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 –

How to apply

Please send an application to HR@floatingpowerplant.com with subject "Application for Hydrodynamic/WEC Numerical Modeller: Winter22".

Please include:

- CV
- Cover Letter
- Desired start date (with reason)
- Desired location (Gran Canaria or Denmark)

(Note **only e-mailed applications will be considered**, and not applications through the LinkedIn platform).

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
 - o Good understanding of hydrodynamic interactions
 - o Expert in the use of Matlab and Simulink
 - o Fast to learn new software
 - o 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



- o Able to run WAMIT or similar wave-structure interaction software
- o Multisurf, Solidworks, Inventor, Fortran
- o Understanding and experience in "generalised modes" in WAMIT
- o Understanding of PTO control
- o Understanding of hydraulic and power generation systems
- o Aero-elastic modelling experience for wind turbines
- o Comparison between numerical models and scaled physical tests
- Understanding of State Space models to represent the radiation force convolution integral
- o Familiarity with agile methodology (the Inhouse Coding team works with Agile)
- o 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 the EU
- 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
 - o Great working conditions incl. flexible working hours, pension, 6 weeks holiday, option to work in other offices, etc.
 - o Good working environment incl. lunch, social events, modern facililites, etc
 - o 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)