## Institut Français de Recherche pour l'Exploitation de la MER

Position to be filled	Physical Measurement Engineer (M/F)
Employment	Engineer
Discipline	Sciences for the engineer
Specialties	Electromechanical, Instrumentation, Industrial Computing
Type of contract (Vacancy)	Contract of indefinite duration,
	REM,
hosting structure	RDT/LCSM
Location	Centre de Brest
LUCATION	Centre de Drest
Publication date	26/03/2018
Taking office	Asap
Reference (HRM part)	

### Ifremer and the hosting structure

If remer contributes, through its work and expertise, to the knowledge of oceans and their resources, the monitoring of the marine and coastal environment and the sustainable development of maritime activities. If remer is a source of knowledge, innovation, monitoring data and expertise for the world of the sea, both in terms of public policy and socio-economic activity. It is the only structure of its kind in Europe.

Founded in 1984, Ifremer is a public industrial and commercial establishment (EPIC), under the joint supervision of the Ministries of Higher Education and Research and Ecology, Sustainable Development and Energy.

#### Presentation of the hosting structure :

In the field of hydrodynamics, his work focuses on the modeling of fluid / structure interactions and behaviors induced through basin tests, *in situ* measurement interpretations or numerical simulations allowing the evaluation of efforts on structures and their dynamic response, in linear and non-linear approaches. In this context, the LCSM laboratory has test basins in Brest and Boulogne-sur-Mer for hydrodynamic studies or qualification assessments. These experimental facilities are used for internal or external applications with academics, SMEs, TPE, ETI or large groups;

#### Introduction of the position to be filled and its position in the organization chart:

In the LCSM laboratory, the recruited engineer will be placed under the hierarchical responsibility of the laboratory manager and assigned to the Brest ocean basin. He / she will contribute to research activities combining experimental modeling in national or international projects for subjects of surface hydrodynamics in general and secondly to the provision of experimental means for internal or external applications. The recruited engineer will be in charge of:

- •Managing the operation of the acquisition systems and measurement setup.
- contributing to the definition and the realization of hydrodynamic experiments, the analysis and the exploitation of the results;
- •contributing to the definition, design and construction of experimental assemblies, as well as the tests conducted in the Brest basin,
- participating specifically in the tests carried out in the Brest ocean basin (experimental hydrodynamics, calibration, acoustics, ...) and ensure, with the colleagues of the laboratory, the coherence and the complementarily of the tests and measures implemented in the basins of Brest and Boulogne-sur-Mer,
- •being responsible for the choice of sensors and their electronic integration, calibrations, acquisitions and associated software and command control devices equipping the basin. The development of new measurement systems,

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- •providing the interface, in his/her field of competence, between the LCSM laboratory and other services / laboratories of lfremer, university laboratories and partners in the framework of associative research projects. Contribute to external relations and valorization actions.
- •Building, as far as possible, on the achievements in the LCSM in terms of methodological choices for the acquisition of measurements and control systems (LabView codes, interfaces with Matlab).

#### Main missions (objectives of the function)

Provision of operational measurement systems in hydrodynamic test tanks. Participation in the management of hydrodynamic experimental infrastructures in Brest used in national and international hydrodynamics projects as well as the basin's service provision for external client or internal Ifremer's Lab. He/she will collaborate on projects implementing sea trials.

#### Main activities

- He / she designs and implements measurement systems for the Brest wave and wind oceanic tank; participate in the processing and analysis of the data; promotes work in the form of referenced and public reports and publications;
- He / she presents the testing facilities to customers, partners, official visitors, listeners (quality, HCERES);
- He / she could supervised students (trainees).

#### **Relational fields**

### Internally:

Placed in the LCSM laboratory of the RDT unit he / she will have strong relations with colleagues from the laboratory and the unit. He/She will specially share and work together with hydrodynamic teams of Brest and Boulogne-sur-Mer: he / she will be in strong relation with the other engineers/researchers of the Brest basin (5)et technicians (3) of Brest's Basin as well as with the manager and the secretariat of the laboratory.

#### Externally:

In the context of collaborative projects, he / she will have a sustained relationship with our partners. He / she will link new relationships with colleagues from complementary disciplines in new projects, conferences.

#### **Used skills**

- <u>Technical skills (knowledge, know-how) :</u>
  - Management and technical supervision of experimental infrastructures
  - Measurement methods and acquisition
  - Analog electronics, electricity
  - Automatic (piloting / servoing)
  - Use of wave generator, hexapod, Qualisys system
  - Knowledge in fluid mechanics appreciated
  - Computer tools (Labview, Matlab, Python)
  - Fluent English (written, spoken)
- Personal qualities (well being) :
  - Initiative, dynamism, rigor and autonomy
  - Relational qualities for team work,

#### Profile (initial training and professional experiences)

- Instrumentation Engineer
- Specialization in physical measurements.

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- Advanced user for dev in Labview is mandatory
- Experience in dev on onbard controller National Instrument Compact RIO and Matlab will be strongly appreciated
- Experience in a tank test or basin will be appreciated

Working conditions (exercise mode : ship boarding, activity rate,...)

Few ship boarding.Full time.

Pistes de *sourcing* (partie réservée au service recruteur et la DRH et ne fera pas l'objet d'une diffusion externe)

ENSIM, INSA, ENSTA, ENSI, ENSAM, Universités, web site IFREMER

#### **Pour postuler**

**Date de clôture de réception de candidatures :** ASAP Accédez à cette offre en un clic (partie DRH) :

Toutes nos candidatures sont traitées via notre site internet. Pour plus de renseignements sur le poste, envoyez votre mail à benoit.augier@ifremer.fr (acceptez-vous de communiquer les coordonnées du (de la) responsable du service recruteur ?)

Consultez nos offres d'emploi sur le site internet d'Ifremer/Travailler à l'Ifremer/<u>Offres d'emploi & stage</u> Suivez nos actualités via LinkedIn, <u>Twitter et Facebook</u>