

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 (Postdoc) with focus on "scale resolving simulation and CFD methods" (salary scale 13 TV-L, 100 %)

The position is initially limited to 36 months. The scope of the position corresponds to 100 % of the regular weekly working hours. The project serves to achieve a habilitation.

Your role

The position is part of the CFD method development at TFD, focusing on scientific CFD in turbomachinery and development of industrial CFD models. We develop CFD methods and employ LES and DNS to address interdisciplinary questions related to aerodynamics, aeroacoustics, and aeroelasticity in turbomachinery. From the improved physical understanding, we derive RANS turbulence and transition models for industrial applications. All work is conducted within the flow solver TRACE, which is developed by the German Aerospace Center (DLR), MTU Aero Engines AG, TFD, and university partners. As part of this collaboration, you are responsible for the quality assurance of the two-equation RANS models in TRACE. This involves expanding test suites with numerical and experimental reference data, calibrating new model combinations, verifying model development, and preparing them for a merge into the TRACE master. You are expected to actively shape the joint research agenda through publications and proposals. If desired, you can habilitate based on your work within the group.

You will work closely on the project with internal and external experienced experts from MTU Aero Engines AG as well as the DLR, Institute of Propulsion Technology.

Who are we looking for?

The successful candidate must hold a doctoral degree with a major in aerospace, mechanical engineering or a comparable course of study with a focus on fluid mechanics, thermal turbomachinery, aircraft propulsion or comparable. In addition, you should have substantial prior experience in code development for numerical flow solvers.

Desired in addition are:

- Very good to excellent grades in your studies
- Good to very good number of publications
- Detailed knowledge of aerothermodynamics of turbomachinery
- 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 Dominik SUCHLA (tel.: +491523 762 0558, email: suchla@tfd.uni-hannover.de).

Please submit your application and supporting documents by 31st May 2026 electronically to

Email: suchla@tfd.uni-hannover.de

or alternatively by post to:

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<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/>