



## Electro-mechanical Technician (detector/R and D facilities) H/F Ref PH-DT-DD-2015-150-LD en SUISSE

Europe

*Are you an electro-mechanical technician with experience in assembly and operation of electro-mechanical systems, and work coordination? Then seize the opportunity and join the Detector Technology group operating at the heart of CERN Physics Department. Within our team, you will autonomously contribute to the development, construction and radiation hardness qualification of leading-edge technical solutions for the next generation of particle detectors. Take part!*

Job Reference: PH-DT-DD-2015-150-LD

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Closing date : 23/08/2015

*Electro-mechanical Technician in the Physics Department (PH), Detector Technologies Group (DT), Detector Development Section (DD)*

### Electro-mechanical Technician (detector/R and D facilities) H/F Ref PH-DT-DD-2015-150-LD en SUISSE

#### Votre mission :

You will join:

- The Physics (PH) Department which carries out basic research in the field of experimental and theoretical particle physics in a stimulating scientific atmosphere, standing as an important reference for the European physics community. It also contributes to the education and training of young scientists.
- The Detector Technologies (DT) group(link is external) which is in charge of the development, construction, operation and maintenance of many particle detectors and their technical infrastructure for the different experiments at CERN.
- The Detector Development (DD) section which provides expertise in various fields of detector technologies. It also comprises the operation of several facilities for detector R&D, such as the wire bonding and interconnect facility and the Quality and Reliability Assurance lab, dedicated laboratories for the characterization of semiconductor and gaseous detectors, and it operates the PH irradiation facilities.(link is external)

#### Functions

As Electro-mechanical technician in the DD Section, you will participate in the operation of the two PH irradiation facilities, the proton facility at the PS accelerator complex (IRRAD), and the gamma facility (GIF) at the SPS accelerator. The facilities are designed to test the radiation hardness of detectors and detector components that will be exposed to high radiation levels during their operation in the LHC or other CERN experiments. You will be responsible for the development, operation and maintenance of electro-mechanical equipment and you will participate in irradiation experiments at CERN. Furthermore, you will be guided by experienced engineers in participating in the construction of new detectors and detector systems. Technical support to other detector facilities and detector projects in the group is also expected.

You will:

- Ensure the operation, maintenance and upgrade of all electro-mechanical equipment, cooling and gas systems in the PH irradiation facilities. Further responsibilities might comprise the maintenance of simple software applications systems (e.g. electronic logbooks, data monitors) and monitoring sensors systems.
- Participate in the preparation of irradiation experiments including the conception of

#### Référence

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#### Date de publication

29/09/15

#### Entreprise

Cern

#### Région

Europe

#### Ville

#### Secteur

Electricité Et Maintenance

#### Type de contrat

- Temps plein
- CDI

irradiation test setups in close collaboration with members of an international client community.

- Contribute to the logistics related to the handling, storage and tracing of objects irradiated in the facilities following predefined radiation protection procedures.
- Participate in the analyses and documentation of dosimetric measurements performed in the irradiation facilities.
- Using CAD tools, draw-up technical specifications and designs of prototype equipment for irradiation experiments and detector construction.
- Ensure proper documentation and storage of technical drawings and documents in the CERN document repository system.
- Take part in detector construction projects in the group.

### **Votre Profil :**

#### Qualification required

Higher (post-secondary) technical certificate/diploma in the field of Electro-mechanics, or equivalent.

- Please note that preference will be given to candidates with the above-mentioned qualifications: In principle consideration will not be given to applications from people with higher qualifications.

#### Experience and competencies

The experience required for this post is:

- Experience in electro-mechanical systems in an industrial or a research environment.
- Experience in design and machining of mechanical parts; precision assembly and construction would be an advantage.
- Experience in work planning, coordination and guidance of small technical teams.
- Hands-on experience with CAD systems like CATIA or similar tools.
- Experience in design and machining of mechanical parts; precision assembly and construction would be an advantage.

The technical competencies required for this post are:

- Electro-mechanical construction, using conventional manufacturing tooling and machines
- Electro-mechanical testing
- Installation & dismantling of electro-mechanical equipment and systems
- Technical infrastructure operation: gas and cooling systems, radiation detectors, small control and electro-mechanical systems.
- 3D & 2D technical drawing
- Knowledge of radiation exposure and protection and/or handling of radioactive material, and the design, installation and/or maintenance of electronic systems will be considered an asset.

The behavioural competencies required for this post are:

- Achieving results: having a structured and organised approach towards work; being able to set priorities and plan tasks with results in mind.
- Solving problems: producing workable and timely solutions that meet requirements.
- Communicating effectively: providing others with timely information; ensuring that information, procedures and decisions are appropriately documented.
- Demonstrating flexibility: demonstrating a willingness to accept changing circumstances; supporting initiatives for change.
- Working in teams: working well in groups and readily fitting into a team; participating fully and taking an active role in team activities.

The language competencies required for this post are:

- Proficient level (spoken and written) in at least one of the two official languages at CERN (English/French).
- Be willing to learn or improve your skills in the second language.

Please note that most of interactions with users will occur in English.

## **Conditions d'emploi :**

### **Eligibility conditions**

Employing a diverse and international workforce is a CERN core value and central to our success. We welcome applications from all Member States irrespective of gender, age, disability, sexual orientation, race, religion or personal situation.

This vacancy will be filled as soon as possible, and applications should normally reach us no later than 23.08.2015.

By applying here, you allow CERN to consider your application for any position it considers relevant with respect to your profile. Please ensure you update your profile regularly with any relevant information and that you inform the recruitment service if you wish your file to be removed from the database.

### **Note on Employment Conditions**

We offer a limited-duration contract for a period of 5 years. Limited-duration contracts shall terminate by default on their date of expiry.

Subject to certain conditions, holders of limited-duration contracts may apply for an indefinite position.

These functions require :

- Work in Radiation Areas.
- Interventions in underground installations.
- A valid driving licence.
- Stand-by duty, when required by the needs of the Organization.
- Work during nights, Sundays and official holidays, when required by the needs of the Organization.

Poste basé à Meyrin (CH), à la frontière avec Saint-Genis-Pouilly (FR).

En savoir plus sur les conditions d'emploi