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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

Faculty of Engineering
Department of Marine Technology

PhD position within Marine Structures (IV-109/18)

Description

A PhD position is available at the Department of Marine Technology, NTNU within the area of ship-based monitoring. This position is a part of the Centre for Research-based Innovation on Marine Operations (SFI MOVE), funded by the Research Council of Norway. The objective of the MOVE Centre is to develop new methods, tools, prototypes and training for safe and efficient installation of marine structures and for their maintenance in extreme marine environments. More information about this centre can be found at <https://www.ntnu.edu/web/move/move-marine-operations-center>.

Marine operations are designed and simulated by engineers before they are executed. Weather limitations etc are set. However, the situation on-board may be different from the simulated conditions e.g. due to the vessel having a different load condition than originally assumed. This will also imply different vessel motions than those obtained as the result from the initial calculations. The main idea of the present Phd project is to perform on-board simulation based on real-time measurements of vessel motions and response. Combined with information about development of the environmental processes, this will form the basis for prediction of future vessel behaviour both in a short-term and long-term sense.

Based on this prediction the system can give advice as well as illustrating the predicted operation based on processing of real data and simulated responses and predict situations before they take place in reality. As an example, such a system will be highly relevant in connection with heavy subsea lifting operations since these are performed in a close cooperation between the crew on bridge, crane and deck. The on-board tool will provide valuable support when performing the various tasks associated with such subsea lifting processes.

Qualifications

The position requires a Master's degree in marine technology, ocean engineering or a similar relevant area. Disciplines such as structural analysis and hydrodynamics are particularly relevant, preferably with some experience regarding control theory. Research or engineering experience on ship and/or marine operations is considered to be an advantage.

Excellent English skills, spoken and written, are required. Applicants from non-English-speaking countries outside Europe must document English skills by an approved test. Approved tests are TOEFL, IELTS, Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE).

The successful candidate should be enthusiastic and highly motivated and be willing to work both independently and with other researchers. The successful candidate must also fulfill the requirements for admission to a doctoral program.

Conditions

PhD Candidates are remunerated in code 1017, and are normally remunerated at gross NOK 436 900 before tax. There will be a 2 % deduction to the Norwegian Public Service Pension Fund from gross wage.

Engagement as a PhD Candidate is done in accordance with "Regulation concerning terms and conditions of employment for the posts of post-doctoral research fellow, research fellow, research assistant and resident", given by the Ministry of Education and Research of 19.07.2010. The goal of the positions is to obtain a PhD degree. Applicants will engage in an organized PhD training program, and appointment requires approval of the applicants plan for a PhD study within three months from the date of commencement.

The position is of 3 years duration.

For further information about the position, please contact Prof. Bernt Leira, Department of Marine Technology, NTNU, Trondheim. Email: bernt.leira@ntnu.no. Also the following can be contacted: SINTEF - Henning Borgen; henning.borgen@sintef.no and Lars Tandle Kyllingstad; lars.kyllingstad@sintef.no.

See <https://www.ntnu.edu/iv/doctoral-programme> for more information.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants. The positions adhere to the Norwegian Government's policy of balanced ethnicity, age and gender. Women are encouraged to apply.

The application

The application must contain information of educational background and work experience. Certified copies of transcripts and reference letters

should be enclosed. Applications with CV, grade transcripts and other enclosures should be submitted via this webpage at www.jobbnorge.no.
Mark the application with IV-109/18.

Start-up date may be discussed, but tentatively August 2018.

Application deadline is 16 April 2018.

According to the new Freedom of Information Act, information concerning the applicant may be made public even if the applicant has requested not to be included in the list of applicants.

Jobbnorge-ID: 149180, Søknadsfrist: Avsluttet