UNIVERSITETET I OSLO

Jobbnorge ID: 247238
Deadline: 8/31/2023
Website: http://www.uio.no/
Scope: Fulltime
Duration: Permanent

Associate Professor in Biophysics and Medical Physics

Job description

A permanent position as Associate Professor in Biophysics and Medical Physics is available at the Department of Physics, under the Faculty of Mathematics and Natural Sciences.

The Department of Physics has a stated vision of strengthening its research and educational activities in Life Sciences at the University of Oslo. The announced position is associated with the section for Biophysics and Medical Physics (BMP) which is one of several research sections at the Department. The successful applicant is expected to take a leading role in realizing this vision.

Faculty of Mathematics and Natural Sciences

Knowledge development in a changing world - Science and technology towards 2030

Video: https://www.youtube.com/watch?v=t4wvWQEhDEs

About the Department and what they are looking for in this position

The BMP section is well-established, with particular competences in radiation physics and dosimetry, and radiobiology as well as in medical physics and imaging. In both research and education, the section has a strong cooperation with the Oslo University Hospital (OUS). This tight interaction is intentional and strongly supported by both OUS and the University of Oslo. Essential infrastructure at the BMP section is an in vitro cell research facility.

The cell laboratories are specially equipped for studying the responses of human cells to ionizing radiation and the influence of micro-environmental factors and other external challenges. Of specialized equipment can be mentioned a new Precision 225 kV X-ray system, a new Attune flow cytometer, equipment for EPR spectroscopy, Ruskinn glove-box hypoxia work stations including microsensors for on-line pericellular oxygen detection and a walk-in incubation room.

Department of Physics operates a cyclotron for acceleration of protons (Oslo Cyclotron Lab), where BMP has established a cell irradiation set-up with an adjacent cell laboratory. The new proton therapy center at OUS will be in operation from 2024/25, which includes a research beam line with cell and animal laboratories. BMP has been involved in the planning of the proton therapy research facility at OUS and proton therapy research is a prioritized research field.

The staff of the BMP section is heavily involved in the education of future medical physicists by teaching courses and supervising master/PhD students in collaboration with the Oslo University Hospital.

General information about the position

The successful candidate is expected to initiate and participate in research that is aligned with the scientific focus of the group in collaborations within BMP and with OUS, as well as strengthening the in-house collaboration with the Oslo Cyclotron Lab. Major research efforts should address cross-disciplinary research objectives within radiation physics, radiobiology, and medical physics. The appointed person is expected to take an active role in strengthening experimental proton radiation therapy research in Oslo.

The appointed person is expected to supervise students for their master and PhD degrees, and also to teach general physics bachelor level courses and master/PhD level biophysical and medical physics courses. The position will also involve administrative duties according to current regulations by the Department or Faculty.

Qualification requirements

Required qualifications:

- Master’s degree in physics and PhD in physics or a related field central for the position
- Post-doctoral experience
- Documented high quality research in a relevant field, demonstrating ability for independent and significant scientific production after the PhD. The main emphasis will be on the candidate’s scientific production from the last five years.
- Experience with attracting external research funding and leading scientific research projects
- Documented pedagogical qualifications and ability to take active part in teaching and supervising students at all levels. The applicant should describe her/his qualifications in view of the Scholarship of Teaching and Learning (SoTL) framework which includes:

- Focus on student learning
- A clear development over time
- A researching approach
- A collegial attitude and practice

The successful candidate who at the time of appointment cannot document sufficient teaching qualifications (minimum formal requirement is a 200 hrs pedagogical programme) will be required to obtain such qualifications within a two-year period.

- Good language skills, in particular a good command of both written and spoken English. The person appointed to the position must be able to teach in Norwegian (or another Scandinavian language) within two years of the appointment.
- Experience with scientific programming and the use of numerical methods in research and education

The following desired qualifications will be prioritized in the assessment:

- Significant experience with experimental work in cell and/or animal models
- Significant experience with experimental radiation research
- Proven track record of attracting external funding from the most competitive funding schemes (ERC or similar)
- Experience in the development and redesign of courses and teaching methods, and motivation to take part in developing and improving study programs
- Experience with communicating university level research and education to a wider (non-scientific) audience.

