



Vacancy Notice: Research Associate, Maritime Energy Management Life-Cycle Assessment

Job title Research Associate, Maritime Energy Management

Organizational Unit: Research

Duty Station: Malmö, Sweden

Duration of contract: Initial one-year fixed-term appointment which may be renewed upon satisfactory performance

1. Organizational setting

The World Maritime University (WMU) is a postgraduate, education and research university established in 1983 by the International Maritime Organization, a specialized agency of the United Nations. WMU's mandate is to build global capacity in maritime and ocean areas. The University offers M.Sc. and Ph.D. programmes, Postgraduate Diplomas, and Professional Development Courses (PDCs) with the highest standards in maritime and oceans education and training. WMU also has a highly respected research and a strong record of publications across the maritime and ocean fields. The Research Associate position falls within the Research Unit at WMU's headquarters in Malmö, Sweden.

2. Main purpose

In the framework of a major EU Horizon 2020 and Nordic Energy Research funded research projects 'CHEK' and 'CAHEMA' addressing the decarbonisation of long distance shipping, WMU is seeking to recruit a full-time Research Associate with expertise in life-cycle assessment (LCA) in the maritime industry. The successful candidate will also be responsible for managing communication and dissemination activities in the project.

The selected candidate will work within an international team of collaborating researchers at WMU, partner universities and innovative companies active in the maritime industry to evaluate new technologies in terms of their climate impact benefits, and to communicate the results to academia, industry, policy makers, and to the wider public.

The LCA will be based on ISO 14040 / 14044 methodologies with a focus on climate impact. LCAs will be conducted on various types of shipping decarbonization technologies including wind-assisted propulsion technology, hull air lubrication systems, waste-heat-recovery systems, ultrasound anti-fouling technology, and hydrogen and ammonia-fueled engines, as well as two overall vessel concepts considering construction, operation, maintenance and

disposal. Details of the technologies will be made available through the collaborating industrial partners and through the use of LCA software and databases.

The results of the LCA are expected to be published as academic output of this project, in a number of peer reviewed journal and conference articles, and the outcomes of the work are expected to be disseminated within academia (universities, maritime academies), and the maritime industry (ship owners, shippers, ship designers, classification societies, and shipyards).

As part of the communication and dissemination activities of the project, the successful candidate is expected to develop and coordinate communication activities in various channels, including press-releases, reports and presentations. As part of the project activities a substantial amount of interaction with project partners and travel is expected.

The successful applicant will work under the overall supervision of the Principal Investigator (PI), as well as the Director of Research, and may functionally be directed by different faculty members of Maritime Energy Management.

3. Working relationships

Internal contacts – the successful candidate will liaise and interact with relevant faculty members on a regular basis as well as with support staff when needed.

External contacts – the successful candidate will be required to liaise with persons in the wider maritime transport sector; in the context of the CHEK Horizon 2020 and CAHEMA projects.

4. Duties, responsibilities

The successful candidate is expected to develop and evaluate LCAs with focus on climate impact for novel shipping decarbonisation technologies and fuels and communicate the results from these studies in the form of academic peer-reviewed research articles, reports and presentations.

Part of the duties will be the development and coordination of general communication activities of the overall project, including publications, press-releases, reports and presentations. The candidate is expected to liaise internationally with leading industrial partners and academic institutions, as part of these projects.

The Research Associate will be required to perform the following specific tasks:

- Develop LCAs for innovative decarbonisation technologies, and the fuels hydrogen and ammonia;
- Take on administrative and reporting tasks related to projects;
- Support presentation of research findings at professional conferences and meetings;
- Develop and maintain a web/social media presence for the CHEK and CAHEMA projects;
- Helping to organize the delivery of workshops and project meetings;
- Contribute to enhancing the research profile of the maritime energy management

research priority area, including developing research proposals and establishing a track record of publications of international quality in leading journals;

- Provide support for any other tasks related to the project as may be required.

5. Minimum requirements – education, experience and language skills

Education

Essential

- PhD in a topic employing LCA, with a background in naval architecture, marine engineering, mechanical engineering, environmental engineering or process engineering, or any other discipline relevant to LCA.

Experience

Essential

- A proven track-record of developing LCAs at research level is a requirement and a track record in research and scholarly publication in life-cycle assessment;
- Experience in contributing to communication and dissemination of research projects, especially in relation to the EU framework;
- Proven project management skills.
- Maritime background and decarbonisation of international shipping

Desirable

- Experience in planning/organizing research projects and drafting relevant research proposals;
- Experience in organizing conferences and seminars;
- Networks and portfolio contacts in the maritime domain.

Languages

Essential

- Fluency in spoken and written English.

Desirable

- Knowledge of other European and UN official languages would be an advantage.

6. Knowledge and skills

Knowledge and skills

Essential

- Ability to work independently and as part of a professional/academic team;
- Excellent communications skills;
- Effective organizational skills, including time management, setting priorities and undertake administrative tasks;
- Ability to work in a multicultural environment and to demonstrate gender-sensitive and non-discriminatory behaviour and attitudes;

- Ability to deal with administrative matters as appropriate to status and with reference to other colleagues within WMU.

These vacancies are open to male and female candidates. WMU seeks to increase the number of women at all levels and, therefore, qualified women are particularly encouraged to apply. WMU will make every effort to facilitate the employment of persons with disabilities.

Application

The position provides for a monthly stipend of 42 000 SEK (free of income tax in Sweden) and medical and life insurance coverage by Cigna International.

Applicants **must** fill in the Personal History Form, which can be found at <http://wmu.se/vacancies>, provide a letter of interest, a complete CV and the contact information of three referees to Marco Batista, Head of Human Resources (mb@wmu.se). Candidates will be contacted if they are short-listed.

Deadline for Applications: 31 May 2021