Position for an experienced ocean modeler at the European Commission Joint Research Centre

Background

The Joint Research Centre (JRC) is a Directorate General of the European Commission providing scientific support to European policies in a wide variety of areas. Within its actual remit, the marine modelling group of the JRC has been developing integrated tools to simulate past, present and future conditions of European regional seas. Such tools are envisaged to play a fundamental role in policy options evaluation and in the assessment cycle of several pieces of legislations such as the Marine Strategy Framework Directive (MSFD).

The main focus of the marine modelling team has been the Mediterranean and Black Seas where Regional Earth Systems Models (called Marine Modelling Framework, MMF) have been developed and applied to resolve different scientific and political questions (Macias et al., 2013, 2014, 2015; Stips et al., 2015, 2016; Miladinova et al., 2017). JRC has recently started a new project (to be executed 2018/2019) on request from DG Environment to expand the MMF to other EU regional seas, specifically to the Baltic Sea, the North Sea and the North-East Atlantic. At the end of the project, the MMF should be fully operationally implemented in the two first basins and the basic hydrodynamic model for the later.

About the contract

We are looking for an experienced ocean modeler with knowledge on the regions of interest. Our preference is for someone with knowledge on hydrodynamic modeling of the large North-East Atlantic, preferably using the GETM model and with some experience in hydrodynamic-biogeochemistry interactions, but candidates with complementary experience would be considered. You would be working on the set-up and implementation of numerical models, but also gain some insight on the EU policy making and on how to use scientific tools to assess policy options.

We offer a two-year contract as Contractual Agent (CA) of the EU Commission. CA employment conditions could be consulted here (<u>http://ec.europa.eu/civil_service/job/contract/index_en.htm</u>), depending on your qualifications and personal status the monthly basic gross salary will vary in the range 3,145 – 5,832 EUR (for Function Group IV).

For more information about the post and on how to apply please contact us at <u>diego.macias-</u> <u>moy@ec.europa.eu</u> or at <u>adolf.stips@ec.europa.eu</u>

References:

Macías D., García-Gorriz, E., Stips A. (2013) Understanding the causes of recent warming of Mediterranean waters. How much could be attributed to climate change? PLoS ONE, 8(11), e81591. doi:10.1371/journal.pone.0081591

Macías, D., Stips, A., García-Gorriz, E. (2014) The relevance of deep chlorophyll maxima in the open Mediterranean Sea evaluated through 3D hydrodynamic-biogeochemical coupled simulations. Ecological Modelling, 281, 26-37, http://dx.doi.org/10.1016/j.ecolmodel.2014.03.002 Macías, D., Garcia-Gorriz, E., Stips, A. (2015) Productivity changes in the Mediterranean Sea for the twenty-first century in response to changes in the regional atmospheric forcing. Frontiers in Marine Science, 2(79). doi: 10.3389/fmars.2015.00079.

Miladinova, S., Stips, A., Garcia-Gorriz, E., Macias, D. (2017) Black Sea thermohaline properties: Long-term trends and variations. Journal of Geophysical Research: Oceans, 122 (7), pp. 5624-5644

Stips, A., Dowell, M., Somma, F., Coughla, C., Piroddi, C., Bouraoui, F., Macias, D., Garcia-Gorriz, E., Cardoso, A.C., Bidoglio, G. (2015) Towards an integrated water modelling toolbox. pp Page, Luxemburg, European Commission.

Stips, A., Bolding, K., Macias, D., Bruggeman, J., Coughlan, C. (2016). Scoping report on the potential impact of onboard desulphurization on the water quality in SOx emission control areas. Publications Office of the European Union. ISBN: 978-92-79-57964-6 (http://publications.jrc.ec.europa.eu/repository/handle/JRC101106)