

CURRICULUM VITAE

Identity

Name: Dulce da Silva Oliveira

Birthdate: 27/02/1983

Citizenship: Portuguese

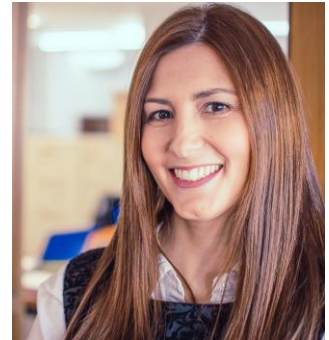
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Present position

May 2019 - to present: Junior researcher (CEECIND/02208/2017) at Centro de Ciências do Mar do Algarve (CCMAR) and Instituto Português do Mar e da Atmosfera (IPMA), PT.

Education

- May 2017: Ph.D. in Science and Environment, specialty in Marine Sedimentology and Paleoclimate, Bordeaux University (France).
- June 2012: M.Sc. in Sea Sciences, Lisbon University (Portugal). Final grade 18/20.
- December 2009: Post-graduation in food safety and quality management, Lusófona University (Portugal). Final grade 18/20.
- August 2006: 1st Degree in Marine Biology and Biotechnology, Instituto Politécnico de Leiria (Portugal). Final grade 15/20.

Professional experience

- February 2018-April 2019: Post-Doc research grant in the framework of the project ULTimATum "Understanding past climatic instabilities in the North Atlantic Region", at Instituto Português do Mar e da Atmosfera (IPMA), PT.
- September 2017-December 2017: Post-Doc position at UMR-CNRS 5805 EPOC (Environnements et Paléoenvironnements Océaniques) - Bordeaux University (FR).
- April 2013-May 2017: Ph.D. fellowship from the Portuguese Science Foundation (FCT) with the research theme "Understanding warm periods within and after the Mid Pleistocene Transition (MIS 31 and 11) in the Iberian Peninsula". Host institutions: EPHE, EPOC-Bordeaux University (FR), Centro de Ciências do Mar (CCMAR)-Algarve University (PT), Dom Luiz Institute (IDL)-Lisbon University (PT), and Instituto Português do Mar e da Atmosfera (IPMA), PT. Supervision: Dr. Maria Sánchez Goñi (FR), Dr. Ricardo Trigo (PT) and Dr. Filipa Naughton (PT).
- September 2010-March 2013: Research Fellow (BI) in the project "Holocene climatic variability in the North Atlantic and adjacent landmasses: land-sea direct correlation-CLIMHOL, PTDC/AAC-CLI/100157/2008" at UGM - LNEG (Unidade de Geologia Marinha - Laboratório Nacional de Energia e Geologia), PT.
- March 2009-August 2010: New product development of Continente private-label brand. Mérieux NutriSciences Corporation (former Silliker Group Corporation), Sonae MC, Lisbon, PT.

- November 2006-March 2009: Quality Assurance/Quality Control technician of Continente private-label products at Modis Azambuja – Modelo e Continente Hipermercados S.A., Lisbon, PT.
- April 2006-July 2006: Aquaculture. Hatchery production and farming of sea bream (*Sparus aurata*). Farming of sea bass (*Dicentrarchus labrax*). Timar - Culturas em Água, Lda. Zimbral, Tavira, PT.
- August 2005-December 2005: Microbiological Analysis Laboratory - Food Microbiology Technician at the Microbiology Laboratory, Univates University, Rio Grande do Sul, BR.

Awards

- 2018: City of Leiria Silver Medal for Scientific Achievements.
- 2018: L'Oréal Portugal Medal of Honour for Women in Science from L'Oréal, Portuguese Science Foundation (FCT) and UNESCO. (15 000 €)
- 2017: Best oral communication. MedPalyno 2017. Mediterranean Palynology Symposium, 4-6 September 2017, Barcelona, Spain. (150 €)
- 2005: Outstanding student scholarship from the Instituto Politécnico de Leiria (IPL), Portugal, to participate in an exchange program of Biological Sciences at the University of Univates, Brazil, during six months. (1800 R\$)

Travel and accommodation awards

- 2019: XX Congress of the International Union for Quaternary Research (INQUA), 25-31 July, 2019, Dublin, Ireland. INQUA funding (500 €) and Association Française pour l'Etude du Quaternaire - AFEQ-CNF INQUA (150 €)
- 2019: Mediterranean Palynology Symposium (MedPalyno) 2019, 4-6 September 2017, Barcelona, France. Association des Palynologues de Langue - L'APLF (200 €).
- 2018: European Geosciences Union (EGU) General Assembly, 8–13 April 2018, Vienna, Austria (200 €).
- 2017: MedPalyno 2017, 4-6 September 2017, Barcelona, Spain. AFEQ-CNF INQUA (250 €) and L'APLF (200 €).
- 2017: PAGES 5th Open Science Meeting, 9-13 May 2017, Zaragoza, Spain. PAGES (250 €) and AFEQ-CNF INQUA (250 €).
- 2015: XIX INQUA Congress, Quaternary Perspectives on Climate Change, Natural Hazards and Civilization, 27 July - 2 August 2015, Nagoya, Japan. INQUA funding (1500 €) and L'APLF (250 €).
- 2014: European Consortium for Ocean Research Drilling (ECORD) scholarship for outstanding young scientists (960 €) to attend the 11th Urbino Summer School in Paleoclimatology, 9-25 July 2014, University of Urbino, Italy.

