

## VACANCY NOTICE FOR A TRAINEESHIP

<b>AREA OF ACTIVITY</b>	<b>INSTRUMENTATION AND CONTROL</b>
<b>REFERENCE</b>	<b>F4E/TRA/2016/021</b>
<b>START AND END DATE - DURATION</b>	<b>01/10/2016 - 30/06/2017 - 9 MONTHS</b>
<b>LOCATION</b>	<b>BARCELONA (SPAIN)</b>
<b>PUBLICATION DATE</b>	<b>02/05/2016</b>
<b>CLOSING DATE FOR APPLICATIONS</b>	<b>31/05/2016 AT 12:00 PM (BARCELONA TIME)</b>

### 1. DESCRIPTION OF THE DEPARTMENT/PROJECT UNIT

The Control, Data Access and Communication (CODAC) Group within the Technical Support Services Unit of the ITER department has the following main responsibilities:

- Collaborate with the ITER central CODAC group in the addressing of technical implementation and integration Instrumentation and Control (I&C) issues.
- Support the F4E Project Teams (groups responsible for the development of the Plant Systems) in the I&C areas. This involves supporting the plant I&C technical specifications preparation, the promotion of compliance to the ITER I&C rules and the follow up of the contracts. These are usually associated to the design, development and prototyping of hardware and software for the I&C integration into the ITER central CODAC systems.

### 2. DESCRIPTION OF TASKS

The trainee will be required to carry out the following tasks:

- Contribute to the ITER magnetics diagnostic integrator development, by supporting F4E in the full development of cycle of the integrator component. This will include at least one of the following activities:
  - electronics design and simulation of the circuit behavior;
  - follow-up of manufacturing and testing R&D contracts;
  - design and implementation of data analysis software;
  - data analysis of collected experimental data;
  - design and implementation of real-time control software;
  - contribute to an European design review of the system.

### **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**

- Bachelor degree in Control Engineering, Electronics Engineering, Physics Engineering, Computer Science or equivalent is requested. Candidates with higher qualification can also apply.
- Good knowledge of at least two of the following subjects:
  - Electronic circuit design and simulation;
  - Systems theory and/or systems engineering, including experience with MATLAB/Simulink;
  - Experience with C or C++ in the context of development of real-time control systems;
  - Experience with Linux as a software development environment for embedded systems (e.g. ARM);
  - Experience in the development of firmware for designs implemented in Field Programmable Gate Arrays.

### **5. WHAT WE OFFER**

Trainees are awarded a monthly maintenance allowance. The monthly allowance for 2016 amounts to €1087,39.

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 31/05/2016 (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](mailto: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.**