Chief Technical Officer (CTO)
School of Physical Sciences
Faculty of Science & Health
Permanent Post

Introduction

Dublin City University www.dcu.ie is a young, dynamic and ambitious University with a distinctive mission to transform lives and societies through education, research and innovation. We are a research-intensive, globally-engaged institution, distinguished by both the quality and impact of our graduates, and focus on the translation of knowledge into societal and economic benefit. Excellence in education and research activities has led to DCU's consistent presence in the rankings of the world's top young universities.

Over its relatively short history DCU has developed a strong reputation nationally and internationally for pioneering innovations in higher education. The University is embarking on a period of significant investment in learning innovation across all of its Faculties. This initiative will help us transform the learning experience of undergraduate students at DCU, reconceptualizing learning opportunities, creating authentic connections between the classroom and enterprise, and embedding digital literacies, disciplinary competencies and transversal skills required to truly future-proof our graduates for the rapidly changing workplace. DCU is joined in this project by a strong consortium of enterprise partners, representing key employment sectors in the Irish economy and with a strong presence in DCU's primary catchment area. This programme of innovation is funded under the Irish government's Human Capital Initiative (HCI) supported by the National Training Fund. It will deliver on the ambitions we have to reimagine undergraduate curricula and to embed innovative pedagogies, enhanced use of technology and deep industry engagement.

School of Physical Sciences

The School of Physical Sciences www.dcu.ie/physics at Dublin City University has a high standing within Ireland and internationally, for both its teaching and research activities. There are more than fifty researchers within the School's research groups including postgraduate students, postdoctoral researchers, research officers, and administrators. Physics research at DCU covers analytics and modelling, astrophysics, biomedical/optical physics, physics education, plasma and laser-plasma physics, materials and nanotechnology as its main priority areas. Researchers in the School lead and contribute to several research centres, including, four National Research Centres – National Centre for Plasma Science and Technology (NCPST), National Centre for Sensor Research (NCSR), INSIGHT and ADAPT, and University Approved Centres - Centre for Astrophysics & Relativity (CfAR), Centre for Advancement of STEM Teaching and Learning (CASTeL), and Water Institute.

The School has been awarded substantial research funding and programme grants from national funding agencies, including Science Foundation Ireland, Irish Research Council, Enterprise Ireland, Sustainable Energy Authority of Ireland, Higher Education Authority PRTLI programme, and European Erasmus+ and Framework Programmes.

DCU School of Physical Sciences offers several undergraduate degree programmes, featuring unique blends of physics fundamentals with modern applications: BSc in Applied Physics, BSc in Physics with Biomedical Sciences, BSc in Physics with Data Analytics and BSc in Physics with Astronomy, all of which are entered via a Physics General Entry programme. A hands-on approach to physics teaching is favoured with an emphasis on the development of experimental and data analytical skills as well as mathematical, computational and reasoning skills. These programmes are delivered through novel and innovative curricula, in partnership with other Schools across the university and industry collaborators. In addition, the School makes important contributions to the curriculum and teaching of the BSc in Science Education programmes and the BSc in Environmental Science and Technology. At postgraduate level, the DCU School of Physical Sciences offers the Professional Diploma in Teaching Physics and the MSc in Astrophysics & Relativity (jointly with the School of Mathematical Sciences). In keeping with its Strategic Plan, the School is modernising our physics programmes available to students through a new innovative curriculum project in partnership with key industry collaborators and other Schools across the university.

Role Profile

The School of Physical Sciences is seeking to appoint a Chief Technical Officer to lead its team of technical officers and provide high-level technical support for its research, teaching & learning and engagement activities. The successful candidate will have excellent technical, leadership and people management skills as well as excellent organisation, communication/IT and interpersonal skills. The ability to work with students, academics, other technical and research staff at all levels is required. The successful candidate will have a flexible approach to work and a willingness to lead and implement change to achieve the School's strategic objectives.

Duties and Responsibilities

Reporting to the Head of School, the Chief Technical Officer's duties and responsibilities will include, but are not limited to the following.

- The CTO will lead, manage and train, as needed, the team of technical officers in the School of Physical Sciences.
- The CTO will oversee the professional development of all technical officers to the highest standards and in line with the School, Faculty and University strategic needs and statutory requirements.
- Responsibility for the operation of the university performance management and development scheme within the School's technical team.
- Oversee the maintenance of teaching laboratories stock inventories and the associated equipment purchasing.
- Manage the School non-pay budget with regard to cost of equipment maintenance and replacement.
- Manage the technical support for School research laboratories and specialist equipment.
- Meet regularly with the Head of School to update him/her on matters relevant to technical officers and their duties.

- Assist the Head of School or other academic colleagues in planning and delivering activities that (1) generate non-exchequer income for the School and (2) promote the School ‘s education and engagement activities.
- Manage all essential matters relating to the upkeep, upgrade and refurbishment of the School's designated spaces and buildings.
- Assist academic staff in the design and delivery of laboratory practical sessions at all levels.
- Assist the Head of School in preparing a detailed plan and implementation process for new technical developments in line with the School strategy, for example, the digitalisation of the School's teaching and learning activities as part of DCU Futures.
- Monitor compliance with Health & Safety regulations and managing the disposal of the School waste.
- Assist the Head of School in updating the School's Safety Statement.
- Represent the School on relevant School, Faculty and University Committees.
- Liaise with External Bodies such as the Environmental Protection Agency (EPA) or the Health and Safety Authority (HSA).
- Assist the Head of School in the preparation of the annual non-pay budget.
- Assist the Head of School in the preparation of the annual update to the School's Risk Register.
- Discharge other duties in line with the changing needs of the School.
- Implement relevant university policies, guidelines and best practices.
- Undertake other duties as the Head of School or his/her representative may assign from time to time.

Qualifications and Experience

Minimum Internal Service Criteria
Please note that internal service criteria will apply

Please note staff must have successfully completed their probationary period

Essential Criteria
- Masters in a relevant discipline or equivalent professional experience as a Senior Technical Officer.
- At least three years experience in the role of Senior Technical Officer in a higher education institution or similar role and experience in the private/public sectors.
- Broad expertise in experimental physics and applications and possess the relevant scientific and technical skills to support the School's research, teaching & learning, and engagement activities.
- Demonstrable knowledge of current and emerging scientific technologies and their implementation and integration into the laboratory, notably in fields that are particularly relevant to the degree programmes delivered by the School of Physical Sciences.
- Experience in, and knowledge of, the main Health & Safety protocols that apply to physical laboratories, e.g. work with ionising or high-power laser radiations.
- Experience in financial/budget/stock management of teaching and/or research laboratories.
- Experience in overseeing the operational and technical functions of a unit.
- Demonstrable team management skills and experience.

Desirable Criteria
- Experience with coordinating and conducting successfully new research projects.

- Experience/engagement with online teaching platforms and technology-assisted learning.

Essential Training

The post holder will be required to undertake the following mandatory compliance training: GDPR, Orientation and Compliance. Other training may need to be undertaken when required.