produced by Visions Unlimited Medien GmbH, Munich, Germany.
- Jul. 2011 Invited conference 'Acidificación del océano, el hermano oculto del calentamiento global' at Caixa Forum, Palma de Mallorca, Spain, in the context of the event "La expedición Malaspina 2010 y las ciencias marinas en España".
- Jun. 2011 Jury member of the 'Mostra de Recerca Jove a BCN 2011' award winners, amongst the best research projects of high-school students from Barcelona city. Organized by 'Consorti d'Educació' and 'Institut d'Educació' of Barcelona town hall.
- Mar. 2011 Conference 'Uns mars que se'ns tornen més àcids, petits canvis poderosos?' at Institut de

Ciencias del Mar.

- Mar. 2011 Invited conference 'Acidificación del océano, el hermano oculto del calentamiento global' at Oceanogràfic de la Ciudad de las Artes y las Ciencias, Valencia, Spain, in the context of the VII CICLO de conferencias "Los Martes del Oceanogràfic".
- Feb. 2011 Lecturer of several classes on climate variability and ocean acidification in the context of the subject "Chemistry of Marine Systems" included in the Doctorate program on Oceanography organized by the University of Las Palmas de Gran Canaria.
- Jun. 2010 Jury member of the 'Mostra de Recerca Jove a BCN 2010' award winners, amongst the best research projects of high-school students from Barcelona city. Organized by 'Consorci d'Educació' and 'Institut d'Educació' of Barcelona town hall.
- May. 2010 Participation in a debate on ocean acidification together with Gwendoline Alston, accompanying the show of the recent movie on this environmental issue titled 'A Sea Change'. Event organized by Angel Cano, from Emisióncero, at La Casa Encendida of Madrid.
- Mar. 2010 Lecturer of several classes on climate variability and ocean acidification in the context of the subject "Chemistry of Marine Systems" included in the Doctorate program on Oceanography organized by the University of Las Palmas de Gran Canaria.
- Feb. 2009 Lecturer of several classes on climate variability and ocean acidification in the context of the subject "Chemistry of Marine Systems" included in the Doctorate program on Oceanography organized by the University of Las Palmas de Gran Canaria.
- Nov. 2008 Invited Conference 'Beyond the greenhouse effect: our oceans' future' at Teatre El Patronat, La Garriga, Barcelona, in the context of the autumn cycle of conferences organized by Aula de la Universitat a l'Abast of Fundació Universitària Martí l'Humà.
- Mar. 2008 Lecturer of several classes on climate variability and ocean acidification in the context of the subject "Chemistry of Marine Systems" included in the Doctorate program on Oceanography organized by the University of Las Palmas de Gran Canaria.
- Mar. 2008 Lecturer of the class "Oceans and seas, sponges of our CO₂ but at a cost" in the context of the XVI Scientific Course "Climate Change, more than an environmental problem" organized by the NGO Mediterrània-CIE and the Universiy Rovira and Virgili, Tarragona.
- Apr. 2006 Several talks at the Public School "La Muntanya" of Aiguafreda, Barcelona, for students of 3rd,4th, 5th and 6th of 'Primària', titled "Investigating the oceans and climate: Has the weather turned crazy?"
- Feb. 2006 Lecturer of the class "Sequestering CO₂. Can we stop the greenhouse effect?" included in the course "11 key questions in climate change" organized by Cosmocaixa, Barcelona.
- Dec. 2006 Invited conference "The progressive acidification of the oceans, today, yesterday and tomorrow" at Institut de Ciències del Mar, CSIC, Barcelona.
- Sep. 2005 Invited conference "Ocean acidification: Present, future and clues from the past" at Research School of Earth Sciences, The Australian National University, Canberra, Australia.
- Sep. 2005 Invited conference "Ocean acidification: Present, future and clues from the past" at the Faculty of Science, University of Wollongong, Wollongong, Australia.
- Jul. 2005 Summer School organized by the Instituto de Investigaciones Marinas, CSIC, Vigo, in the context of the Carbo-Ocean European Project on "Measurement methods for the carbon system and related tracers in sea water". Lecturer of the subject "Paleo-pH techniques".
- May 2005 Lecturer of the class "The anthropogenic acceleration of the carbon cycle, where are we going?" in the context of the doctorate course 764049 "Climate Reconstructions: The marine

record" organized by the Faculty of Geology of the University of Barcelona.

