Cenaero

REF.: BE-JO-2024-01

JOB OFFER

Senior Research Engineer
Multiphysics simulation for Plasma in rarefied conditions

Cenaero, located in Gosselies (Belgium), is a private non-profit applied research center providing to companies involved in a technology innovation process numerical simulation methods and tools 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.

Cenaero provides expertise and engineering services in multidisciplinary simulation, design, and optimization in the fields of both mechanics (including fluid, structure, thermal, and acoustics) and electro-magnetics, manufacturing of metallic and composite structures as well as in analysis of in-service behavior of complex systems and life prediction. It also provides software through its massively parallel multi-physics platform Argo and its design space exploration and optimization platform Minamo. Cenaero operates the Tier-1 Walloon supercomputing infrastructure.

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. **Passion drives us; boldness moves us forward to ambitious projects. Scientific rigor and intellectual curiosity fuel our quest for high-quality work.**

To support the expanding research activities in multiphysics simulations with a focus on electromagnetism and rarefied flow conditions, we are looking for a senior research engineer and offer a permanent contract (CDI) within our team in Belgium.

Job description

Cenaero is currently looking for a research engineer (M/F) **with an expertise in plasma and partial discharges simulations in rarefied conditions to expand** research activities on **multidisciplinary simulations for design.** This permanent position is available immediately. **You will be responsible for the technical progress as well as for the project management, in order to meet our clients' expectations and in line with our Quality Management System (EN9100).**

Profile

We are looking for a candidate with:

- PhD in engineering, physics or demonstrated equivalent experience
- Advanced knowledge in multi-physics modeling and simulation for plasma, rarefied gas and electro-magnetics
- Experience in nonlinear finite element and particle in cell DSMC for partial discharges in vacuum applications
- Proficiency in object-oriented programming on Linux platform
- Scripting and programming experience (C++, Python, bash…)
- Excellent analytical skills and solution-oriented thinking capabilities
- Autonomous working skills with an aptitude for teamwork
- Fluency in French and/or English

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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.

Application procedure

Interested candidates should send a cover letter, quoting the reference number of the offer (BE-JO-2024-01) and a resume to rh_be-jo-2024-01@cenaero.be