

## ACADEMIC POSITIONS

### JOB DESCRIPTION

- **JOB TITLE/PROFILE** PhD position: Optimization of the layout of floating wind turbines farms to optimize energy production

- **RESEARCH FIELD(S)** Engineering

- **JOB DESCRIPTION**

The aim of this project is optimizing the wind turbine farms layout by taking into account the environmental conditions, geographical position and the turbine technology. In this purpose, large computations are required to identify the optimal parameters. In order to reduce the computation time, a sensitivity analysis is carried out through stochastic tools leading to focus on specific parameters or conditions. First, the energy production is calculated for specific configurations. A probabilistic model is associated to the parameters based on the obtained data and expert knowledge. Through uncertainty propagation the production for all points is approximated and the optimal values are defined and validated through numerical calculations.

- **QUALIFICATIONS/SKILLS/EDUCATION & RESEARCH REQUIREMENTS**

The successful candidate will present an academic background, at a master level, either in fluid mechanics, ocean sciences, and marine engineering, or in applied mathematics and data sciences.

- **APPLICATION DEADLINE**

1<sup>st</sup> of May 2024. International candidates are encouraged to apply

- **STARTING DATE**

The position is available for 10 months ideally starting in September 2024

- **JOB LOCATION**

<sup>1</sup> **Social Sciences** - Law, Education, Economics, Social Science, Psychology - **Political Science** - Political Science - **Computational Sciences** - Computer Science, Mathematics - **Engineering** - Architecture and Design, Engineering - **Natural Sciences** - Biology, Chemistry - **Physical Sciences** - Physics, Space Science - **Environmental Sciences** - Agricultural Science, Geosciences - **Humanities** - Theology, Philosophy, Literature, Linguistics, History, Anthropology, Arts and Culture - **Medical Sciences** - Medicine

The job location is Marseille, France, on the campus of Chateau-Gombert

○ **REQUESTED DOCUMENTS OF APPLICATION**

Letter of motivation, CV and 2 reference letters.

○ **CONTACT TO APPLY**

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<sup>1</sup> **Social Sciences** - Law, Education, Economics, Social Science, Psychology - **Political Science** - Political Science - **Computational Sciences** - Computer Science, Mathematics - **Engineering** - Architecture and Design, Engineering - **Natural Sciences** - Biology, Chemistry - **Physical Sciences** - Physics, Space Science - **Environmental Sciences** - Agricultural Science, Geosciences - **Humanities** - Theology, Philosophy, Literature, Linguistics, History, Anthropology, Arts and Culture - **Medical Sciences** - Medicine