- Mar. 2004 The Australian National University. Lecturer of the subject "The Ocean and the Carbon Cycle" of the course GEOG2016/6016 "Introduction to Greenhouse" organized by the School of Resources, Environment and Society.
- Aug. 2001 33th Catalan Summer University Universitat at Prada de Conflent. Lecturer of the subject "Gaia: the blue planet" from the course "Invisible neighbors: microbial life in the water" organized by Catalan Society of Biology.
- Jan. -Mar. 2000 Cardedeu High School, lecturer of several theory and laboratory classes.
- Nov. 1998 International University Study Center (IUSC), Barcelona. Lecturer of several classes on oil tanker spills management and tensioactives for graduate students.
- Nov. 1996 Universitat Autònoma de Barcelona. Lecturer of a divulgative course on climate change included in a postgraduate course on environment and waste management, organized by Universitat Autònoma de Barcelona and Gentiana, S.A.

PEER REVIEW AND EDITORIAL ACTIVITIES:

- **Peer Review of papers** for a variety of Multidisciplinary, Earth and Marine Science journals including *Science*, *Earth-Science Reviews*, *Earth and Planetary Science Letters*, *Scientific Reports*, *Geophysical Research Letters*, *Geochimica et Cosmochimica Acta*, *Science of the Total Environment*, *Journal of CO₂ Utilization*, *Paleoceanography and Paleoclimatology*, *Chemical Geology*, *Biogeosciences*, *Geochemistry*, *Geophysics*, *Geosystems*, *Marine Geology*, *ICES Journal of Marine Science*, *Climate of the Past*, *Journal of Experimental Marine Biology and Ecology*, *Diversity*, *Global and Planetary Change*, *Palaeogeography*, *Palaeoclimatology*, *Palaeoecology*, *Organic Geochemistry*, *The Holocene*, *Climate Research*, *Anthropocene*, *Continental Shelf Research*, *Geo-Marine Letters*, *ISRN Oceanography*, *Revista de la Sociedad Geológica de España*, *Boletín de la Sociedad Geológica Mexicana*, etc.
- **Peer Review of Book Proposals** for Wiley-Blackwell.
- **Peer Review of Grant Proposals** for the US National Science Foundation, the Spanish Ministry of Economy and Competitiveness, Generalitat de Catalunya, Fundació "La Caixa", Fundación CajaCanarias, the Caribbean Coral Reef Institute, the Marsden Fund of the Royal Society of New Zealand, the Department of Science and Technology of the Government of India, the Fondo para la Investigación Científica y Tecnológica (FONCYT) of Argentina, the KAUST Competitive Research Grant (CRG) program (Saudi Arabia) and the National Science Center, Poland.
- **Peer Review of Postdoctoral Fellowships** from the Spanish Ministry of Economy and Competitiveness and Universitat de les Illes Balears.
- **Peer Review** of the 4th, 5th and 6th Intergovernmental Panel on Climate Change (IPCC) Assessment Report, published in 2007, 2013-2014 and 2021-2022, respectively, the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC), published in 2019, and the First United Nations World Ocean Assessment, published in 2016.
- **Editor** of the scientific journal *ISRN Oceanography* from January 2012 to February 2014
- **Guest Editor** of a special topic on corals under ocean warming and acidification in *Scientia Marina*, 76(2), 2012.

EXPERIENCE IN OCEANOGRAPHIC CRUISES AND FIELDTRIPS ABROAD

- Jul. 2014 Director of a field trip to the Huinay Scientific Field Station in Chile, to collect cold water corals for manipulation experiments and geochemical analyses in Barcelona.
- Jul. 1995 European campaign IMAGES MD/101 on board of the French vessel Marion Dufresne II in the North Atlantic Ocean and Mediterranean Sea.
- Mar. 1996 International campaign PALEOPAC96 on board of the Spanish vessel BIO-HESPÉRIDES in the South eastern Pacific Ocean.

