Postdoc: Wind farm turbulence

Job description
Are you fascinated by the effect of turbulence on wind energy production? Are you highly motivated to work in a dynamic research environment? We are looking for a postdoc to study the influence of atmospheric turbulence on wind farms performance using novel large-eddy simulations!

Advancements in wind turbine technology have resulted in growing use of wind energy to reduce carbon emissions. Modern wind turbines and wind farms are becoming so large that their performance is affected by atmospheric turbulence flow phenomena that are not yet well explored. You will develop novel large-eddy simulation techniques to study how atmospheric turbulence affects wind farm performance.

Location
Work is carried out in the Physics of Fluids group at the University of Twente in the Netherlands. We study various fluid mechanical problems using experiments, simulations, and theoretical methods. The group is embedded in the Max Planck Center for Complex Fluid Dynamics, the J.M. Burgers Research Center for Fluid Mechanics. For further information, you are encouraged to visit us at https://stevensrjam.github.io/Website/ and http://pof.tnw.utwente.nl, where you can read more on our research.

Profile
We seek a highly motivated, positive and hardworking researcher with a PhD in turbulence, fluid dynamics, wind energy, or in a closely related field to join a hardworking group of scientists and engineers working on a common theme. Demonstrated programming experience and the skill to perform state-of-the-art simulations of fluid dynamics programs are a requirement. The position requires the ability to work independently with excellent analytical and interpersonal skills. Proficiency in English is required, both spoken and written.

Our offer
This position plays a key role in the wind farm project and will be embedded in a multifaceted research group with colleagues working on similar topics.
- Full-time 2-year postdoc position.
- Full status as an employee, including pension and health care benefits. Salary and conditions are in accordance with the collective labor agreement for Dutch universities.
- We provide a stimulating, modern research environment with world-class research facilities, including access to top supercomputers.
- The starting salary, depending on experience, ranges from € 3.353 to €4.402 gross per month
- A holiday allowance of 8% of the gross annual salary and a year-end bonus of 8.3%.
- Between 29 and 41 leave days in case of full-time employment.
- The university is situated on a green campus with facilities for sports and other activities.
- Researchers from outside the Netherlands may qualify for a tax-free allowance equal to 30% of their taxable salary (the 30% tax regulation).

Information and application
Please submit your application to Richard Stevens (r.j.a.m.stevens@utwente.nl), including:
- A cover letter outlining your specific interest, qualifications and motivation to apply for this position.
- A detailed CV.
- Contact information of two academic references who are willing to provide a recommendation letter at our request.
- An interview and a scientific presentation will be part of the selection procedure.

We are an equal opportunity employer and value diversity at our company. We do not discriminate on the basis of race, religion, color, national origin, sex, gender, gender expression, sexual orientation, age, marital status, veteran status, or disability status. We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job application or interview process, perform essential job functions, and to receive other benefits and privileges of employment. Please contact us to request accommodation.