

Post-doctoral fellowship
**Methodological development for dynamic modelling of coastal eco-sociosystems :
application to the Thau Lagoon (France)**

The post-doctoral project is part of the European integrated project SPICOSA (Science and Policy Integration for COastal Assessment System- <http://www.spicosa.eu/>) applying a system approach framework in order to carry out assessment methodologies through system dynamics modelling, regarding a set of coastal zone issues towards their integrated management. One of the challenges for a system approach applied to coastal zone is to combine and integrate processes and components with heterogeneous spatial and temporal scales (description and/or variation). Consequently, it is necessary to design the compatibility between different types of ecological and socio-economical formulation processes, and the relationship between the different spatial and temporal resolutions and levels of aggregation for the various components. To share these assessment tools within the scientific and stakeholder community, all these steps must be completed whilst elaborating a set of procedures to evaluate and validate the models developed, and to combine the criteria of quality approach as defined, e.g., in hydrology and in the area of system theory. The work of the post-doctoral fellow will consist on the one hand, working on the study site application of Thau lagoon, and for the whole ecological and socio-economic systems related to the issues of eutrophication and bacterial contamination, to assess relevant working scales to the various processes and their representation in the system, to develop appropriate modules under EXTEND environment (<http://www.extendsim.com>) , and to test and validate them. On the other hand, she/he will design a quality insurance approach for the development, provision and use of models or sub-models for the whole SPICOSA community.

Key-words : Integrated Coastal Zone Management (ICZM); Modelling; System approach.

Postdoctoral position is contracted for a duration of 12 months, possibly renewable for a period of 6 months non-renewable. The annual gross salary (before taxes) is around 31 434 Euros, representing a monthly salary of 2 620 Euros (i.e. monthly net salary around 1750 €).

Interested applicants should send :

1. A handwritten letter including your specific skills and competence for the particular postdoctoral position you are interested in,
2. A detailed curriculum vitae,
3. A summary of work previously done, mentioning the date of submission of the thesis,
4. A list of publications and communications / symposia,
5. Two letters of recommendation.

Documents must be addressed by email or by the post to the scientific contact (see below). The closing date of the call for applications is 26 September 2008 : this is the ultimate date for sending the complete forms to the scientist contact. Postdoctoral positions will begin from the 1st of November, 2008.

The criteria for selecting candidates are as follows :

- The Curriculum Vitae of the nominee must be consistent with the proposal regarding the post-doctoral position
- The candidate must be under 35 years old at December 31, 2008 and should have obtained his (her) PhD within the last 3 years.
- The candidate has not previously performed post-doctoral research at Ifremer.
- The candidate has spent a majority of his (her) doctoral position out of Ifremer.

Academic training and specific skills:

Ph.D. in modelling of dynamic system with background experience in ecological modelling and model coupling. Knowledge of coastal system and, if possible, in system approach. Skills in English speaking and writing necessary.

More information on this postdoc can be obtained from cedric.bacher@ifremer.fr, thierry.laugier@ifremer.fr, annie.fiandrino@ifremer.fr