EXPERTISE IN ANALYTICAL TECHNIQUES AND LARGE INFRASTRUCTURES

- Autonomous underway seawater pCO₂ determination using a CO₂-Pro.
- Autonomous underway seawater pH determination using a SAMI-pH.
- Spectrophotometric seawater pH determination.
- Seawater alkalinity determination.
- Multiple Collector Inductively Coupled Plasma Mass Spectrometry (using a Neptune from Finnigan)
- Multiple Collector Thermal Ionisation Mass Spectrometry in Positive as well as Negative modes (Using a Triton from Finnigan).
- Laser Ablation coupled to Inductively Coupled Plasma Mass Spectrometry (Using an ArF 193 nm Laser Ablation Excimer)
- Total organic carbon δ¹³C using an Elemental Analyzer coupled to a Finnigan MAT-252 isotope ratio mass spectrometer
- Pressurised Liquid Extraction
- Microwave Assisted Extraction
- Gas Chromatography with FID and ECD detection
- Gas Chromatography coupled to Mass Spectrometry (Electronic Impact and Chemical Ionisation)
- Lipid extraction from sediment and water samples and cleanup procedures
- Gas Chromatography coupled to Infrared Detection
- Elemental analyses of C and N
- High Performance Liquid Chromatography with UV and Fluorescence detection
- Ionic Exchange Liquid Chromatography

MISCELANEOUS:

❖ Media Release and Outreach:

- April 2022: Interview for Radio El Far, together with Irma Ventayol, (Oficina de Canvi Climàtic i Sostenibilitat de l'Ajuntament de Barcelona), to talk about the recently published Working Group III contribution to the 6th IPCC Assessment Report.

<https://www.youtube.com/watch?v=wHZAhTy-a7E>

- April 2022: Participation in a round table at Institut de Ciències del Mar, CSIC, on "Climate emergency: Debate between scientists and administrations", together with Salvador Samitier (Oficina Catalana del Canvi Climàtic, Generalitat de Catalunya), Irma Ventayol, (Oficina de Canvi Climàtic i Sostenibilitat de l'Ajuntament de Barcelona), Mònica Roca (Cambra de Comerç de Barcelona) and Jesús Carrera (IDAEA-CSIC). This activity was covered by Catalunya Radio and Cadena Ser radios.

