



French group GLADYS (www.gladys-littoral.org), Applied Mathematics Institute of Montpellier together with LEGI propose a 18 months long post-doctoral position at University Montpellier II. This position is funded by the french Agence Nationale de la Recherche (ANR), in the framework of the project COPTER (ref. NT05-2-42253; « Conception, Optimisation et Prototypage d'ouvrages de lutte contre l'érosion en domaine littoral »).

The post-doctoral position will be dedicated to the study of nearshore hydrodynamics, of inferred sand bar morphodynamics and to the design of beach defence structures thanks to basin / flume experiments as well as in-situ nearshore hydrodynamics campaigns in the Northwestern Mediterranean Sea. The studied sites are a) the Espiguette Sand Pit, located southward Le Grau du Roi harbour and b) the Maguelone sandy beach located southward Montpellier.

The candidate will contribute :

- 1) to characterize the hydrodynamics of the two nearshore sites with traditional equipments (ADV, ADCP, wave gauge) and more peculiar types of equipments (VHF wave gauge net);
- 2) to study the sand bar morphodynamics submitted to relevant wave forcings in a wave flume and a 3D wave basin;
- 3) to design original coastal defence structures (Low-Crested Structures, geotubes) that may be used to protect such coasts against erosion and submersion;
- 4) to characterize the behaviour and the efficiency of these coastal defence structures in the flume and the basin.

Recommended PhD background :
in-situ nearshore hydrodynamics campaigns, and/or
ADCP, ADV data processing, and/or
flume experience

Duration of the position : january 2008 / july 2009
In-situ experiments started on september 2007 (data already exist).
Flume experiments will start on february 2008.
Main worksite: Montpellier, south of France
Secondary worksite: Grenoble , Alps, France.

Salary: 1867,27 Euros / month

For further informations, please contact:
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This works comes in the framework of the COPTER project, but is also strongly related to the national LEFE/IDAO « déferlement » project (Hervé Michallet, herve.michallet@hmg.inpg.fr), the RELIEF MODLIT projet (Philippe Bonneton, p.bonneton@epoc.u-bordeaux1.fr) and the RELIEF MICROLIT project (Raphael Certain, certain@univ-perp.fr).

Collaborations:
GLADYS, I3M Montpellier, GEOSCIENCES Montpellier, LEGI Grenoble , LEGEM Perpignan
The flume experiments will take place at LEGI (Grenoble, France)
The basin experiments will take place at SOGREAH (Grenoble, France)