Participation in national and international research projects

9. 2018-2021: Portuguese 2020 research project Warm Worlds (PTDC/CTA-GEO/29897/2017) "Understand the warm periods in the last 1.5 Ma", led by Teresa Rodrigues (IPMA, PT).
8. 2018-2020: FCT R&D project HOLMODRIVE (SAICT-45-2017-02) "North Atlantic Atmospheric Patterns influence on Western Iberia Climate: From the Lateglacial to the Present" coordinated by Armand Hernández (IDL and Lisbon University, PT).

7. 2015-2020: Portuguese FCT project ULTImATum (IF/01489/2015) "Understanding past climatic instabilities in the North Atlantic Region" led by Filipa Naughton (IPMA, PT).
5. 2015-2016: French project AO-INSU/LEFE PuLSE "Understanding Paleoenvironmental instabilities in the Southwestern European region" , led by Stephanie Desprat (EPHE, EPOC-Bordeaux University, FR).
4. 2015-2017: South Korean and French project PHC STAR MEDKO "Abrupt climate events in the past Mediterranean and Korean basins", University of Bordeaux (FR) and University of Hanyang (South Korea), led by Maria Fernanda Sanchez Goñi (EPHE, EPOC-Bordeaux University, FR) and Shin Kyoung-Hoon (Hanyang University).
3. 2013-2016: French project INSU-IMAGO WarmClim "Understanding warm periods by integrating North Atlantic land-sea-ice palaeoclimatic records with inverse modelling", led by Maria Fernanda Sanchez Goñi (EPHE, EPOC-Bordeaux University, FR).
2. 2010-2013: Portuguese FCT project CLIMHOL (PTDC/AAC-CLI/100157/2008) "Holocene climatic variability in the North Atlantic and adjacent landmasses: land-sea direct correlation", led by Filipa Naughton (IPMA, PT).
1. 2008-2011: Spanish and Portuguese project "Programa de cooperação transfronteiriça Portugal-Espanha: NATURA MIÑO-MINHO - Valorización de los recursos naturales de la cuenca hidrográfica del Miño-Minho", led by Fátima Abrantes (IPMA, PT).

Areas of expertise

Marine palynology; Palaeoecology; Quaternary palaeoclimatology; European, North American vegetation history; Orbital and millennial-scale climate variability.

My specialist area of interest is the detection and characterization of vegetation and climate changes in the North Atlantic region (Iberian and French margins and eastern North America coast) during past warm periods using vegetation records from Quaternary marine archives. Over the course of my Ph.D. and post-doctoral research I have developed extensive experience in all aspects of marine palynology, including (i) a strong botanical knowledge of the European and North American flora, (ii) specialisation in the identification of pollen and spores from these regions, (iii) the interpretation of pollen data including relevant techniques of statistical analysis (numerical zonation, ordination, application of transfer functions for climate reconstruction, and (iv) presentation of pollen results through participation in international conferences and publication in international journals. Importantly, my research has also provided critical experience of the study and interpretation of pollen as part of team-based multi-proxy investigations of marine sediment sequences. The analysis of pollen in marine sediments is a vital component of multi-proxy investigations, not only providing continuous, high-resolution records of past vegetation and biodiversity changes but also enabling direct land-sea correlation of climate event impacts. The direct comparison between terrestrial and marine climate signals from the same record permit the direct correlation of marine and terrestrial climate signals which is critical for evaluating temporal relationships (leads and lags) between terrestrial and marine environmental change. Moreover, as vegetation at the regional scale closely tracks climatic changes related to atmospheric circulation, marine pollen records also provide insights into atmospheric organization, precipitation regimes and wind patterns.

Specific skills:

- Drilling, core description, sampling;
- Microfossil extraction for paleoecological analyses (pollen, spores);
- Pollen analysis;
- Analytical software: R, PSIMPOOL and SPSS;
- Radiocarbon calibration (Calib program);
- Age-depth modelling (R clam software);
- Interpretation of marine proxy data (Biomarkers, planktonic foraminifera assemblages and isotopes, benthic foraminifera isotopes, etc.).

Research interests

- Long-term and millennial-scale environmental changes in Europe and North America during the present interglacial and last deglaciation, with foci on the Iberian Peninsula, SW France and Cape Hatteras region.
- Intensity and climate variability of key past warm periods considered as analogues for the projected global warming, namely Marine Isotopic Stages (MIS) 11 and 31, in regions highly sensitive to climate changes such as the Mediterranean.
- Forcing mechanisms and regional expression of the Holocene and its best orbital interglacial analogues, MIS 11c and MIS 19c, on SW Europe's climate and vegetation as revealed by comparison of proxy-based reconstructions and climate model experiments.
- Climate and vegetation signature in SW Iberia during the cool interglacial MIS 13.
- Indian vegetation and Indian Summer Monsoon response to climate variability during the past one million years.

Publications

Theses

- May 2017: Ph.D. thesis: Understanding warm periods within and after the Mid Pleistocene Transition (MIS 31 and 11) in the Iberian Peninsula. 292 p. (<http://www.theses.fr/2017BORD0598>).
- June 2012: M.Sc. thesis: Vegetation response to Holocene climate variability in south-western Europe. 159 p. (<http://repositorio.ul.pt/handle/10451/8623>).

