

Hydrodynamic/WEC Numerical Modeller

Floating Power Plant A/S (FPP) is looking for a Hydrodynamicist, with expertise in Matlab, Simulink and Wave Energy Convertors, to join our fast-growing business and team. If you want to have direct influence and be part of a renewable energy adventure – please send an application to HR@floatingpowerplant.com

Main tasks

- To continue the development of Floating Power Plant's inhouse code/simulation tool (primarily in Matlab and Simulink)
- To initiate new features in FPP's simulation tool in order to deliver loads, motions and other outputs required for FPP's technology development
- To ensure the FPP code development follows the business requirements of the company
- To work together with industrial and academic partners on running simulations
- To run simulations and document the results as needed

Technical Skills

- Essential
 - Good understanding of the equation of motion for a wave energy convertor in the time domain
 - Good understanding of hydrodynamic interactions
 - Expert in the use of Matlab and Simulink
 - Fast to learn new software
 - Logical thinking and good to troubleshoot to solve errors in code
 - Understanding of commercial interests, with an ability to ensure work meets customer needs and company business goals
- Nice to have
 - Able to run WAMIT or similar wave-structure interaction software
 - Multisurf, Solidworks, Inventor, Fortran
 - Understanding and experience in “generalised modes” in WAMIT
 - Understanding of PTO control
 - Understanding of hydraulic and power generation systems
 - Aero-elastic modelling experience for wind turbines
 - Comparison between numerical models and scaled physical tests
 - Understanding of State Space models to represent the radiation force convolution integral
 - Familiarity with agile methodology (the Inhouse Coding team works with Agile)
 - Experience with Jira

Personal Skills

- Passion to make a difference and bring FPP's technology to the next level
- Enthusiastic and self-driven and be able to work independently.
- Able to take ownership of the workflow
- Good to prioritize work and determine the appropriate level of detail for a task
- Team player
- Good to communicate with team and external partners

Experience

- Minimum Masters' degree and preferably a PhD in hydrodynamic modelling of wave energy convertors
- Must be eligible to work in Denmark
- The place of work is Vallensbæk, Denmark or Gran Canaria, Spain (FPP's technical team is located in these two offices)

What we offer

- FPP is a Danish company, backed by 240 shareholders, rapidly expanding in order to develop and commercialise the world's first floating wind and wave device
- We have a fast-paced and fun environment with varied tasks and a great team
- You will be working alongside colleagues and external partners who are the leaders in their fields
- The work which you undertake will be key to the company's success, and will directly impact the design of FPP's technology and our commercial projects
- Attractive working terms
 - Competitive salary and share option program (warrants) - meaning you can own a part of our success
 - Great working conditions incl. flexible working hours, pension, 6 weeks holiday, option to work in other offices, etc.
 - Good working environment incl. lunch, social events, modern facilities, etc
 - Regular Friday drinks and other events with colleagues
- We are an international team so the main office language is English.
- The place of work is Vallensbæk, Denmark or Gran Canaria, Spain (FPP's technical team is located in these two offices)

Cross competencies

Please note we are currently looking for 7 new colleagues. If your skill set overlap some of the other positions, please emphasise this, as this will be evaluated positively.