

Resolution date February 12th 2020

PROPOSAL FOR THE ASSIGNEMENT OF R1 PROJECT ENGINEER FOR FUSION ENERGY AND PARTICLE ACCELERATORS TECHNOLOGIES (N°Ref.50/2019)

Publish date December 9th 2019 N° Ref. 50/2019

Job Title: "R1 Project Engineer for Fusion Energy and Particle Accelerators technologies"

Description:

The bFUS Group is seeking for a Project Engineer (R1) to work in a research project in the field of Fusion Energy and Particle Accelerators.

Its main tasks will be focused on mechanical, thermal and fluid dynamics designs and analyses of nuclear fusion and/or particle accelerators components. The tasks to be carried out will be mainly focused on mechanical design of components using CAD tools and mechanical, thermal and fluid dynamics simulations using CAE tools, mainly FEA and CFD. This candidate must be highly skilled in mechanical engineering, thermal and fluid dynamics fields, applied to the nuclear fusion and particle accelerators sectors. Capability to work in a team being flexible, innovative, with initiative, with problem solving skills and with high level of analytical and synthesis skills.

Qualifications and experience required:

Essential:

The call is open to professionals from any nationalities that fulfill the following eligibility criteria:

- Hold a Master Degree in the areas of Industrial Engineering, Mechanical Engineering, Energy Engineering, Physics, Materials Engineering, or an equivalent degree.
- Background and proven experience in mechanical engineering, mechatronics engineering, vacuum technology, fabrication design and codes.
- CAD and FEM tools experience: CATIA V5/Solidworks and ANSYS (or equivalent)

Preferred:

- Experience in design of fusion and/or particle accelerator components and/or high-tech environments: design of magnets, beam line components, shielding components, vacuum systems.
- Experience with mechanical design and fabrication of components for nuclear engineering and other scientific projects.
- Experience in European collaborative projects.
- Experience in R+D projects.
- Good communication skills; ability to communicate complex scientific information to individuals from other disciplines.



Language required:

Fluent in English and Spanish Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Results-oriented
- Analytical and synthesis capabilities

Technical knowledge:

- Experience in CAD and FEM tools: CATIA V5/Solidworks and ANSYS (or equivalent)

Required documents:

Applicants must submit the following documents by email to <u>irecjobs@irec.cat</u>, Indicate reference **50/2019** job vacancy before December 31st 2019.

- Curriculum Vitae, specifying the completed degree and any relevant professional experience.
- Motivation letter.

What we offer:

We offer a temporary contract, with extension possibility. Salaries will be paid in accordance with the IREC's salary policy, depending on the candidate's qualification and professional experience.

Estimated starting date: January 2020.

This project has received support from the Secretariat of Universities and Research of the Department of Business and Knowledge of the Generalitar de Catalunya, and is co-financed by the European Regional Development Fund of the European Union within the framework of the FEDER Operational Program of Catalonia 2014- 2020