Personal qualities

- Ability to create and contribute to a well-functioning, inclusive and productive research environment
- Organizational and networking skills, ability to collaborate and conduct scientific leadership

The successful candidate should have an international profile with respect to the above criteria. The candidate for this position will be selected based on excellence and fit with the section's research profile.

We offer:

- Salary NOK 635 400 - NOK 821 100 per annum depending on qualifications in a position as Associate Professor (position code 1011).
- A professionally stimulating work environment.
- Attractive welfare benefits and a generous pension agreement, in addition to Oslo's family-friendly environment with its rich opportunities for culture and outdoor activities.
- The opportunity to apply for promotion to full professorship at a later stage

How to apply

The application must include:

- Application letter with a statement of motivation and research interests
- A detailed CV, including a complete list of education, positions, pedagogical experience, administrative experience, project acquisition and coordination experience, and other qualifying activities.
- Copies of educational certificates, PhD diploma, transcript of records and letters of recommendation.
- A research plan (max. 5 pages) including possible synergies with relevant research sections at the Department of Physics and other departments at the University of Oslo, and at Oslo University Hospital.
- A complete list of publications and academic merits and awards (if not included in the CV).
- Summary of up to three selected scientific publications the applicant wishes to include in the evaluation describing their significance and impact. A copy of these publications (or an open access link to these) must be provided
- Educational portfolio of 3-6 pages documenting educational competence and experience, including a reflection note in which your own teaching practice and view of learning is anchored in the SoTL framework (focus on student learning, development over time, a researching approach and a collegial attitude and practice)
- List of reference persons: 2-3 references (name, relation to candidate, e-mail and phone number)

The application with attachments must be submitted in our electronic recruiting system; please follow the link "apply for this job". Please note that all documents should be in English (or a Scandinavian language).

Formal regulations

As a general rule an interview will be used in the appointment process, usually supplemented with a trial teaching session. The basis for assessment will be the scientific production of the applicant, the teaching portfolio, pedagogical and educational qualifications, the applicant's qualifications within leadership and administration, other qualifications as well as general personal suitability for the position. In ranking the competent applicants, the full range of qualifications will be considered and explicitly assessed.

Rules for appointments to associate professorships.
https://www.uio.no/english/about/regulations/personnel/academic/rules-appointment-professor.html

Rules for the assessment and weighting of pedagogical competence for appointments to permanent academic posts which include teaching duties:
https://www.uio.no/english/about/regulations/personnel/academic/rules-basic-pedagogical-competence.html

According to the Norwegian Freedom and Information Act (Offentleglova), information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds. Women are encouraged to apply.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results, see: http://www.uio.no/english/for-employees/employment/work-results/

In addition, the University of Oslo aims for its employees to reflect the diversity of the population to the greatest degree possible. We therefore encourage qualified applicants with disabilities or gaps in their CV to apply for the position. The University of Oslo will adapt the workplace to suit employees with disabilities. Applicants who indicate that they have disabilities or gaps in their CV are made aware that this information may be used for statistical purposes.

Contact information

For question about the position:

Associate Professor Nina Edin, phone: +47 22855492 / +47 92812070, e-mail: n.f.j.edin@fys.uio.no

Head of Department Susanne F. Viefers, phone: +47 22855004 / + 47 92668887, e-mail: s.f.viefers@fys.uio.no

For questions regarding Jobbnorge, please contact HR Adviser Ørjan Pretorius, e-mail: orjan.pretorius@mn.uio.no

About the University of Oslo

The University of Oslo is Norway's oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

The research at the Department covers a broad range of subfields within physics and technology: From space research to medical physics. A good proportion of the research is interdisciplinary, and conducted in close cooperation with collaborators in Norway and abroad.

Education and teaching are other essential activities. We offer a broad range of courses, and the Department is involved in several study programmes at bachelor's and master's level. Some of the best lecturers in Norway are amongst our employees, and we are proud of our prizewinning teaching and learning environment. The Department has 200 employees, of which 50 are permanent scientific positions. On a yearly basis 20 students complete their Ph.D. and 50 finish their M.Sc. degree.

Additional information

Place of service:

Problemveien 7 0313 Oslo (Oslo Municipality)