



Vlaams Instituut voor de Zee vzw
Flanders Marine Institute

VACANCY

Experienced acoustic geophysical data processor

SITUATION

For 20 years, the Flanders Marine Institute (VLIZ) has been strengthening the accumulation of marine knowledge and the excellence of marine scientific research in Flanders. VLIZ is a coordination and information platform, a focal point for marine and coastal research, which also serves as an international contact point for marine science. Important activities are national and international networking, information and data management, scientific communication for policy and industry, education and the general public, and logistical support of marine research. Since 2017, the institute also initiates, promotes and executes innovative and multidisciplinary marine research, and this at the service of, in collaboration with or complementary to Flemish and international marine research groups.

To strengthen its research capacity, VLIZ is hiring 14 new colleagues in its Research Department. Join our multidisciplinary team in Oostende at the Belgian coast and be part of a new wave of marine research in Flanders. You will work in a unique institute in which your science will be supported by state-of-the-art data systems and services, research infrastructure, science communication and an extensive marine library. Moreover, VLIZ is part of a wide network of Belgian and international marine research groups, offering many opportunities for scientific collaboration.

In addition to these open positions, VLIZ sets up a recruitment reserve for potential temporary jobs. Opportunities may arise for the following profiles: ecological modeler, environmental data analyst/modeler with experience in R, marine biologist/taxonomist, molecular ecologist, marine geologist. Candidates with such a profile are encouraged to make a spontaneous application.

For each function, VLIZ considers enthusiastic involvement, open servitude, excellent professionalism and integrity as important characteristics.

EXPERIENCED ACOUSTIC GEOPHYSICAL DATA PROCESSOR

In recent years there has been a rapidly growing interest in the study of drowned landscapes and geo-archaeology of the continental shelf. This new and challenging research field integrates the study of climate and sea level change, palaeogeography, geological mapping, prehistoric archaeology, and human presence and migration routes in the North Sea- once mainly dry land but now largely buried below the seabed. VLIZ is one of the pioneers in Belgium of this challenging interdisciplinary research field.

Within the new research unit "Seascapes Past and Future" of the Research Department we intend to develop and expand the palaeolandscape and geo-archaeological research over the next years, in close cooperation with national and international research institutes. Following a successful survey to the Brown bank in 2018, two follow-up surveys are planned in the southern/central North Sea in 2019. But also closer to the shore a lot of interesting research is waiting. Mapping the remnants of drowned Roman and medieval settlements, for instance, or the detection of small (archaeological or other) objects buried below the seafloor.

The success of this new research is highly dependent on detailed acoustic imaging of the seafloor and subseafloor. VLIZ' new multitransducer parametric echosounder has opened important perspectives towards ultra-high-resolution 2D and 3D imaging of the shallow sub-bottom. Combined with high-resolution seismic data (e.g. sparker) and high-resolution multi-beam data this allows an uninterrupted image ranging from the seafloor down to the deeper layers. Moreover, the acquisition of sub-bottom and multi-beam data using autonomous vehicles (such as AUV and USV, recently acquired by VLIZ) will play an increasingly important role in efficient acoustic imaging in the near future.

To develop this research, VLIZ hires an experienced acoustic data processor in the Research Department.

MAIN RESPONSIBILITIES

- To process acoustic data (multibeam, 2D seismic, 2D/3D parametric echosounder);
- To visualise 3D data volumes;
- To perform signal analysis for enhanced detection of buried features (2D and 3D);
- To efficiently process large datasets obtained with AUV and/or USV;
- To assist with seismic data interpretation;
- To contribute to data acquisition at sea (national and international);
- To interact and collaborate with colleagues at VLIZ for contribution in various research projects;
- To possibly contribute to research and innovation projects in collaboration with partners from the Blue Economy;
- To network at national and international level with other (marine) scientists.



PROFILE

- MSc in Geophysics or Geology;
- Expertise in multibeam data processing (Qimera or equivalent);
- Expertise in seismic data processing and signal analysis (RadExpro or equivalent);
- Knowledge of seismic interpretation software (e.g. Kingdom, ISE, ...) is a plus;
- Technical experience in acoustic data acquisition at sea;
- Knowledge of seismic and multi-beam acquisition software (e.g. Delph, Qinsky, ...) is a plus;
- Knowledge of 3D visualization software (e.g. Avizo, Voxler, ...) is a plus;
- Critical and creative;
- Scientifically integer;
- Open minded and taking initiative;
- Strong interpersonal skills, a motivated team player;
- Willing to work in an international context;
- Willing to learn new skills on a regular basis;
- Good oral and written English communication skills;
- Academic writing skills are a plus;
- Knowledge of non-acoustic data processing (e.g. magnetic, ERT, EMI...) is a plus.

ADDITIONAL INFORMATION

For more information concerning this vacancy, please contact:

- Tine Missiaen, head of the research unit Seascapes Past & Future
 - Mail: tine.missiaen@vliz.be
 - Telephone: +32 (0)474 51 20 21
- Michiel Vandegehuchte, Research Director VLIZ
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OUR OFFER

- We offer a challenging job in the dynamic environment of VLIZ
- A contract of indefinite duration. The salary follows the salary scales of scientific personnel in the Flemish Government.
- Fringe benefits: holiday pay, end-of-year bonus, meal vouchers, hospitalization insurance, bike allowance, free public transport for home-work commuting and an attractive holiday arrangement.

DOES THIS VACANCY APPEAL TO YOU?

Send in your cover letter and CV until May 15th 2019 (23:00 CEST):

- By post: Jan Mees, General director VLIZ, InnovOcean site, Wandelaarkaai 7, 8400 Oostende
- By mail: jobs@vliz.be with subject "06 SPF - Vacancy Acoustic Data Processor"

Contact us by telephone on +32 (0)59 34 21 30.



VLIZ promotes equality and diversity in the workplace. You will be recruited based on competencies. Qualities of people are decisive, regardless of gender, religion, ethnic origin, age, sexual orientation or any disability.

PROCEDURE

Based on the received motivation letters and CVs, a select group of candidates will be invited for a job interview. You will be informed by email. The job interviews take place in the offices of VLIZ.

Employment can start immediately after the selection procedure and ideally not later than 1st October 2019.

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