Peer-review articles

- 10.** Naughton F., Costas S., Gomes S.D., Rodrigues T., Desprat S., Bronk-Ramsey C., Salgueiro E., Sanchez Goñi M.F., Renssen H., Trigo, R., Oliveira, D., Voelker A.H.L., Abrantes F., Coupled ocean and atmospheric changes during Greenland Stadial 1 in southwestern Europe. Under review at Quaternary Science Reviews, 212, 108-120.
- 9.** Oliveira, D., Desprat, S., Q. Yin, Naughton, F., Trigo, R., Rodrigues, T., Abrantes, F., Sánchez Goñi, M.F., 2018. Unraveling the forcings controlling the vegetation and climate of the best orbital analogues for the present interglacial in SW Europe. Climate Dynamics, 51: 667. <https://doi.org/10.1007/s00382-017-3948-7>.
- 8.** Sánchez Goñi, M.F., Desprat, S., Fletcher, W.J., Morales-Molino, C., Naughton, F., Oliveira, D., Urrego, D., Zorzi, C., 2018. Pollen from the Deep-Sea: A Breakthrough in the Mystery of the Ice Ages. Front. Plant Sci. 9:38. doi: 10.3389/fpls.2018.00038.

7. Abrantes, F., Rodrigues, T., Rufino, M., Salgueiro, E., Oliveira, D., Gomes, S., Oliveira, P., Costa, A., Mil-Homens, M., Drago, T., Naughton, F., 2017. The Climate of the Common Era off the Iberian Peninsula. *Climate of the Past*, 13, 1901-1918. <https://doi.org/10.5194/cp-13-1901-2017>.
6. Desprat, S., Naughton, F., Oliveira, D., Sánchez Goñi, M.F., 2017. L'étude du pollen des séquences sédimentaires marines pour la compréhension du climat: l'exemple des périodes chaudes passées. «Pollen in marine sedimentary archives, a key for climate studies: the example of past warm periods.» *Quaternaire*, 28(2), 259-269, doi: 10.4000/quaternaire.8102.
5. Oliveira, D., Sanchez Goñi, M.F., Naughton, F., Polanco-Martínez, J.M, Jimenez-Espejo, F.J., Grimalt, J.O., Martrat, B., Voelker, A.H.L., Trigo, R., Hodell, D., Abrantes, F., Desprat, S., 2017. Unexpected weak seasonal climate in the western Mediterranean region in response to MIS 31, a high-insolation forced interglacial. *Quaternary Science Reviews* 161, 1–17. doi: 10.1016/j.quascirev.2017.02.013.
4. Oliveira, D., Desprat, S., Rodrigues, T., Naughton, F., Hodell, D., Trigo, R., Rufino, M., Lopes, C., Abrantes, F., Sánchez Goñi, M.F., 2016. The complexity of millennial-scale variability in southwestern Europe during MIS 11. *Quaternary Research* 86, 373-387. doi:10.1016/j.yqres.2016.09.002.
3. Sánchez Goñi, M.F., Llave, E., Oliveira, D., Naughton, F., Desprat, S., Ducassou, E., Hodell, D. A., Hernández-Molina, F.J., 2016. Climate changes in south western Iberia and Mediterranean Outflow variations during two contrasting cycles of the last 1 Myrs: MIS 31– MIS 30 and MIS 12– MIS 11. *Global and Planetary Change* 136, 18-29. doi: 10.1016/j.gloplacha.2015.11.006.
2. Eynaud, F., Londeix, L., Penaud, A., Sánchez Goñi, M.F., Oliveira, D., Desprat, S., and Turon, J.-L., 2016. Dinoflagellate cyst population evolution throughout past interglacials: Key features along the Iberian margin and insights from the new IODP Site U1385 (Exp 339). *Global and Planetary Change* 136, 52-64. doi: 10.1016/j.gloplacha.2015.12.004.
1. Naughton, F., Keigwin, L., Peteet, D., Costas, S., Desprat, S., Oliveira, D., de Vernal, A., Voelker, A., Abrantes, F., 2015. A 12,000-yr pollen record off Cape Hatteras — Pollen sources and mechanisms of pollen dispersion. *Marine Geology* 367, 118-129. doi:10.1016/j.margeo.2015.06.003.

Scientific Reports

Mil-Homens M, Naughton F, Costa AM, Oliveira D, Santos C, Rodrigues T, Abrantes F, Fonseca S, Serrano R (2012). Characterization of DIVA09 – a gravity core from the Minho shelf. Project NATURA MIÑO-MINHO “Valorización de los recursos de la cuenca hidrográfica del MIÑO-MINHO” Activity 1 report – Part 2”. Unidade de Geologia Marinha – LNEG. Relatório Técnico INGMARDEP 05/2012. 47p.

Other publications

- 2019: Honored in the book "Mulheres na Ciência" by "Ciência Viva", 2019. <http://www.cienciaviva.pt/mulheresnaciencia/index.asp>
- 2018: Book from Inés Garbayo, María Cuaresma and Filomena Fonseca “Visualización de la actividad científica femenina en la Eurorregión Algarve-Andalucía”. ISBN: 9788494347160. 2018, 170 pp. https://www.uhu.es/fexp/difusion/docs/ciencia_en_femenino_2.pdf. Oliveira, D. contribution on page 43.

