

Applications are invited from suitably qualified candidates for the following position:

Assistant Professor in Physics
School of Physical Sciences
Faculty of Science & Health
Fixed Term Contract up to January 2024

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 School of Physical Sciences wishes to recruit a new temporary appointee at Assistant Professor Level with expertise in Physics/Physics Education to support the delivery of a new Professional Diploma in Teaching Physics (PDITP) programme which is designed to upskill post-primary teachers to meet current Teaching Council subject requirements in Physics at the highest level. The PDITP programme has been approved by the Department of Education and Skills and this Award will be delivered by DCU in collaboration with partners in the University of Limerick (UL) and NUI Galway (NUIG). The programme will ensure that successful candidates:

- Acquire the theoretical and experimental knowledge of physics as well as pedagogical content knowledge that is necessary for effective physics teaching at post-primary level;
- Demonstrate an ability to connect physics content modules and the school physics curriculum;
- Develop a high standard of practical competence in physics teaching as reflective practitioners during their programme of study.

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, research technicians and administrators. Physics research at DCU covers astrophysics, plasma and laser-plasma physics, biomedical/optical physics, microsystems, materials physics and physics education as its main priority areas. The School hosts several research centres and notably the National Centre for Plasma Science and Technology (NCPST) www.ncpst.ie. Research in physics education takes place within the university approved Centre for Advancement of STEM Education (www.castel.ie) which focuses on research in STEM education at all educational levels. The School has been very successful in winning substantial research funding and programme grants from Science Foundation Ireland (https://www.sfi.ie), the Higher Education Authority PRTLI

programme (www.hea.ie/PRTLI), Enterprise Ireland www.enterprise-ireland.com and the EU Horizon2020, in addition to postgraduate scholarships and postdoctoral fellowships

The School of Physical Sciences offers four undergraduate degree programmes: BSc in Applied Physics, BSc in Physics with Biomedical Sciences, BSc in Physics with Astronomy and BSc Physics with Data Analytics, all of which are entered via a Physics General Entry programme. The school also contributes to the concurrent BSc Science Education programmme and leads the pathway for qualification as a second level physics teacher.

Relationships

The position will report to the Head of School and work closely with other colleagues, particularly the PDITP Programme Coordinator. Building positive relationships with professional support staff as well as technical and pedagogical specialists and engagement with key stakeholders within and outside of DCU is an important aspect of this role.

The Role

The appointee will be expected to support the School in implementing an innovative programme for upskilling second level teachers, specifically:

- Designing and delivering physics modules and physics practicals using a blended approach of online and face-to-face delivery.
- Implementation of innovative pedagogical approaches to teaching, learning and assessing physics
- Engaging with university-wide elements of the programme including inter-institutional cooperation, project evaluation and reporting.

The role includes teaching, supervision of laboratory sessions, student mentoring and supervision of taught projects and research.

Duties & Responsibilities

See job description for a list of duties and responsibilities associated with this post.

Applicant Requirements

Essential Criteria

- Applicants must hold an honours degree in physics, physics education or equivalent, and a minimum qualification of a Masters degree in physics or a related area
- Applicants must have the ability to teach a broad range of physics topics at honours undergraduate
 physics level in their area of specialization and contribute to the future development of the School's
 teaching.
- Applicants must demonstrate experience in the delivery of undergraduate lecture and laboratory physics, ideally including experience in innovative pedagogies and/or assessments and/or online methods.
- Applicants must have a demonstrable comprehension of teaching within post-primary Schools.
- Applicants must demonstrate the ability to conduct programme administration and management in a public service university environment;
- Applicants must demonstrate a strong commitment to work with colleagues within existing research groups, as well as a willingness to develop and lead new activities as appropriate;
- Applicants must demonstrate excellent communication and Social skills consistent with the highest quality of teaching and learning, as well as evidence of successful teamwork and a collegial approach.

Desirable Criteria

PhD in physics or a related area

Applicants must ideally have a minimum of three years' relevant Postdoctoral research experience and
a demonstrable track record of high quality and original research, as evidenced by regular publication
in high impact physics journals, a significant citation rate, presentations at top international
conferences and the ability to attract research funding.

Mandatory Training

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

Salary scale:

Assistant Professor (below bar) €40,604 - €55,820

*Appointment will be commensurate with qualifications and experience, and will be made on the appropriate point of the relevant salary scale in line with current Government pay policy.

Closing date: Friday, 7 May 2021

For more information on DCU and benefits, please visit Why work at DCU?

Informal enquiries:

Dr Eilish McLoughlin, Associate Professor, Deputy Head of School of Physical Sciences, DCU, Dublin 9. Tel: +353 (0)1 700 5862 E-mail: Eilish.McLoughlin@dcu.ie
Do not send applications to this address. Instead, apply using the procedure set out below.

Application Procedure: Application forms are available from the DCU Current Vacancies website at https://www.dcu.ie/hr/vacancies/current.shtml Applications must be submitted by e-mail to hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: Job Ref #RF1496 *Assistant Professor in Physics*.

Dublin City University is an equal opportunities employer. In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes. The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the DCU Policy Starter Packs