VACANCY NOTICE FOR A TRAINEESHIP

AREA OF ACTIVITY	**SYSTEMS / MECHANICAL ENGINEERING FOR JT-60SA TOKAMAK**
REFERENCE	**F4E/TRA/2018/053**
START AND END DATE - DURATION	**01/10/2018 – 30/06/2019 - 9 MONTHS**
LOCATION	**GARCHING NEAR MUNICH (GERMANY)**
RESERVE LIST – MAXIMUM NUMBER	**5**
PUBLICATION DATE	**25/05/2018**
CLOSING DATE FOR APPLICATIONS	**25/06/2018 AT 12:00 PM (BARCELONA TIME)**

1. DESCRIPTION OF THE DEPARTMENT/PROJECT UNIT

Fusion is the energy source of the sun and the stars. On earth, fusion research is aimed at demonstrating that this energy source can be used to produce electricity in a safe and environmentally benign way, with abundant fuel resources, to meet the needs of a growing world population.

JT-60SA is a fusion experiment ('tokamak' in fusion jargon) designed to support and complement the scientific results achievable with the operation of ITER (the largest worldwide experiment in the field) and to investigate how best to optimise the operation of fusion power plants that are going to be built beyond ITER.

JT-60SA is in advanced construction and assembly at the Quantum Science & Technology Institute of Naka (Japan).

Europe is contributing the Toroidal Field (TF) magnet and all coil current leads, the cryoplant, most of the cryostat, and magnet and heating power supplies.

The F4E/JT-60SA unit, through contracts with several EU industries and with the support of primary EU research institutes, contributes to the system design, configuration, detailed specifications, contracts follow-up, tests, transports and onsite installation, for the European contribution.

2. DESCRIPTION OF TASKS

The trainee will work flexibly within the Fusion for Energy JT-60SA engineering team to:

- Support the development of conceptual mechanical design and functional requirements for JT-60SA enhancements;
- Support the analytical assessment of design solutions.

3. ELIGIBILITY CONDITIONS

- Be a national of one of the Member States of the European Union or of a Third state fully associated with the Euratom fusion programme (Switzerland);
- The candidate must have finished his/her university degree at least 3 years attested by a diploma. The university degree must have been obtained within the last 3 years before the closing date for applications;
- In order for the trainee to fully profit from the traineeship and to be able to follow meetings and perform adequately, candidates must have good knowledge of English, the main working language of F4E.

Applications will not be accepted from candidates who:

- have already benefited from any kind of in-service training within a European institution or body, or
- who have had or have any kind of employment within a European institution or body.

4. QUALIFICATIONS REQUIRED

Candidates must have:

- BEng in Mechanical, Nuclear or Aerospace Engineering or in Mechatronics, or equivalent education;
- Knowledge of at least one of the following:
  - Systems engineering
  - Manufacturing techniques
  - Control systems
  - 3D CAD design
- Excellent English and communications skills;
- Ability to work in a team.

The following would be considered advantageous (but not essential):

- Experience working or studying with people from other cultural backgrounds
- Knowledge of any of the following
  - Japanese
  - Vacuum technology
  - Cryogenic engineering
  - Robotics
  - Computer aided engineering

5. WHAT WE OFFER

Trainees are awarded a monthly maintenance allowance. The monthly allowance for 2018 in Garching amounts to € 1265,09.

Additionally, trainees may receive a travel allowance, subject to budget availability, to compensate for travel expenses incurred from the place of residence to the seat of F4E and vice versa. Trainees whose place of recruitment is less than 50 km from F4E´s offices shall not be entitled to a travel allowance.

Detailed information about the F4E traineeship procedure as well as trainees´ rights and duties can be found in the Decision of the Director of 'Fusion for Energy' on the Acceptance of Traineeships published on our website. We strongly recommend applicants to read them carefully.

Accommodation costs will be covered by the trainee.

6. SUBMISSION OF APPLICATIONS

The online application process starts upon clicking **"CLICK TO APPLY"** on the traineeships page: http://www.fusionforenergy.europa.eu/careers/traineeships.aspx

Applicants must register their applications online through the F4E traineeship´s tool by creating a valid F4E user account and choosing the vacancy notice they wish to apply to.

Please note that the online traineeship application tool is the *only* acceptable means of sending applications. Applicants are responsible for keeping their e-mail addresses and personal details up to date in their profile in F4E online application tool.

The mandatory fields in the profile marked with an asterisk should be duly filled in. Candidates are requested to submit the following 2 documents:

- A detailed Europass curriculum vitae in **English** (can be obtained at the following address: http://europass.cedefop.europa.eu/en/documents/curriculum-vitae)
- A motivation letter of 2 pages maximum in English

Applications must be sent by 25/06/2018
(closing time 12:00 pm Barcelona time)

In case you encounter technical problems when trying to submit your application via the traineeship application tool, please make a screenshot and send it to: traineeships@f4e.europa.eu.

It is the responsibility of the applicant to inform 'Fusion for Energy' about any technical problem without delay within the deadline mentioned above.

Please, do not send any supporting documents (i.e.: copies of your ID-card, educational certificates, etc.) **with your application at this stage if not specified in the Traineeships Notice.**