Conference presentations

Oral communications (as a first author)

9. Oliveira D, Desprat S, Naughton F, Rodrigues T, Alonso-García M, Joan O. Grimalt, Abrantes F, Sánchez Goñi MF. 2019. Climate and vegetation imprint of the cool MIS 13 in the Iberian Peninsula. Mediterranean Palynology Symposium 2019, Bordeaux, France, 9-11 July, 2019. (Accepted)
8. Oliveira D, Desprat S, Q Yin, Naughton F, Trigo R, Rodrigues T, Abrantes F, Sánchez Goñi MF. Western Mediterranean vegetation and climate dynamics during the best astronomical analogues of the Holocene: evidence from a model–data comparison. European Geosciences Union (EGU) General Assembly, 8–13 April 2018, Vienna, Austria. EGU General Assembly Conference Abstracts (Vol. 20, p. 12077). EGU2018-12077.
7. Oliveira D, Desprat S, Q Yin, Naughton F, Trigo R, Rodrigues T, Abrantes F, Sánchez Goñi MF (2017). Unraveling the forcings controlling the magnitude and climate variability of the best orbital analogues for the present interglacial in SW Europe. In: De Linares C. & Belmonte J. (Eds.). 2017. Mediterranean Palynology Symposium 2017. Abstracts Book. Barcelona, Spain. pp. 30. ISBN 978-84-945378-8-2.
6. Oliveira D, Sanchez Goñi MF, Naughton F, Polanco-Martínez JM, Jimenez-Espejo FJ, Grimalt JO, Martrat B, Voelker AHL, Trigo R, Hodell D, Abrantes F, Desprat S (2017). Unexpected weak seasonal climate in the western Mediterranean region in response to MIS 31, a high-insolation forced interglacial. PAGES 5th Open Science Meeting, 9-13 May 2017, Zaragoza, Spain.
5. Oliveira D, Desprat S, Rodrigues T, Naughton F, Hodell D, Trigo R, Abrantes F, Sánchez Goñi MF (2016). The diversity of millennial-scale cooling events in southwestern Europe during MIS 11. 2nd APOCEAN - Associação Portuguesa de Oceanografia – Meeting, 6-7 May 2016, S. Pedro de Moel, Portugal.
4. Oliveira D, Desprat S, Rodrigues T, Naughton F, Hodell D, Trigo R, Abrantes F, Sánchez Goñi MF (2016). Land–sea climatic variability during MIS 11 in southwestern Europe: Evidence from IODP Site U1385 (Shackleton Site) (2016). Colloque Q10 AFEQ CNF-INQUA 2016: Paléoclimats et environnements quaternaires, quoi de neuf sous le soleil? 16-18 February 2016, Bordeaux University, France.
3. Oliveira D, Desprat S, Rodrigues T, Naughton F, Hodell D, Trigo R, Abrantes F, Sánchez Goñi M. (2015). New insights on MIS 11 climate changes at millennial time scale in southwestern Europe. XIX INQUA Congress, Quaternary Perspectives on Climate Change, Natural Hazards and Civilization, 27 July - 2 August 2015, Nagoya, Japan.
2. Oliveira D, Naughton F, Trigo R (2013). Holocene climate variability in the southeastern Bay of Biscay. CLIMHOL Workshop: Holocene climatic variability in the North Atlantic and adjacent landmasses: land-sea direct correlation. IPMA (Instituto do Mar e da Atmosfera), 25 - 26 September 2013, Lisbon, Portugal.
1. Oliveira D, Naughton F, Trigo R, Rodrigues T, Jouanneau JM, Weber O (2012). Holocene climate variability in south-western France. European Geosciences Union (EGU) General Assembly, Vienna, Austria. Geophysical Research Abstracts, Vol. 14, EGU2012-10699, 2012.

Posters (as a first author)

13. Oliveira D, Desprat S, Naughton F, Rodrigues T, Alonso-García M, Joan O. Grimalt, Abrantes F, Sánchez Goñi MF. 2019. Climate change and vegetation dynamics during the lukewarm interglacial MIS 13 in SW Europe. 20th Congress of the International Union for Quaternary Research (INQUA), Dublin, Ireland, 25-31 July, 2019. (Accepted)

