

VACANCY NOTICE FOR A TRAINEESHIP

AREA OF ACTIVITY	BROADER APPROACH ENGINEERING SUPPORT
REFERENCE	F4E/TRA/2019/070
START AND END DATE - DURATION	01/10/2019 - 30/06/2020 - 9 MONTHS
LOCATION	GARCHING NEAR MUNICH (GERMANY)
RESERVE LIST – MAXIMUM NUMBER	5
PUBLICATION DATE	29/04/2019
CLOSING DATE FOR APPLICATIONS	20/05/2019 AT 12:00 NOON (BARCELONA TIME)

1. DESCRIPTION OF THE DEPARTMENT/PROJECT UNIT

The Fusion for Energy Broader Approach Department (BA) has the responsibility to implement three main projects JT-60SA, IFER and IFMIF. They aim to complement the ITER project and to accelerate the realisation of fusion energy by carrying out R&D and developing some advanced technologies for future demonstration fusion power reactors (DEMO).

2. DESCRIPTION OF TASKS

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

- Develop software routine in FORTRAN and C++ for the calculation of electromagnetic forces and mechanical stress mainly using finite element methods;
- Develop software graphic routines with QT5 or similar API;
- Develop interface routines for finite element codes such as ANSYS;
- Develop quasi real time data analysis tools;
- Develop data acquisition/data storage software routine.

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 of 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

- Bachelor of Engineering in one of the following fields: Mechanical, Nuclear, Aerospace, Information Technology, Computer Science or equivalent education with proven knowledge and experience in software development and Computer aided engineering;
- Excellent knowledge of computer language FORTRAN and C++;
- Excellent Finite Element Methods Knowledge;
- Excellent English and communications skills;
- Ability to work in a team.

The following would be considered an advantage:

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

5. WHAT WE OFFER

Trainees are awarded a monthly maintenance allowance. The monthly allowance for 2019 amounts to € 1.396,71 (Munich).

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 20/05/2019 (closing time 12:00 NOON, 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.**