<https://www.youtube.com/watch?v=R-HkJWZ0Z-4>

- April 2022: Interview with Radio Nacional de España in Catalan and Spanish, to talk about the recently published Working Group III contribution to the 6th IPCC Assessment Report.
- April 2022: Interview with Pere Bosch for TV3 (Catalan TV) in the program 'Els Matins' to talk about the recently published Working Group III contribution to the 6th IPCC Assessment Report.
<https://www.ccma.cat/tv3/alacarta/els-matins/carles-pelejero-hem-de-baixar-la-corba-demissions-de-co2/video/6152438/>
- December 2021: As a result of the publication of the Sala *et al.* paper in Science of the Total Environment on the effects of the COVID-19 lockdown at a Mediterranean coastal site, numerous releases were produced, mostly in Catalan and Spanish media, including radio interviews (SER, COPE), newspaper articles (e.g. El Punt, Regió 7, La Vanguardia, La República, Diari de Girona) and notes at TV web sites (TV3).
<https://www.ccma.cat/324/el-confinament-va-comportar-temporalment-un-mediterrani-amb-aigues-mes-netes/noticia/3135026/>
- October 2021: Interview for the Spanish online newspaper Vozpopuli on the scarcity of the Certified Reference Materials provided worldwide by Andrew Dickson (Scripps Institution of Oceanography, US).
<https://www.vozpopuli.com/next/agua-mar-dickson.html>. An extract of it was also posted at the program "Hoy empieza todo" with Ángel Carmona of the Spanish Radio3 (<https://www.rtve.es/play/audios/hoy-empieza-todo-con-angel-carmona/rodrigo-cuevas-se-comprado-teatro-agua-mas-cara-mundo-eme-dj-20-10-2021/6145840/>).
- July 2021: Outreach note at ICM News on "What do marine sediments tell us about the Earth's climate?".
<https://www.icm.csic.es/ca/noticia/que-ens-expliquen-els-sediments-del-fons-del-mar-sobre-el-clima-de-la-terra>
- June 2021: Interview with Sean Holman from the online Canadian news magazine The Tyee to fact check climate skeptic Patrick Moore. <https://thetyee.ca/Analysis/2021/06/04/Fact-Checking-Patrick-Moore-Climate-Skeptic/>
- March 2021: Note at the Catalan online newspaper Vilaweb on our paper published at *Mètode Science Studies Journal*. <https://www.vilaweb.cat/noticies/mes-enlla-de-lescalfament-global/>
- November 2019: Interview in Radio Exterior (Spanish Radio) to talk about our publication in *Nature Geoscience* on the varied contribution of the Southern Ocean to the deglacial atmospheric CO₂ rise.
(http://mvod.lvl.rtve.es/resources/TE_SMARCAE/mp3/9/0/1573641759309.mp3).
- October 2019: As a result of the publication of a *Nature Geoscience* paper on the Southern Ocean role as a source/sink of CO₂, several media releases were produced including, amongst others notes at TV3 (Catalan TV; <https://www.ccma.cat/324/locea-artic-pot-deixar-de-tenir-el-seu-important-paper-de-regulador-del-clima/noticia/2956281/>) and the newspaper La Vanguardia (<https://www.lavanguardia.com/vida/20191022/471143356012/el-oceano-austral-se-convirtio-en-fuente-de-co2-al-final-de-la-desglaciacion-hace-12000-anos.html>).
- September 2019: Interview with Lúdia Heredia for TV3 (Catalan TV) in the program 'Els Matins' to talk about the recently published IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC). (<https://www.ccma.cat/tv3/alacarta/els-matins/la-pujada-del-nivell-del-mar-desplacara-milions-de-persones/video/5925366/>).
- November 2018: Interview with Frederic Pahisa for *betevé* (Barcelona TV) to talk about ocean acidification in the program 'Climatic Shock'. (<https://beteve.cat/contaminacio-barcelona-canvi-climatic>).

- January 2017: Briefing in the Catalan newspaper El Periódico, in relation to the publication of the Third Report on Climate Change in Catalonia. (<http://www.elperiodico.cat/ca/medi-ambient/20170130/sectors-mes-afectats-canvi-climatic-catalunya-5774660>)
- November 2016: Interview for a TV program produced by El Vallès Educa, shown at Canal Terrassa TV and Vallès Oriental TV, on the 'Science Day' at primary schools.
- April 2016: Interview with Valeria Aubareda for a program at Catalunya Informació radio to talk about the disastrous 2016 coral bleaching in the Great Barrier Reef.
- January 2016: As a result of the publication of a *Nature Climate Change* paper on marine bacteria sensitivity to human-induced ocean acidification, several media releases were produced, including notes at the newspapers El Periódico, Eldiario, Diari de Girona, Regió 7, amongst others.
- February 2015: Interview in the program 'Españoles en la mar' of Radio Exterior (Radio Nacional de España, Spanish Radio) to talk about ocean acidification.
- April 2014: Interview with Alex Renton for the journal Newsweek during the preparation of the article "The Disaster We've Wrought on the World's Oceans May Be Irrevocable" (<http://www.newsweek.com/2014/07/11/disaster-weve-wrought-worlds-oceans-may-be-irrevocable-256962.html>). This article was also published in The Independent under the title "Can scientists save the world's sea life from "ocean acidification"?" (<http://www.independent.co.uk/environment/nature/can-scientists-save-the-worlds-sea-life-from-ocean-acidification-9596053.html>)
- December 2013: Interview for the Spanish journal ALFA (Consejo de Seguridad Nuclear) during the preparation of the article "Gastritis marina. La absorción de dióxido de carbono atmosférico por los océanos está incrementando su acidez y amenaza sus ecosistemas" (ALFA 23, I, 2014).
- May 2013: Note at the European Commission Science for Environment Policy News Alert featuring our research on the effects of acidification in the Mediterranean Red Coral: Science for Environment Policy, Issue 326, A bleak future for Mediterranean coral as oceans become more acidic.
- October 2012: Interview for the Spanish newspaper La Razón on recent research regarding the 'Triassic heat wave' (<http://www.larazon.es/noticia/6870-la-ola-de-calor-del-triasico>).
- August 2012: Outreach article in the Spanish newspaper La Vanguardia on ocean acidification titled "S'acidifica el mar?".
- March 2012: Interview in the program 'Connexió Barcelona' of BTV (catalan TV) to talk about ocean acidification.
- March 2012: Interviews for the Spanish newspapers El Periódico and ARA, for the news agency EFE-Verde, and for the digital newspaper ARN Digital regarding the paper 'The geological record of ocean acidification' recently published in Science.
- February 2012: Interview for the news agency Red de Ciencia y Desarrollo (www.scidev.net) regarding ocean acidification.
- March 2011: Interview in the program 'Españoles en la mar' of Radio Exterior (Radio Nacional de España, Spanish Radio) to talk about ocean acidification.

