CIDCO
Centre interdisciplinaire de développement en cartographie des océans

Interdisciplinary Centre for the Development of Ocean Mapping

La géomatique est un secteur de technologie en pleine croissance et la cartographie des océans en fait grand usage. Le CIDCO, est un centre de R&D en cartographie des océans et a pour mission de développer un noyau d'expertise en géomatique marine de calibre international, qui réponde aux besoins d'innovations, de conseils et de transferts technologiques dans ce domaine.

The CIDCO offers positions to be fulfilled in 2017:

# Geomatics and mobile mapping Specialists

### Concours #2017-01

**Summary :**

Under the responsibility of the CIDCO General Manager and under the supervision of the scientific director, you will contribute to the Research and Development of new technologies in geospatial data processing, and management. These positions include practical activities including geospatial data acquisition system definition, set-up and operation in order to test the new methodologies and algorithms developed by the CIDCO. The CIDCO is involved in international research project and these positions include short term mobility in America and Europe.

**Common features to the two positions :**

- To participate to the design of new methods and software in geospatial data processing ;
- To participate to technology transfer from research projects to products ;
- To write scientific publications for journals and international conferences ;
- To contribute to the development of the CIDCO programme in Hydrographic surveying.

Required competences

- To set-up and implement advanced methods in applied geodesy, theory of observation, and adjustment;
- Good skills in applied maths (numerical methods, statistics, algorithm design);
- Ability to program in Scilab or Matlab; Python; Fortran , C ou C++.

**LiDAR mobile mapping profile :**

The main activity of this job will be devoted to the design of automatic calibration software and performance analysis of mobile LiDAR system, in the context of drone, ship-borne or land vehicle surveys.
In addition the successful candidate will be able to conduct field trials and to integrate prototype systems to gather test data sets.

**Experience and education :**

- Undergraduate or graduate studies in a field related to geomatics, applied maths, computer science or electrical engineering;
- Experience in data acquisition from mobile LiDAR and associated sensors (LiDAR, inertial measurement units, GNSS positioning)

**Hydrography profile :**

The main activity of this job will be devoted to automate quality control and quality assurance of multibeam data sets, and more generally, from hydrographic survey systems. The successful candidate will be able to conduct experiments using an autonomous surfacer vehicle or a survey vessel for the validation of new methods and algorithms.

**Experience and education :**

- Undergraduate or graduate studies in a field related to hydrography, geomatics, applied maths, computer science or electrical engineering; To be graduated from an IHO category A recognized programme (for example ENSTA-Bretagne, UNH…) would be an asset;
- Good knowledge in data acquisition and data processing (Multibeam systems, inertial measurement units, GNSS positioning);
- Knowledge of professional software used in hydrography ; for instance QPS/Qinsy, SIS, Caris/HIPS

**Competences and professional skills :**

- Able to work independently and within a team;
- Open mind and interest for multidisciplinary activities;
- Skills in mathematical modeling and problem solving;
- Able to communicate in French and English;

**Salary and conditions :**

- Renewable annual contract (37,5 h/weeks);
- 39 000 $ - 62 400 $ depending on qualification and experience;
- Social care programme;
- Starting dates, from mid-April 2017

Candidates should send their CV and cover letter before Wednesday March 15th 2017 à 16h to

Concours # 2017-01
CIDCO
Jean-Charles Ledeuil – Adjoint administratif
By e-mail : jean-charles.ledeuil@cidco.ca par fax : (418) 724-1401

**Candidate selected for an interview will be contacted**.