

# Position: 3 Year PhD “Ocean Nitrogen Cycle” (Gif Sur Yvette, France)

**Date Posted:** 30 April 2010

**Application Deadline:** 31 August 2010

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**Start Date:** 01 January 2011

**Salary:** n/a Euros per annum

**Country:** France

**Position Type:** MSc / PhD Position

**Duration:** 3 Years

**Category:** Other

**Work Authorisation:** Employee must be authorised to work in the EU

**Languages:** English

**Language Level:** Excellent

**Working Hours:** n/a

**Link to More Info:** [www.greencycles.org](http://www.greencycles.org)

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## Description:

A three year PhD position is available at the Laboratoire des Sciences du Climat et de l'Environnement (LSCE / IPSL) in Gif sur Yvette, France, in the field of global marine biogeochemical modelling, starting January 2011. The position is part of the European Marie Curie Initial Training Network GreenCycles II ([www.greencycles.org](http://www.greencycles.org)) and involves collaboration with the leading European research centres on earth system interactions.

Climate marine biogeochemistry interactions play an important role in shaping future pathways of the Earth System, yet there is substantial uncertainty in current modelling efforts. One particular area of uncertainty concerns the treatment of the nitrogen cycle in state of the art ocean biogeochemical models. Understanding and predicting the response of the marine nitrogen cycle to global change will require a new generation of models that better consider important aspects of the N cycle. The project will be based around the existing marine biogeochemical model PISCES and will focus on the development of its nitrogen cycle component. More specifically the project aims to examine the response of nitrous oxide emissions as well as important ocean processes specific to the N cycle (e.g. N fixation, denitrification, nitrification, and annamox) to climate change and variability. A systematic assessment of the model strengths and weaknesses (including simulations of ocean nitrogen isotopes) with existing measurements will be integral.

## Other Benefits:

**Other Requirements:** We are seeking a highly motivated candidate to spearhead these activities within the Marine Biogeochemistry and Climate Modelling group at LSCE. The successful candidate is expected to interact with the research groups at ETH (Zurich, Switzerland) and UEA (Norwich, UK) and will actively participate in network wide workshops and training events. We invite candidates with some background and interest in ocean biogeochemical cycles to apply. Experience in numerical modeling and/or the ocean nitrogen cycle would be an advantage. Candidates holding a relevant Masters degree are eligible for this PhD within their first four years of their degree award. At the start of their fellowship, researchers may not have resided or carried out their main activity in France for more than 12 months in the preceding 3 years. French nationals are eligible only if they have been active in research in a Third Country for at least three of the last four years. Payment (annual salary of €34,5001 ) will be according to Marie Curie rules (<http://ec.europa.eu/research/mariecurieactions/>), including an allowance for transnational travel and mobility.

