

Global thinking,  
interdisciplinary research:  
the spirit of Leibniz!



Nestled in a modern city surrounded by nature and with an exceptional standard of living, Leibniz University Hannover offers excellent working conditions in a vibrant scientific community.

The Institute of Turbomachinery and Fluid Dynamics is one of the most modern turbomachinery institutes in Germany. We - a motivated team of employees - use an excellently equipped test field and advanced software to solve current research challenges.

**The Institute of Turbomachinery and Fluid-Dynamics (TFD) welcomes applications for the following position starting at the earliest possible date:**

## Academic Staff (PhD Position) with focus on "CFD of dynamic stall on wind turbines" (salary scale 13 TV-L, 100 %)

The position is initially limited to 30 months. The scope of the position corresponds to 100 % of the regular weekly working hours. The project serves to achieve a Phd.

### Your role

The position is within the CFD Methods Development Group at TFD, emphasizing scientific flow simulations for wind turbines. As part of this work, TFD contributes to the Collaborative Research Center (SFB) 1463. Our team develops advanced CFD methods and utilizes Large Eddy Simulations (LES) and Direct Numerical Simulations (DNS) to tackle interdisciplinary challenges in aerodynamics, aeroacoustics, and aeroelasticity in turbomachinery.

In this project, you will directly address significant challenges facing the next generation of wind turbines. Your contributions will be crucial in enhancing our understanding and predictive capabilities regarding dynamic effects on the aerodynamics and aeroelasticity of wind turbines. These effects are vital for ensuring the safety and economic viability of future multi-megawatt wind turbines. You will have access to comprehensive numerical tools and computational resources to generate high-quality simulation data of unsteady flows around airfoils using Unsteady Reynolds-Averaged Navier-Stokes (URANS) and hybrid RANS-LES methods. You will also have the chance to present your findings to the public at conferences and through publications, thereby expanding your professional network.

## Who are we looking for?

The successful candidate must hold a university science degree with a major in aerospace, mechanical engineering or a comparable course of study with a focus on fluid mechanics, wind energy, thermal turbomachinery, aircraft propulsion or comparable. In addition, you should have substantial prior practical and theoretical experience in CFD.

Desired in addition are:

- Very good to excellent grades in your studies
- Detailed knowledge of aerothermodynamics of wind turbines
- Detailed knowledge of physical phenomena of turbulent flows
- Knowledge in C++ and Python
- Very good knowledge of German or English
- Willingness and ability to contribute to a team
- Independent and careful way of working
- Pleasure in scientific work

Equal opportunities and diversity are core values at Leibniz University Hannover. Our goal is to tap into individual potential and open up possibilities. We therefore welcome applications from anyone interested in the position, irrespective of gender, nationality, ethnic origin, religion or ideology, disability, age, sexual orientation and identity.

We strive towards a balanced and diverse workforce and a reduction in under-representation in accordance with the Lower Saxony Equal Rights Act (*Niedersächsisches Gleichberechtigungsgesetz – NGG*). We therefore also encourage applications from women for the above-mentioned position. Preference will be given to equally-qualified candidates with disabilities.

## Why join us?

With more than 5000 employees, Leibniz University Hannover is one of the largest and most attractive employers in the Hannover region. We offer a vibrant interdisciplinary and international working environment, and promote personal and professional [development](#) ranging from subject-related skills to leadership and languages.

Part-time employment as well as remote work (mobile work, work from home) can be arranged upon request. We support employees with [balancing work and family life](#), through services such as back-up childcare, childcare during school holidays, and parent-child offices, as well as providing individual advice regarding family responsibilities and caring for dependants.

To promote health and well-being among employees, we offer an extensive [sports programme](#) with over 100 different sports, as well as a fitness centre with a sauna and climbing space. [Health management](#) measures, such as courses on stress management, good nutrition and relaxation, aim to ensure a healthy workplace.

At our institute you can also expect:

- An attractive and modern working environment with excellent facilities
- A dynamic team in an autonomous organization with flat hierarchies
- The opportunity to build up an extensive network in science and industry
- Freedom for professional and personal development

## Additional information

For further information, please contact Mrs. Hye Rim KIM (tel.: +491523 762 0557, email: [kim@tfd.uni-hannover.de](mailto:kim@tfd.uni-hannover.de)).

Please submit your application and supporting documents by 31<sup>st</sup> May 2026 electronically to

Email: [kim@tfd.uni-hannover.de](mailto:kim@tfd.uni-hannover.de)

or alternatively by post to:

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Institut für Turbomaschinen und Fluid Dynamik (TFD)  
Mrs. KIM  
Gebäude 8141, dritte Etage  
An der Universität 1, 30823 Garbsen

<http://www.uni-hannover.de/en/jobs>

Information on the collection of personal data according to article 13 GDPR can be found at:

<https://www.uni-hannover.de/en/datenschutzhinweis-bewerbungen/>