- 14.** Oliveira D, Naughton F, Desprat S, Rodrigues T, Grimalt J, Martrat B, Voelker A, Trigo R, Polanco-Martínez J, Hodell D, Abrantes F, Sánchez Goñi MF. The Iberian Peninsula in a warmer world: learning from Quaternary super-interglacials. Encontro de Oceanografía 2019, Peniche, 24-25th May, 2019
- 12.** Oliveira D, Sanchez Goñi MF, Naughton F, Polanco-Martínez JM, Jimenez-Espejo FJ, Grimalt JO, Martrat B, Voelker AHL, Trigo R, Hodell D, Abrantes F, Desprat S. Orbital parameters controlling the western Iberian vegetation and climate during the Middle Pleistocene Transition: evidence from the extreme interglacial MIS 31. European Geosciences Union (EGU) General Assembly, 8–13 April 2018, Vienna, Austria. EGU2018-19826. General Assembly Conference Abstracts (Vol. 20, p. 19826).
- 11.** Oliveira D, Sanchez Goñi MF, Naughton F, Polanco-Martínez JM, Jimenez-Espejo FJ, Grimalt JO, Martrat B, Voelker AHL, Trigo R, Hodell D, Abrantes F, Desprat S (2017). MIS 31, a globally super interglacial? Insights from a new high-resolution direct land-sea comparison from the southwestern European margin. In: De Linares C. & Belmonte J. (Eds.). 2017. Mediterranean Palynology Symposium 2017. Abstracts Book. Barcelona, Spain. pp. 30. ISBN 978-84-945378-8-2.
- 10.** Oliveira D, Sanchez Goñi MF, Naughton F, Polanco-Martínez JM, Jimenez-Espejo FJ, Grimalt JO, Martrat B, Voelker AHL, Trigo R, Hodell D, Abrantes F, Desprat S (2017). Unraveling western Mediterranean vegetation and climate dynamics during the super interglacial MIS 31. Ciência 2017 - Science and Technology in Portugal Meeting, 3-5 July 2017, Lisboa Congress Centre, Portugal.
- 9.** Oliveira D, Desprat S, Rodrigues T, Naughton F, Hodell D, Trigo R, Abrantes F, Sanchez Goñi MF (2017). The complexity of millennial-scale cooling events in SW Europe during MIS 11. PAGES 5th Open Science Meeting, 9-13 May 2017, Zaragoza, Spain.
- 8.** Oliveira D, Desprat S, Rodrigues T, Naughton F, Hodell D, Trigo R, Abrantes F, Sánchez Goñi MF (2016). The diversity of millennial-scale variability in southwestern Europe during MIS 11. Ciência 2016 - Science and Technology in Portugal Meeting, 4-6 July 2016, Lisboa Congress Centre, Portugal.
- 7.** Oliveira D, Sánchez Goñi MF, Naughton F, Desprat S, Hodell DA, Trigo R, Abrantes F (2016). Vegetation and climatic changes during MIS 31 in southwestern Europe. 2nd APOCEAN - Associação Portuguesa de Oceanografia – Meeting, 6-7 May 2016, S. Pedro de Moel, Portugal.
- 6.** Oliveira D, Desprat S, Rodrigues T, Naughton F, Hodell D, Trigo R, Abrantes F, Sánchez Goñi MF (2015). Marine Isotope Stages 11-12 direct land-sea comparison from the Shackleton Site U1385, IODP Expedition 339. IODP (International Ocean Discovery Program)/ECORD (European Consortium for Ocean Drilling) Portugal day, 3 November 2015, Pavilhão do Conhecimento - Ciência Viva, Lisbon, Portugal.
- 5.** Oliveira D, Sánchez Goñi MF, Naughton F, Hodell D, Rodrigues T, Daniau AL, Eynaud F, Trigo R, Abrantes F, IODP Expedition 339 Scientists Team (2014). Understanding MIS 11 by integrating land-sea-ice records from the Shackleton site (IODP 1385, SW Iberian margin). 11th Urbino Summer School in Paleoclimatology (USSP), 9-25 July 2014, University of Urbino, Italy.
- 4.** Oliveira D, Rodrigues T, Desprat S, Naughton F, Hodell D, Daniau AL, Eynaud F, Trigo R, Abrantes F, Sánchez Goñi MF (2014). Revealing MIS 11 climatic variability in the southwestern Iberian margin: direct land-sea comparison. IODP Exp. 339 2nd post-cruise meeting, 4-6 June 2014, Tarifa, Spain.
- 3.** Oliveira D, Sánchez Goñi MF, Naughton F, Hodell D, Rodrigues T, Daniau AL, Eynaud F, Trigo R, Abrantes F, IODP Expedition 339 Scientists Team (2014). Understanding MIS 11 by integrating land-sea-ice records from the Shackleton site (IODP 1385, SW Iberian margin), Geophysical Research Abstracts, Vol. 16, EGU2014-13192, 27 April – 2 May 2014, EGU General Assembly, Vienna, Austria.

2. Oliveira D, Naughton F, Trigo R, Abrantes F, Rodrigues T, Voelker A (2014). The role of blocking events during the 8.2. ka event over the mid-latitudes of the eastern North Atlantic region. 1st APOCEAN - Associação Portuguesa de Oceanografia – Meeting, 21-22 March 2014, Lisbon, Portugal.

1. Oliveira D, Naughton, F., Trigo, R., Abrantes, F., Rodrigues, T., Voelker, A (2012). The role of blocking events during the 8.2. ka event over the mid-latitudes of the eastern North Atlantic region. 7th Symposium on the Atlantic Iberian Margin (MIA 2012), Lisbon, Portugal.

Presentations as a co-author

31. T. Rodrigues; C. Gonçalves; M. Padilha; M. Alonso-Garcia; D. Oliveira; J.O. Grimalt; F. Abrantes; What can Past Interglacials Climate and Oceanographic Variability teach us about the ongoing climate warming?; 20th INQUA , 25th and 31st July Dublin Ireland, 2019. (Poster accepted)

30. Gomes, S.D., Fletcher, W., Rodrigues, T. , Oliveira, D., Sanchez-Goni, M. F., Abrantes, F., Stone, A., Naughton, F . Rising atmospheric CO₂ concentrations: the overlooked factor promoting forest development in southwestern Europe across Termination I?. 20th Congress of the International Union for Quaternary Research (INQUA), Dublin, Ireland, 25-31 July, 2019. (Poster accepted)

29. Naughton, F., Oliveira, D., Desprat, S., Rodrigues, T., Morales Molino, C., Hodell, D., Alonso-Garcia, M., Abrantes, F., Sanchéz-Goñi, M.F. 2019. Climate-driven vegetation changes during MIS 12 and MIS 16 in southwestern Europe. 20th Congress of the International Union for Quaternary Research (INQUA), Dublin, Ireland, 25-31 July, 2019. (Oral presentation accepted)

28. Desprat S, Clément C, Oliveira D, Anupama K, Prasad S, Zorzi C, Lauterbach S, Andersen N, Thomas Blanz T, Ralph Schneider R, Martinez P. 2019. Response of the Indian vegetation and monsoon rainfall to the current and last interglacial warmings in the Mahanadi river region. 20th Congress of the International Union for Quaternary Research (INQUA), Dublin, Ireland, 25-31 July, 2019. (Poster accepted)

27. Sánchez Goñi, M.F., Desprat, S., Morales del Molino, C., Naughton, F., Oliveira, D., Ferretti, P., Polanco-Martinez, J.M., Rodrigues, T., Alonso-García, M., Rodríguez-Tovar F.J., Dorador, J. 2019. 800,000 years of western Mediterranean vegetation and climate changes: a zooming on the cold MIS 17 interglacial (700 ka). MedPalyno 2019, Bordeaux, France. (Oral presentation accepted)

