

DEMO Engineering Analysis Lead

Job Description

The Engineering Analyses Lead of in the DEMO Central Team (DCT)¹ will manage and coordinate all activities related to structural & seismic analysis, nuclear integration & nuclear analysis, electromagnetic & fluid dynamic analyses, load specifications, code & standards, and material database throughout the project. He/she will manage all design and engineering analysis tasks in the Work Package WPDES with EU fusion laboratories and industry.

Main Responsibilities

- Supervise staff, coordinate, and support the activities of the Analysis Section.
- Provide effective leadership for the Analysis Section ensuring team members are motivated and developing their skills and experience, and manages the resource plan.
- Manage and coordinate analysis tasks including structural, seismic, electromagnetic, fluid dynamic and nuclear analyses in WPDES with EU fusion laboratories, universities and industry based on project priority.
- Liaise with the lead engineers of the DEMO tokamak systems to identify suitable approaches to assess and verify proposed system solutions within the defined configuration and considering the project deadlines.
- Responsible for the follow-up of the design of radiological protection and shielding and identification of non-compliances of the defined targets.
- Responsible for defining and updating load specifications required for the plant design and for monitoring the progress in the completion of system load specifications.
- Responsible for controlling that the appropriate codes & standards and material properties database are used for the design.
- Collaborate with the Project Management Office in assuring work delivery consistent with the budget of the Analysis Section.
- Communicate effectively and establish good work relations ensuring that the design assessment results are timely communicated.

Required / desired qualifications and competencies

- MSc or PhD degree in Engineering or equivalent.
- Demonstrated ability to lead a multi-disciplinary team and to interact with experts in different scientific disciplines.
- At least 10 years of experience in design and analysis of tokamak systems.
- Ability to work effectively as part of a cross-functional, project-oriented team.
- Good interpersonal skills to help resolve difficult issues when they arise.
- Good command of both written and spoken English.

The post holder will work in Garching (Germany) and will report to the Head of the DCT Plant Architecture & System Design Division. In the initial phase before the Head of that Division is installed, reporting will be directly to the FTD Head.

¹ In FP9, the DCT is foreseen to advance the design basis (physics and technology) of a DEMO fusion power plant, by implementing and agile architectural design capability, impartial analysis of options, and quick access to the expertise distributed in the EU fusion laboratories, universities and industry. This is needed to ensure the rapid convergence towards a feasible DEMO plant architecture (see G. Federici, C. Baylard, DEMO Project Charter Proposal, IDM reference: 2P3ZEP. April 2020).

Date of Job Vacancy: January 1st, 2021

Application Deadline: September 15th, 2020

The applicant will ideally already have a work contract with a EUROfusion Beneficiary and will be seconded to the EUROfusion Programme Management Unit (PMU) in Garching. Otherwise, she/he will have to secure a work contract with one of the Beneficiaries, to be seconded to the PMU in Garching.

The EUROfusion secondment will ideally run until the end of the Horizon Europe framework period (31 December 2027), but the actual labour contract might be subject to the rules, regulations and conditions of the Beneficiary that employs the applicant.

EUROfusion strives for diversity and inclusion, and explicitly encourages members of minority groups, and females, to apply for this position.

In case the candidate is shortlisted, the interviews will take place by the mid of October.

Please send your completed application including CV, cover letter and examples of your past related-work experience to: anne.graebner@euro-fusion.org.

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