

## Senior Engineer for Remote Maintenance

### Job Description

The Senior Engineer for Remote Maintenance in the DEMO Central Team (DCT)<sup>1</sup> must ensure that the design of the DEMO fusion plant and, in particular, of the in-vessel components, evolve on the basis of well-defined solutions for the remote maintenance. He/she is expected to establish and maintain an effective dialogue with the Work Package Remote Maintenance (WPRM) to enable the definition and maintenance of system design interfaces that track the evolution of the design.

### Main Responsibilities

- Support the development of the remote handling concepts required to ensure the reliable and robust maintenance of DEMO incl. replacements, inspections, or repair in the activated areas.
- Define and develop the Maintenance Management Plan (MMP) that defines policies, processes and procedures for maintaining structures, systems and components (SSCs) of the plant including the key considerations of maintenance (availability and reduction of the machine's shut-down phases, mean time to failure, mean time to repair).
- Coordinate the development of the maintenance handbook to serve as a guide to component designers.
- Liaise closely with the component designers to ensure the development of systems design solutions is compliant with RM requirements.
- Liaise closely with WPRM that is in charge of technology development incl. testing of remote handling solutions.
- Liaise with the safety group in WPSAE to ensure the plant maintenance strategy is compliant with safety requirements to enable the safe operation of the plant during normal operation and accidental conditions.
- Define and coordinate within the DCT tasks in WPDES with EU fusion laboratories, universities and industry ensuring the rapid convergence towards a feasible DEMO plant architecture.
- Oversee the preparation of CAD models and drawings.
- Support the preparation of the documentation package of the plant systems including technical and functional specifications, technical descriptions and verifications;

### Qualifications/ Competencies

- MSc or PhD degree in Engineering or Equivalent
- At least 10 years of experience in the mechanical design and integration of fusion components, ideally in the field of remote maintenance;
- Previous experience as a robotics engineer or similar role
- Excellent knowledge of CAD software, ideally CATIA V5;
- Broad understanding of component design, qualification, manufacture, test, inspection, assembly, operation and related engineering processes is essential
- Ability to work effectively both independently and as part of an international team.
- Good interpersonal skills.
- 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.

---

<sup>1</sup> 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 1<sup>st</sup>, 2021**

**Application Deadline: September 15<sup>th</sup>, 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](mailto:anne.graebner@euro-fusion.org).

**CONTACT: Gianfranco Federici**

Tel: + 49 (0)89 3299 4228

E-mail: [gianfranco.federici@euro-fusion.org](mailto:gianfranco.federici@euro-fusion.org)