

A.D.A.M SA seeks to appoint an

Accelerator Physicist

A.D.A.M. SA (Applications of Detector and Accelerators to Medicine) is working on the R&D and production of accelerators for medical applications. It is a research company, inspired by CERN and a subsidiary of Advanced Oncotherapy plc (“AVO”). A.D.A.M SA is head-quartered in Meyrin/Switzerland and its laboratories are based at CERN. A.D.A.M SA is involved in a hadron cancer-therapy project to build the linear proton accelerator LIGHT (Linac for Image Guided Hadron Therapy). LIGHT’s proton energies range from 70 MeV to 230 MeV and its beam properties are ideally suited for the effective treatment of tumours. More information on A.D.A.M. SA can be found on www.adam-geneva.com and www.avopl.com.

A.D.A.M. SA is seeking a talented Accelerator Physicist to support the beam dynamics studies of the linac and take an active role in the commissioning of the LIGHT accelerator at our installation and commissioning site in Daresbury, UK then in Harley Street (London). The successful candidate will join the Physics Group which is responsible for the design and commissioning of the proton injector, linac and transfer line. The group plans and performs the beam commissioning of the LIGHT accelerator in close collaboration with the experts from other groups in the company.

This role will be employed in the UK on a UK contract, and will report into Physics Group based in Geneva. It is envisaged that the initial months of the contract will be spent working alongside the technical team in Geneva, then the focus will move to Daresbury.

Main activities:

- Take an active role in the beam commissioning, accelerator operation and the beam measurements.
- Performing transverse and longitudinal beam dynamics studies of the linac and beam transfer lines.
- Analysing the beam measurements and comparing the results with the simulations.
- Collaborating with the mechanical engineering group for the characterization and integration of the accelerator elements.
- Writing technical reports and technical documentation.

Requirements:

- Master’s degree/ PhD in Physics or equivalent.
- Experience in beam measurements, data taking and analysis.
- Knowledge of beam diagnostic devices and measurement methods.
- Good knowledge of transverse and longitudinal beam dynamics in linacs, with experience in simulations with envelope and multi-particle tracking codes
- Experience in data analysis using tools like Octave, Matlab or Python.
- Ability to work independently and as part of a team.
- Good problem-solving skills: analysing the problems and proposing sound solutions.
- Communicating effectively: expressing ideas, opinions and suggestions in a clear and structured way.
- Good level of spoken and written English with the ability to draw up technical documentation.

Following additional skills and experience are advantageous:

- Knowledge of transverse and longitudinal beam dynamics in hadron/ion linacs
- Experience in hadron/ion linac beam dynamics simulations
- Previous experience in accelerator operation and machine optimisation.
- Knowledge of linac RF components and their controls.

Information

For further information please contact a.degiovanni@avo-adam.com

What we offer

- A permanent contract in the UK with frequent trips to Geneva to work alongside the ADAM technical team
- a competitive salary , private healthcare and 7.5% contribution to pension
- 28 days holiday
- a friendly, international working environment with experts in their field
- career progression through training, development and attendance at conferences
- the chance to be at the cutting-edge of proton therapy research

Applications

Interested candidates should submit

- a cover letter
- a curriculum vitae,
- a master degree certificate or equivalent in a relevant field
- at minimum, the names of two referees, or two letters of recommendation (and/or employment certificates)

by email to the HR Director: bridget.biggar@avo-adam.com

For full consideration, applications should be submitted by September 28th 2018.