



**Assistant Professor in Bio-/Biomedical Physics**  
**Faculty of Science & Health**  
**School of Physical Sciences**  
**Permanent**

**Introduction**

Dublin City University ([www.dcu.ie](http://www.dcu.ie)) is a research-intensive, globally-engaged, dynamic institution that is distinguished by both the quality and impact of its graduates and its focus on the translation of knowledge into societal and economic benefit. DCU prepares its students well for success in life, and in the workplace, by providing a high-quality, rounded education appropriate to the challenges and opportunities of the 21st century. As Ireland's University of Enterprise, it is characterised by a focus on innovation and entrepreneurship and a track-record of effective engagement with the enterprise sector, including commercial, social and cultural enterprises. Excellence in its education and research activities has led to its consistent position in the rankings of the world's top young universities. Dublin City University is growing and 2016 saw a significant transformation for the University. The DCU Incorporation Programme saw the coming together of St. Patrick's College, Drumcondra, Mater Dei Institute of Education and Church of Ireland College of Education with Dublin City University.

DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your academic career.

The Faculty of Science and Health is an internationally recognised centre of excellence in scientific innovation and health transformation. The Faculty is made up of six constituent Schools, Biotechnology, Chemical Sciences, Health and Human Performance, Mathematics, Nursing and Physical Sciences. We offer a range of over 20 honours degree courses from Chemical Sciences to Physics with Biomedical Sciences to Nursing, Psychology to Sport Science and many more. Many of our courses have affiliations to or are recognized by external professional bodies, for example, the Institute of Actuaries, the Institute of Physics or the Teaching Council of Ireland. The Faculty is home to four National Research Centres – the National Nano-bioanalytical Research Facility (NRB), the National Centre for Sensor Research (NCSR), the National Institute for Cellular Biology (NICB) and the National Centre for Plasma Science and Technology (NCPST). In addition, the Faculty is host to the International Centre for Neurotherapeutics (ICNT), the Centre for Advancement in Science Education and Learning (CASTeL), the Fraunhofer Project Centre (FPC) and the Water Institute.

The School of Physical Sciences wishes to recruit a new permanent appointee at Assistant Professor level with expertise in Bio-/Biomedical Physics.

### **Duties and Responsibilities:**

#### **Teaching**

The candidate will be expected to contribute directly to undergraduate and postgraduate physics and associated degree programmes *via* teaching of physics lecture modules (including at advanced undergraduate and postgraduate level), coordination of undergraduate physics laboratories, contribution to development of undergraduate physics laboratory activities, student mentoring/tutoring, final year project supervision, as well as associated outreach and related activities.

The candidate would also be expected to provide leadership in teaching in the area of bio-/biomedical physics, in particular in terms of the design and development of undergraduate and taught postgraduate programmes. The appointee would also be expected to undertake various administrative duties related to the School's programmes, including acting as programme chair on the normal rotating basis. The total teaching hours and responsibilities will be defined by the Head of School in line with normal workload allocation.

#### **Research**

As there is a vital and synergistic relationship between research and teaching, the appointee will be expected to engage strongly with the research activities within the School. Of particular interest are the School of Physical Sciences well-established research strengths and strong existing expertise in the fields of Microsystems, Materials Growth and Surfaces/Interfaces Characterisation, Ultrafast Interactions in Atomic and Molecular Systems, and Plasma Diagnostics, Modelling and Applications. We expect the appointee to be able to initially synergistically contribute to, and strengthen, some of these existing research activities, utilising the broad range of experimental facilities available at DCU.

The candidate would ideally have research specialism in the field of Microsystems with a view to strategically extend the present techno-scientific portfolio of the Fraunhofer Project Centre for Embedded BioAnalytical Systems "FPC@DCU" (led by Prof. J. Ducrée). The FPC@DCU focusses predominantly on the development of high technology-readiness-level "Lab-on-a-Disc" solutions for industry. This would provide the successful candidate with a strong support infrastructure to enhance the development of their own research and facilitate developments towards commercialisation if appropriate.

However, applications from candidates with strong research records in any of the areas of biomedical applications of thin films and surfaces, lasers and laser interactions/processing, plasmas and plasma diagnostics or any other similar or related fields, are welcome and will be given equal consideration.

The candidate will lead an active and vibrant research programme in a biomedical physics field, including attracting significant research funding and recruiting and supervising postgraduate research students. We are seeking a candidate with a genuinely broad vision who, in the medium and longer terms, will develop new research directions, beyond the existing state of the art, in a current topic of biomedical physics. We would be especially interested in candidates whose research vision includes alignment with key and future needs of the biomedical industry.

**Job Requirements:**

Applicants must hold an honours degree in Physics or a very closely related discipline and a PhD in Physics or a related area, with a strong preference for a candidate with a PhD in an area of bio-/biomedical physics. Postdoctoral experience, and a demonstrable track record of high quality research showing evidence of both originality in research and ability to attract funding are expected for an appointment at Assistant Professor Level. Experience in the delivery of undergraduate lecture and laboratory physics modules would be an advantage.

The successful candidate will be expected to take a leadership role in both the teaching and research missions of the School and University in the area of biomedical physics. To this end they should be able to teach a broad range of physics topics at honours undergraduate physics level and at postgraduate level in their area of specialization and contribute to the future development of the School's teaching. They will have a demonstrable and verifiable track record of high quality research as evidenced by regular publication in high impact journals, a significant citation rate, presentations at cognate conferences etc., or other measures of research quality and impact.

The successful candidate will be a highly motivated individual on track to develop into a top tier physics academic, with a well-balanced teaching and research profile.

**Informal enquiries:** Informal enquiries may be addressed to Assoc. Prof. John-Paul Mosnier, Head of School of Physical Sciences, Dublin City University, Dublin 9, Ireland. E-mail: [jean-paul.mosnier@dcu.ie](mailto:jean-paul.mosnier@dcu.ie)  
Tel: +353 (0)1 700 5303.

*Please do not send applications to this email address, instead apply as described below.*

**Application procedure:**

Application forms are available from the DCU Current Vacancies (Open Competitions) website at <http://www4.dcu.ie/hr/vacancies/current.shtml> and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0)1 700 5149; Fax +353 (0)1 700 5500 Email: [hr.applications@dcu.ie](mailto:hr.applications@dcu.ie).

**Closing date:** 28<sup>th</sup> March 2019

**Salary scale:** \*€52,188 - €83,039

*\*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.*

**Along with the application form, please submit a brief CV and cover letter. Please clearly state the role that you are applying for in your application and email subject line: Job Reference #1179 in Bio-/Biomedical Physics – School Physical Sciences, Faculty of Science & Health**

***Dublin City University is an equal opportunities employer***