

Barcelona, 27 September de 2021

Postdoctoral contract in marine ecosystem modelling

Place: [Institut de Ciències del Mar \(ICM\)](http://www.institut-cienciesdelmar.csic.es), CSIC, Barcelona

Salary: FC3-FC1, 46,287.17 to €58,059.19 €, depending on experience

Contract period: One year, with the possibility to be extended for 1-2 additional

Institute of Marine Science – CSIC

The Institute of Marine Science (*Institut de Ciències del Mar*, ICM-CSIC) is the fourth largest research institute of the Spanish National Research Council (CSIC) and the largest dedicated to marine research. Under the motto “Ocean Science for a Healthy Planet,” the ICM conducts frontier research and foster both knowledge and technology transfer on topics related to ocean and climate interactions, conservation and sustainable use of marine life and ecosystems, and impact mitigation of natural and anthropogenic hazards. In-depth knowledge, determined action, and coordinated management are essential to confronting these global challenges, thereby driving sustainable development of humankind.

Recruitment at ICM is open, transparent and merit-based, and all applicants compete on the same terms.

What we are looking for

A postdoctoral researcher to work on marine ecosystem modelling development and applications within the European project **FutureMARES** (futuremares.eu/) and WP4.4 (mechanistic marine food web modelling) at our research group located at the **Institute of Marine Science** (ICM-CSIC) in **Barcelona, Spain**.

The objective of the contract is to characterize the **potential effect of two Nature-Based Solutions** (sustainable fisheries management and the establishment of marine protected areas) **to overcome the impacts of ongoing climate change effects on marine resources and ecosystems**. The methodological approach will involve the use of **statistical and mechanistic**

modelling techniques of marine ecosystems with special focus on the Western Mediterranean Sea.

We are looking for candidates with a strong background on marine ecosystem modelling with **Ecopath with Ecosim and Ecospace software**¹ and its latest developments (e.g., Christensen et al. 2014, Steenbeek et al. 2018, Coll et al. 2019) and knowledge on the field of marine sciences, biological sciences, and environmental sciences or similar. A good level of **English** is essential and knowledge of **GIS, statistical analyses and programming with R** is highly recommended.

Work conditions

The contract is available for one year, with the possibility to be extended for 1-2 additional years. Starting dates are negotiable, but we are looking for a suitable candidate to join our group as soon as possible (preferably **early 2022**). The salary will be according to CSIC standards (FC3-FC1, 46,287.17 to €58,059.19 €, depending on experience).

Contact

Interested candidates, please contact Dr. Marta Coll (mcoll@icm.csic.es) with the following information:

- **Expression of interest to join our group**
- **Summary of CV (max. 5 pages)**
- **Names of three referees**

The position will be opened until filled.

Marta Coll, Senior researcher

www.martacollmarine.science

www.icm.csic.es

¹ www.ecopath.org

References

- Christensen V, Coll M, Steenbeek J, Buszowski J, Chagaris D, Walters CJ (2014) Representing variable habitat quality in a spatial food web model. *Ecosystems* 17:1397-1412
- Coll M, Pennino MG, Sole J, Steenbeek J, Bellido JM (2019) Predicting marine species distributions: complementarity of food-web and Bayesian hierarchical modelling approaches. *Ecological Modelling* 405:86-101
- Steenbeek J, Corrales X, Platts M, Coll M (2018) Ecosampler: a new approach to assessing parameter uncertainty in Ecopath with Ecosim. *SoftwareX* 7:198-204