26. Clément, C, S. Desprat, K. Anupama, S. Prasad, C. Zorzi, D. Oliveira, S. Lauterbach, C. Bolton, N. Andersen, T. Blanz, S.C. Clemens, R. Schneider, P. Martinez. Indian vegetation and monsoon rainfall changes during the last deglaciation and early Holocene at orbital and millennial timescales. MedPalyno 2019, Bordeaux, France. (Oral presentation accepted)

25. Rodrigues, T., Voelker, A.H.L., Rufino, M., Alonso-García, M., Oliveira, D., Hodell, D.A., Grimalt, J.O., Abrantes, F. (2018) Alterações Climáticas durante o último 1 Milhão de Anos: Evidências da Margem Ibérica. Ciência 2018 - Science and Technology in Portugal Summit, 4th July 2018, Lisbon Congress Centre, Portugal. (Oral presentation)

24. Naughton, F., Gomes, S.D., Rodrigues, T., Desprat, S., Bronk-Ramsey, C., Salgueiro, E., Sanchez Goñi, M.F., Oliveira, D., Voelker, A.H.L., Abrantes, F. (2018) Climate variability in central western Iberia across the last 11.7 ka. Conference "Climate and Prehistory in Southern Iberia", 24-25 September 2018, Lisbon, Portugal. (Oral presentation)

23. Naughton, F., Costas, S., Gomes, S.D., Rodrigues, T., Desprat, S., Bronk-Ramsey, C., Salgueiro, E., Sanchez Goñi, M.F., Renssen, H., Trigo, R., Oliveira, D., Voelker, A.H.L., Abrantes, F. (2018) Complex climatic pattern in Central Western Iberia during the YD. 9th Symposium on the Atlantic Iberian Margin (MIA 2018), 4-7 September 2018, Coimbra, Portugal. (Oral presentation)

- 22.** Rodrigues, T., Alonso-García, M., Rufino, R., Oliveira, D., Hodell, D.A., Grimalt, J.O., Abrantes, F. (2017) Climate Changes over the last 1.3 Ma on the Iberian Margin. 3th QUIGS - PAGES working Group: workshop: Interglacials of the 41kyr-world and the Middle Pleistocene Transition, 28-30 August 2017, Molyvos, Island of Lesbos, Greece. (Oral presentation)
- 21.** Wary, M., Oliveira, D., Morales Del Molino, C., Naughton, F., Eynaud, F., Londeix, L., Ducassou, E., Sanchez-Goni, M.F. (2017) Role of the Mediterranean Outflow Water on the North Atlantic climate and ocean circulation during past climate warming events. In: De Linares C. & Belmonte J. (Eds.). 2017. Mediterranean Palynology Symposium 2017. Abstracts Book. Barcelona, Spain. pp. 30. ISBN 978-84-945378-8-2. (Oral presentation)
- 20.** Sánchez Goñi M.F., Desprat S., Morales-Molino C., Naughton F., Oliveira D., Rodrigues T., Polanco-Martínez, J.M., Eynaud F., Daniau A.L., Hodell D.A., Sierro F.J., Martín-García G.M. (2017) The Shackleton site, a pivotal Iberian margin climatic archive for understanding the ocean-ice-land interactions of the last 800,000 years. In: De Linares C. & Belmonte J. (Eds.). 2017. Mediterranean Palynology Symposium 2017. Abstracts Book. Barcelona, Spain. pp. 30. ISBN 978-84-945378-8-2. (Oral presentation)
- 19.** Wary, M., Londeix, L., Eynaud F., Oliveira, D., Morales Del Molino, C., Naughton, F., Ducassou, E., Sanchez-Goni, M.F. (2017) Role of the Mediterranean Outflow Water on the North Atlantic climate and ocean circulation during past climate warming events. 11th International Conference on Modern and Fossil Dinoflagellates, 17-21 July 2017, Bordeaux, France. (Oral presentation)
- 18.** Abrantes F, Rodrigues T, Rufino M, Naughton F, Gil I, Salgueiro E, Stroynowski Z, Drago T, Santos C, Oliveira D, Domingues S, Alberto A, Mil-Homens M. The climate of the last two millennia off Iberia (2017). EGU2017-9686; EGU General Assembly, Vienna, Austria. (Poster)
- 17.** J. Etourneau, J.-H. Kim, D. Oliveira, Wary, M., K.-H. Shin, J.-K. Gal, A. Penaud, F. Eynaud, M.F. Sánchez Goñi (2017). Investigating climate variability in SW Iberia margin during the last deglaciation. Workshop South Korean and French project PHC STAR MEDKO: "Abrupt climate events in the past Mediterranean and Korean basins", 10 February 2017. Bordeaux University, France. (Oral presentation)
- 16.** Desprat S., Oliveira, D., Rodrigues T., Daniau A.L., Morales Del Molino C., Naughton F., Yin Q., Guilhem G., Sánchez Goñi M.F. (2016). Réponse climatique du sud-ouest de l'Europe aux échelles orbitale et millénaire au Pléistocène moyen (2016). Journées scientifiques "Climats et impacts". 15-16 November 2016, Paris-Sud (Orsay) University, France. (Oral presentation)
- 15.** Naughton F., Rodrigues T., Salgueiro E., Sanchez Goñi M.F., Desprat S., Costas S., Gomes S., Bronk-Ramsey C., Duprat J., Michel E., Rossignol L., Zaragosi S., Prabhu, C.N., Oliveira, D., Voelker A.H.L., Abrantes F. (2016). Climate variability across the last deglaciation in western Iberia and its margin. 2nd APOCEAN - Associação Portuguesa de Oceanografia – Meeting, 6-7 May 2016, S. Pedro de Moel, Portugal. (Oral presentation)
- 14.** Desprat S., Sánchez Goñi M.F., Rodrigues T., Oliveira, D., Guillem G., Piette N., Hodell D. A. (2016) Climate Variability during Middle Pleistocene interglacials in southwestern Europe. Colloque Q10 AFEQ CNF-INQUA 2016: Paléoclimats et environnements quaternaires, quoi de neuf sous le soleil? 16-18 February 2016, Bordeaux University, France. (Oral presentation)
- 13.** Sanchez Goñi M.F., Desprat S., Morales del Molino C., Naughton F., Oliveira, D., Rodrigues F., Eynaud F., Daniau A.-L. Hodell D. A., Martín-García G. M., Sierro F. J. (2016). The Shackleton site, a pivotal Iberian margin climatic archive for understanding the ocean-ice-land interactions of the last 800,000 years. XII International Conference on Paleoceanography (ICP12), 28 August-2 September 2016, Utrecht, The Netherlands. (Poster)
- 12.** Etourneau J., Kim J.-H., Kang S., Oliveira, D., Gal J.-K., Choi B., Shi K.-H., Penaud A., Sanchez-Goñi M.F. (2016) Rapid climate and environmental changes in the western Iberian Peninsula since the last glacial period. 17-22 April 2016, EGU General Assembly, Vienna, Austria. (Poster)

