

## JOB OFFER

# Research Engineer

## Aerodynamic simulations for turbomachinery design

Cenaero is an applied research center that provides numerical simulation methods and tools to companies involved in a technology innovation process, allowing to invent and design more competitive products. Our ambition is to be internationally recognized as a technology leader in modeling and numerical simulation, to be a strategic partner of large global industries as well as a real support to regional companies including innovative SMEs.

We are mainly active in the aerospace, process engineering, energy, and building sectors, and provide expertise and engineering services in multidisciplinary simulation, design and optimization in the fields of mechanics (fluid, structure, thermal and acoustics), manufacturing of metallic and composite structures. Having a solid and recognized experience in numerical simulations and the development of methodologies and tools for turbomachinery applications, Cenaero is an official strategic R&D partner of the Safran group.

In addition to providing engineering services and software development, Cenaero operates a Tier-1 supercomputing infrastructure. Our headquarters are located in Gosselies (Belgium), with a subsidiary office in near Paris (France).

To support the expanding **research activities focusing on CFD for turbomachinery applications**, we are looking for a senior research engineer and offer a permanent contract (CDI) within our team in Belgium.

### Job description

We are working on a daily basis on challenging projects with our clients and research partners. These projects are often integrated in a multi/pluridisciplinary context that relies on a strong CFD-centric expertise, involving aerodynamic, aeroacoustic, aeroelastic, aeromechanical and/or aerothermal analyses. Passion drives us; boldness moves us forward to ambitious projects. Scientific rigor and intellectual curiosity fuel our quest for high-quality work.

Your aerodynamic expertise and skills will allow you to set up and further develop CFD simulation strategies that require complex meshing and/or efficient multifidelity methods. You will be responsible for the technical project progress, in order to meet our clients' expectations and in line with our Quality Management System (EN9100).

### Profile

We are looking for a candidate with:

- an aeronautical engineering master degree (or equivalent), with a PhD degree as a valuable asset
- a solid background in numerical methods for Computational Fluid Dynamics
- a working experience (industrial or academic) of at least 2 years on turbomachinery-related projects
- a strong affinity with turbomachinery design and an interest in optimization and data mining techniques
- a proficiency in different CFD software (Ansys-Fluent, OpenFOAM,...) and pre/post processing tools
- scripting and programming experience (C++, Python, bash,...)
- excellent analytical skills and solution-oriented thinking capabilities
- autonomous working skills with an aptitude for team work
- a fluency in French and English
- development experience of low-order fidelity tools as a welcomed skill

### Offer

By joining Cenaero, you'll have the opportunity to take part in the challenging developments of different sectors, in direct contact with its economic actors and experts. Cenaero offers you a competitive salary and the opportunity to develop yourself in a dynamic and stimulating environment. We believe our co-workers are the source of our success. We care for the personal development of our collaborators and seek to make them harmoniously progress.

### Contact

Motivated candidates are invited to send their CV and motivation letter to : [rh\\_be-jo-2022-003@cenaero.beaero.be](mailto:rh_be-jo-2022-003@cenaero.beaero.be) and to mention the job offer reference.