JOB OFFER

Senior Composite structures & processes Research Engineer

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. Internationally recognized, in particular through its research partnership with Safran, Cenaero is mainly active in the aerospace (with an emphasis on turbomachinery), process engineering, energy and building sectors.

Cenaero provides 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 as well as in analysis of in-service behavior of complex systems and life prediction. Cenaero also provides software through its massively parallel multi-physics platform Argo and its design space exploration and optimization platform Minamo.

Cenaero operates experimental facilities in composite manufacturing and prototyping as well as the Tier-1 Walloon supercomputing infrastructure with 14,000 computing cores (see tier1.cenaero.be for details). Cenaero will invest 10 M€ for the renewal of the infrastructure by the end of 2022.

To support the expanding research activities on manufacturing process simulation and design of composite materials and components, Cenaero is currently looking for a Senior Composite structures & processes Research Engineer (F/M).

Position

You will be responsible for developments in collaborative and industrial projects and will bring innovative solutions through collaboration with colleagues in high performance composite applications as well as numerical and software development activities. Your will also have to opportunity to oversee some of these projects and interact with partners of the academic and industrial fields. Your skills in the field of computational mechanics and simulation will contribute to developments at the intersection of physics-based simulation and machine learning to push the limits of real-world system modeling

Your objectives will include the development of activities with key aerospace and technological companies to extend the range of projects and solutions brought by Cenaero to tomorrow's digital industrial landscape and more sustainable high-performance materials.

Profile

Candidates should have the following qualifications:
- PhD in engineering or demonstrated equivalent experience
- Advanced knowledge in multi-physics modeling and simulation for solid mechanics (FEA)
  - Finite element analysis of laminated structures
  - Non-linear mechanics, contact, failure criteria, CHT,…
- Strong background in the field of composite materials and processes for high performance applications
  - Long fiber reinforced (UD, woven,…) composites
  - Infusion, injection, and automated manufacturing processes
- Experience in the field of machine learning, optimization and design space exploration is a plus
- Eager to work in an applied research environment, using skills and teamwork to solve challenging objectives in the numerical field
- Curious to learn new trends in numerical simulation & apply them to industrial projects in a solution-oriented approach
- Quality oriented with a good capability to manage projects and meet deadlines
- Good communication skills (written and spoken).

- Be fluent in English and in French.
- Be a team player and have a proactive attitude.

Offer

Cenaero offers a position in growing and leading technological sectors, a direct relationship with their business actors and technical experts, a competitive salary package and a stimulating and dynamic work environment.

Contact

Interested candidates should send a cover letter, quoting reference number of the offer, and a resume to :

mailto:rh_be-jo-2022-004@cenaero.be