- 11.** M.F. Sánchez Goñi, T. Rodrigues, S. Desprat, D. Oliveira, G. Guillem, A.-L. Daniau, E. Ducassou, F. Eynaud, D.A. Hodell (2015). Southwestern European climate response to the contrasting interglacials of the last 800,000 years. XIX INQUA Congress, Quaternary Perspectives on Climate Change, Natural Hazards and Civilization, 27 July - 2 August 2015, Nagoya, Japan. (Oral presentation)
- 10.** J. Etourneau, J.-H. Kim, D. Oliveira, K.-H. Shin, J.-K. Gal, A. Penaud, M.F. Sánchez Goñi, Abrupt changes in the Mediterranean Outflow Waters during the last deglaciation - preliminary results. XIX INQUA Congress, Quaternary Perspectives on Climate Change, Natural Hazards and Civilization, 27 July - 2 August 2015, Nagoya, Japan. (Poster)
- 9.** M.F. Sánchez Goñi, S. Desprat, D. Oliveira, T. Rodrigues, D. Hodell, IODP Expedition 339 Scientists. (2014). Western Mediterranean vegetation response to contrasting interglacials of the last 1 million years. Milankovitch Anniversary UNESCO Symposium: Water Management in Transition Countries as Impacted by Climate and Other Global Changes, 3-5 September 2014, Belgrade, Serbia. (Oral presentation)
- 8.** Naughton, F., Keigwin, L., Peteet, D., Desprat, S., Costas, S., Oliveira, D., Abrantes, F., de Vernal, A. (2014). Holocene climate changes in the mid-latitudes of the western North Atlantic. 1th APOCEAN - Associação Portuguesa de Oceanografia – Meeting, 21-22 March 2014, Lisbon, Portugal. (Oral presentation)
- 7.** Jimenez-Espejo, F.J., Grunert, P., Martrat, B., Hodell, D., Voelker, A., Flores, J.A., Martinez-Ruiz, F., Asahara, Y., Rodriguez-Tovar, F.J., Balestra, B., Oliveira, D., Sanchez-Goñi, M.F., Grimalt, J.O., Hernandez-Molina, F.J., Xuan, C., Stow, D.A.V., Alvarez-Zarikian, C. (2014). Water masses changes and paleoenvironmental conditions during MIS 31 at site IODP U1385. IODP Exp. 339 2nd post-cruise meeting, 4-6 June 2014, Tarifa, Spain. (Poster)
- 6.** Desprat, S., Sánchez Goñi, M.F., Oliveira, D., Guillem, G., Daniau, A.L., Rodrigues, T., Ducassou, E., Eynaud, F., Hodell, D., Balestra, B., Flores, J.A., Grimalt, J.O., Sierro, F.J., (2014). Vegetation and fire regime changes in southwestern Europe during contrasting interglacials of the last 800 kyr. IODP Exp. 339 2nd post-cruise meeting, 4-6 June 2014, Tarifa, Spain. (Poster).
- 5.** Naughton, F., Keigwin, L., Desprat, S., Oliveira, D. Abrantes, F. (2013). Vegetation/oceanographic changes in the mid-latitudes of southwestern North Atlantic. EGU General Assembly 2013 Abstract Processing Charge for "Vegetation/oceanographic changes in the mid-latitudes of southwestern North Atlantic". Geophysical Research Abstracts, EGU2013-13386, Viena, Austria. (Oral presentation)
- 4.** Naughton, F., Keigwin, L., Oliveira, D. Abrantes, F. (2013). Holocene vegetation / oceanographic changes in the Cape Hatteras region (southwestern North Atlantic). Workshop "Holocene Climate changes", 4-5 April 2013, London, UK. (Oral presentation)
- 3.** Abrantes, F., Rodrigues, T., Naughton, F., Gil, I., Salgueiro, E., Stroynowski, Z., Santos, C., Oliveira, D., Domingues, S., Mil-Homens, M., Witt, L., Drago, T. (2013). The Latest Holocene Climate Record off Iberia. Conference "Holocene Climate changes", 4-5 April 2013, London, UK. (Oral presentation)
- 2.** Sanchez Goni, M., Desprat, S., Daniau, A., Ducassou, E., Eynaud, F., Hodell, D.A., Balestra, B., Flores, J.A., Grimalt, J.O., Rodrigues, T., Sierro, F.J., Oliveira, D., Hernandez-Molina, F.J., Stow, D.A., and Alvarez Zarikian, C.A. (2013) Vegetation and fire activity changes in southwestern Europe during contrasting interglacials before and after the Middle Pleistocene Transition (MPT). PP13A-1861. American Geophysical Union, Fall Meeting 2013, 9–13 December 2013, San Francisco, USA. (Poster)
- 1.** Naughton, F., Keigwin, L., Peteet, D., Desprat, S., Oliveira, D., Costas, S. Abrantes, F. Holocene climate changes in the Cape Hatteras region. (2013) PP33A-1910. American Geophysical Union, Fall Meeting 2013, 9–13 December 2013, San Francisco, USA. (Oral presentation)