- March 2011: Briefing in the Spanish newspaper *El Periòdic*, on the occasion of a talk on ocean acidification given at L'Oceanogràfic de la Ciudad de las Artes y las Ciencias, Valencia, Spain.
- Nov 2010: Interview for Global Talent News on the diminishing capacity of natural reservoirs to sequester atmospheric CO₂ (<http://www.ca.globaltalentnews.com/actualitat/reportatges/5253/Disminueix-la-captacio-natural-de-CO2.html>).
- May 2010: Interview in the program 'Partiendo de Cero' of 'Onda Cero' (Spanish Radio) to talk about sea level changes and floods in the Middle East during the Holocene.
- April 2010: Interview in the program 'Telenotícies Migdia' of TV3 (Catalan TV) to talk about ocean acidification.
- April 2010: Interview with Joan Barril in the program 'El Cafè de la República' of Catalunya Ràdio (Catalan Radio) to talk about ocean acidification.
- April 2010: New broadcast in the program 'Catalunya Vespre' of Catalunya Ràdio (Catalan Radio) on our paper published in *Trends in Ecology and Evolution*.
- April 2010: Interview in the program 'Noticiari de les 2PM' of COM Ràdio (Catalan Radio) to talk about ocean acidification.
- April 2010: Interview with Ariadna Castillo in the program 'Fes Natura' of Ràdio El Prat (Catalan Radio) to talk about ocean acidification.
- April 2010: As a result of the publication of a paper in *Trends in Ecology and Evolution*, on paleo-perspectives of the ocean acidification issue, numerous media releases were produced. These resulted in more than 50 contributions to means of communication from Spain, U.K., Italy, Hungary, France, US, Australia, Mexico, Venezuela, Chile and India, including TV and radio interviews, newspaper articles, and Internet notes.
- April 2009: Interview in the program 'A hombros de gigantes' of Radio Nacional de España Radio 5 Todo Noticias to talk about the effects of climate change in sea level and in marine organisms.
- December 2007: Interview and participation in the program 'Efectes Positius' of Ràdio 4 (Catalan Radio) devoted to the alarming minimum recorded in Arctic summer sea ice for year 2007.
- October 2007: Interview and participation in the program 'Les Agendes' of Ràdio 4 (Catalan Radio) devoted to the Nobel Price Award given to the IPCC and Al Gore.
- April 2007: Participation in the Report "Els efectes del canvi climàtic en els oceans" of the program "Thalassa" of Canal 33 (Catalan TV).
- February 2007: Participation in the Debate on Climate Change "Set Contes i un Malson" of the program "Millennium" of Canal 33 (Catalan TV).
- November 2006: Report "Oceans més acids" in the program "El Medi Ambient" of TV3 (Catalan TV).
- October - November 2005: As a result of the publication of a *Science* paper on a reconstruction of seawater acidity for the last 300 years, several media releases were produced. These resulted in approximately 20 contributions to means of communication from Spain, U.K., US, Australia and Mexico including newspaper articles, radio interviews and Internet notes.

❖ **Research Groups and Scientific Societies:**

- Member of the Experts Group on Climate Change in Catalonia, and invited author in the Second Report on Climate Change in Catalonia (published in 2010) and the Third Report on Climate Change in Catalonia (published in 2016).
- Member and Coordinator of the Research Group on Marine Biogeochemistry and Global Change, recognized and funded by the Catalan Government.