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Code: DONES

Group: bFUS Programme

Group leader: Manel Sanmarti

Job Title: “Mechanical Engineer (R1/R2) for Fusion and Particle Accelerators technologies”

Description:

The bFUS Group is seeking for a Project Engineer (R1/2) to work in a technical European 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, and on providing support with the technical management of the project, system requirements and interfaces, redaction of technical specifications for manufacturing and manufacturing follow-up.

This candidate must be highly skilled in mechanical and fabrication design using CAD/CAE tools, mainly in the structural/mechanical, thermal and fluid dynamics fields, applied to the nuclear fusion and particle accelerators sectors. The candidate must have extended knowledge in nuclear and conventional codes and standards. 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.
- More than 3 years' experience in Mechanical Engineering (design, assembly and integration).
- More than 3 years' experience in manufacturing design according to nuclear codes (ASME III, RCC-MR, ITER SDC-IC and similar) and conventional codes (ASME BPVC, EN-13445).
- Experience in management of complex system design including system requirements, interface management, technical specifications, tendering documents, contract and fabrication follow up.
- CAD and FEM tools experience: CATIA V5/Solidworks and ANSYS.

- Experience in similar jobs, i.e., more than 2 years' experience in complex and multidisciplinary projects (fusion and/or large scale science projects).
- Experience in producing good quality technical documentation.

Preferred:

- Extended experience in design of fusion and/or particle accelerator components: magnets, beam line components, shielding components, vacuum systems.
- Experience in the IFMIF/EVEDA project or Fusion related projects.
- Experience in European R&D collaborative projects.
- Good communication skills; ability to communicate complex scientific information to individuals from other disciplines.

Language required:

Fluent in Spanish and English

Personal Skills:

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

Required documents:

Applicants must submit the following documents by email to msanmarti@irec.cat, reference 4/2021 job vacancy before July 15th 2021.

- 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: July 2021.