Referee for international journals

Quaternary Science Reviews (3x)

Organization of scientific meetings / moderator

Moderator: 3rd APOCEAN - Associação Portuguesa de Oceanografia – Meeting, 24-25th May, 2019 Peniche, Portugal.

Marine Geophysical Cruises

MINEPLAT project “Assessment of the potential of mineral resources of the Alentejo continental shelf (metallic and non-metallic ores) formed during Pliocene-Quaternary times, ALT20-03-0145-FEDER-000013, ALENTEJO 2020. 30 March – 14 April 2019, Alentejo offshore (Sines – Odeceixe). Acquisition of geophysical data: Vessel: Noruega (47 m), IPMA.

Outreach activities

- Co-responsible for the bimonthly scientific Paleo-Forums at IPMA, PT (since 2014);
- Dissemination research activity to
 - education institutions: Participation in the outreach programme “IPMA-Escolas”, PT, dedicated to 1st grade students (2017-2019); presentation “Every grain of pollen has a story to tell” to 1st grade students at EB1/JI Moinhos da Funcheira, PT (May, 2018). Presentation “Reconstruction of atmospheric and ocean circulation conditions from oceanic records” to high school students at Escola Secundária de Miraflares, PT (November 2018). Presentation of the palynological work at IPMA to students of the University of Aveiro (December, 2018).
 - general public: press: Jornal Público <https://www.publico.pt/2018/03/21/ciencia/noticia/e-se-o-clima-do-passado-em-portugal-nos-dissesse-como-vai-ser-o-do-futuro-1807398>; radio: Rádio Renascença <http://www.pt.cision.com/s/?l=2d828d40>, Rádio Antena 1: <http://www.pt.cision.com/s/?l=b67ce582>; TV: SIC <https://sic.pt/Programas/o-programa-da-cristina/videos/2019-05-29-Mulheres-Cientistas-Para-perceber-o-futuro-temos-de-saber-explicar-o-passado>.

Member of research associations or working groups

APOCEAN (Associação Portuguesa de Oceanografia, APLF (Association des Palynologues de Langue Francaise), QRA (Quaternary Research Association), and AFEQ-CNF INQUA (Association Française pour l'Etude du Quaternaire - CNF INQUA); EGU-European Geosciences Union; IODP Expedition 339 Shackleton Site pollen working group; and Oceanography and Climate Change Group of CCMAR.

Languages

Portuguese: native speaker

English: fluent (speaking, reading, writing)

French: independent user - reading; basic user - writing and speaking

Spanish: independent user - speaking and reading; basic user - writing

Workshops and specialized courses (after 2010):

- 2019 CCMAR Symposium "discover CCMAR from the inside". Universidade do Algarve - Campus de Gambelas, Faro, Portugal, 9 May 2019.
- Marine Biogeochemistry Training School on Biogeochemical and ecological dimensions of a changing ocean. Universidade do Algarve - Campus de Gambelas, Faro, Portugal, 5-8 June 2018.
- South Korean and French project PHC STAR MEDKO workshop. Abrupt climate events in the past Mediterranean and Korean basins. University of Bordeaux, France, 10 February 2017.
- "Dynamique du climat passé - UE Master 2 Océano" course. University of Bordeaux, France, 23 November – 4 December 2015.
- Training on different lipid biomarkers from the Mediterranean cores in the context of the project PHC STAR MEDKO (Abrupt climate events in the past Mediterranean and Korean basins), at the University of Hanyang, South Korea, 27 May-12 June 2015.
- Science Communication and Public Engagement Workshop, IPMA - Portuguese Institute for the Sea and Atmosphere, Lisbon, Portugal, 27-28 January 2015.
- 11th Urbino Summer School in Paleoclimatology; University of Urbino, Italy; 9-25 July 2014.
- CLIMHOL Workshop "Holocene climatic variability in the North Atlantic and adjacent landmasses: land-sea direct correlation"; duration: 2 days; LNEG Alfragide, Portugal; September 2013.
- Author Workshop at European Geosciences Union (EGU) General Assembly; Earth and Planetary Sciences, Elsevier; Vienna, Austria; April 2012.
- Course of Oceanography. Basic principles and main processes; duration: 2 days; LNEG, Portugal; December 2011.
- Course of basic Microscopy; duration: 1 day; LNEG, Portugal; December 2011.
- Paleoclimatology and terrestrial environments; duration: 2 weeks; Université de Bordeaux I, France; November 2011.
- Technical Scientific Writing Workshop; duration: 2 days; Faculdade de Ciências de Lisboa, Portugal; June 2010.

Lisbon, 18/06/2019



Dulce da Silva Oliveira