Anbieter

Universität
Universität Stuttgart

Institut/Einrichtung
Stuttgarter Lehrstuhl für Windenergie (SWE) @ Institut für Flugzeugbau

Kategorie
Wissenschaftl. Stellen

Angebot

Titel
Early-Stage-Researcher position in the EU Horizon 2020 MSCA ITN Project FLOAWER

Einsatzort
Allmandring 5B
70569 Stuttgart
Deutschland

Beschreibung

Stuttgart Wind Energy (SWE) has an exciting opportunity for an:

Early-Stage-Researcher (ESR) in the EU Horizon 2020 MSCA ITN project FLOAWER

ESR2: Assessing the measurements of offshore wind conditions using LiDAR on floating platforms for resource assessment and power curve verification

During the ESR you will contribute to the advance of floating wind energy by working on different methods to assess and analyze wind conditions offshore with remote sensing devices installed on floating structures.

You will be working on:

- General study of advantages and disadvantages of different possibilities to measure wind conditions offshore with floating structures
- Analytical comparison of different methods to measure wind conditions with a LiDAR from different floating platforms and positions (e.g. floating LiDAR, nacelle-based, transition piece based, floater based) for wind resource assessment and power curve determination
- Development of new and extension of existing simulation environments for LiDAR measurements on floating structures performing wind field reconstruction
- Verification of the simulation environment with real measurement data
- Assessment of the uncertainties of LiDAR measurements on different floating structures

About FLOAWER

FLOAWER is the EU-funded "FLOAting Wind Energy netwoRk". Within FLOAWER interdisciplinary training will be provided to 13 Early Stage Researchers (ESR) in different research fields related to floating wind energy. FLOAWER multidisciplinary approach will endow the ESR with scientific and technical skills to train the new generation of high-profile scientists and engineers, provide them with enhanced career perspectives and address offshore wind energy industry needs. Participating in FLOAWER gives you a unique chance to become part of an international research team. Alongside excellent opportunities for research, you will learn project management and intercultural communication skills. You can find more information about the FLOAWER project on:

http://www.floawer-h2020.eu

About the Institute

Stuttgart Wind Energy (SWE) is part of the Institute of Aircraft Design and a dedicated wind
energy institute since 2004. Our research focus includes wind measurement technology, energy forecasting, sound emission estimation, design and modelling of floating systems, electromechanical interactions, control and simulation of on-/offshore turbines and farms. SWE is internationally well known for pioneering work in the area of wind lidar for wind energy applications. As a team, we are continuously looking for new ways to better understand the wind by developing new lidar hardware and models. We explore new applications and look for opportunities to apply the results of the research to wind energy. In our projects, we collaborate with a wide range of national and international partners.

What we offer
- A pleasant working atmosphere in an internationally recognized, mixed and motivated team of researchers
- A versatile and interdisciplinary job and the possibility to pursue a PhD
- A flexible working environment to support professional and academic further developments
- Contacts to international research institutions and companies in the field of wind energy
- Opportunities to participate in international conferences, workshops and collaboration tasks (e.g. IEA Wind Task 32)
- Opportunities for courses and training, and
- A wide range of sport and cultural activities at the University of Stuttgart and in the region

Salary
You will be employed on a full-time basis with a competitive salary in accordance with the MSCA rules and your personal circumstances. The amount corresponds to the amount the university receives from the Research Executive Agency for the researcher costs and includes the living and mobility allowance as well as a family allowance, if applicable. It is a gross amount and includes the employer’s share of social security contributions and the employee’s share of social security contributions, including tax. The obligation to pay taxes and to contribute to social insurance (health, nursing, unemployment and pension insurance) is based on the relevant regulations.

For more info about the salary calculation, the requisites for family allowance and more details on the employment conditions, please see the founding body’s rules at:

Supervision
You will benefit from joint supervision and multi-sectoral advisory committees, ensuring the successful completion of your Individual Research projects.

Training
In addition to your scientific project, you and the other ESRs will be collaborating with world-leading research groups within the Consortium through secondments. All ESRs will benefit from extensive and varied further continuing education; completing a series of carefully designed training modules and transferable skills courses; they will participate in symposia, workshops and international conferences and will have meaningful exposure to the industrial environment through FLOWAER industrial partners.

Secondments
Two secondments of 3 months duration at the premises of IWES Fraunhofer (Germany) and IDEOL (France) will be included in this ESR position.

Enrolment in the PhD program
Enrolment in the PhD degree program at the University of Stuttgart has explicit requirements for the admission. These are explained in the University of Stuttgart PhD Guide.

Anforderungsprofil
We are looking for a candidate with great interest in scientific research, motivation to work in international projects, the enthusiasm to push technological boundaries and explore new terrain with the support of their colleagues at SWE and in the FLOWAER project. Candidates are required to have a master’s degree in engineering or a similar degree with an academic level equivalent to the master’s degree in Meteorology, Physical Sciences, Engineering, Mechatronics, Computational Science or similar.

You should have:
- Motivation to dive into challenging research questions.
- Capability to work both independently and cooperate in a team.
- Strong focus on creativity, proactivity, positive solutions, and perseverance for scientific work.
- Excellent communication skills in spoken and written English.
You would benefit from having:

- Basic experience in the use of wind lidar and wind measurements in general.
- Basic knowledge of wind energy.
- Experience with field measurements and data analysis.
- Some knowledge of the German language.

In addition, you should satisfy at the time of the recruitment the following mandatory characteristics:

- Having not more than 4 years of equivalent research experience (i.e. working as researcher after obtaining your master’s degree).
- Having not been awarded a PhD degree.
- Having not resided or carried out your main activity in Germany for more than 12 months in the last 3 years.

All interested candidates irrespective of age, gender, race, disability, religion or ethnic background are encouraged to apply. The University of Stuttgart strives to increase the number of females in science and encourages women to apply. Applicants with disability and with equal qualification will be given preference.

Your application in English or German should include your curriculum vitae, transcript of grades, job references, and an electronical copy of the final thesis of your studies or relevant research papers.

Vergütung
see job description

Art der Beschäftigung
Vollzeit

Zeitraum der Beschäftigung
nach Vereinbarung

Bewerbungsfristende
Sonntag, 31. Mai 2020 - 23:00

Kontakt

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Bitte beziehen Sie sich in Ihrer Bewerbung auf https://www.stellenwerk-stuttgart.de/