**Associate professor in physics education research at the Center for Computing in Science Education, University of Oslo**

The **Center for Computing in Science Education** (CCSE) at the Department of Physics, University of Oslo, invites applications for an Associate Professorship in **Science Education**.

**General information about the position:**

Center for Computing in Science Education ([www.mn.uio.no/ccse](http://www.mn.uio.no/ccse)) is a Center for Excellence with the goal of becoming an international hub for research-based integration of computational methods in education. Even though the use of computing has changed the sciences and their practice, computing has sparsely been integrated in science educations. At the University of Oslo, we have over many years developed new courses and study programs, where programming and computing are integrated from day one. An important task for the center is to build a research basis for this educational development activity and to generally strengthen the physics education research activity. We are hiring an associate professor in physics education research with documented experience from studies of the impact of computing in physics education.

CCSE acts as a hub for educational development at the Faculty of Mathematics and Natural Sciences. The center aims to lead research-based development of new learning materials, methods and practices to study their effects and how they transform teaching culture and student learning, to involve students deeply in the development of new practices and methods, and to disseminate and adapt the practices and results across disciplines in collaboration with key partners. One example is implementing a training course for learning assistants in how to promote student-active learning in group sessions.

CCSE is involved in integrating programming in education across the sciences – in physics, mathematics, chemistry, geoscience, and bioscience – and is expanding to other disciplines such as in the humanities. CCSE is also closely integrated with KURT, the Center for Teaching and Learning in Science, and is also involved in professional development of teachers – teaching them to integrate computing in disciplinary context in school education and developing a research-basis for this activity.

CCSE is a national Center for Excellence in Education from 2016 to 2026. CCSE will be integrated in the ordinary activity at the Faculty of Mathematics and Natural Sciences from 2026. The associate professor will be hired at the Department of Physics and will become part of the physics education research group at the Department of Physics after 2026.

**Work tasks and responsibilities:**

The associate professor is expected to build a research program focusing on the effects of the integration of computing in higher education physics education, to build an external funding portfolio to finance this activity, to supervise master and PhD-students in this field, and to contribute to the general teaching activities at the Department of Physics. 50 % of the working time will be devoted to teaching, teaching related activities and administrative duties.

The successful candidate is also expected to contribute to build a culture for teaching and learning by organizing and contributing to common workshops and meeting focusing on instructional design and development. It is expected that an associate professor in physics education research also will contribute to help increase the quality of teaching at the Department.

**Qualifications**

The Faculty of Mathematics and Natural Sciences has the strategic ambition of being a leading research faculty. Candidates for the advertised position will be selected in accordance with this ambition. The applicant should have the following *mandatory* qualifications:

* A doctoral degree in the fields physics education research or science education research, or a doctoral degree in physics and a substantial research background in physics education research or science education research at least corresponding to a doctoral degree
* Research experience from studies of the impact of computing in physics education using qualitative research methods
* Teaching experience in physics and/or physics education
* Organizational and collaborative skills
* Excellent communication skills in a Scandinavian language and in English

The following qualifications will be prioritized in the assessment:

* Documented research competence and interests relevant for the research program at CCSE
* Strong academic qualifications and strong record of international peer-reviewed publications in journals with high impact factors in the scope of the position (with emphasis on the past five years record);
* Ability to collaborate across established academic disciplines and build national and international networks
* Experience with attracting external research funding and leading scientific research projects
* Experience in development/redesign of courses/teaching methods, and motivation to take part in developing/improving study programs
* Experience from programs for building pedagogical competence in learning assistants or teaching faculty
* Experience with basic Python programming and machine learning
* Experience with communicating university level research and education to a wider (non-scientific) audience

**Evaluation**

Interviews and trial lectures will be used as part of the appointment process. The basis for assessment will be the scholarly production of the applicant, other qualifications, pedagogical or educational, the applicant’s qualifications within leadership and administration as well as the general personal suitability. In ranking the competent applicants, the full range of qualifications will be considered and explicitly assessed.

References will also be contacted.

Reference is otherwise made to rules regarding the procedures for appointment of persons to positions as professors and associate professors at the University of Oslo: <https://www.uio.no/english/about/regulations/personnel/academic/rules-appointment-professor.html> and 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-assessment-weighting-pedagogical-competence.html>

**We offer:**

* Salary NOK 552 800 - 741 300 per annum depending on qualifications in position as Associate Professor (position code 1011)
* A professionally stimulating working 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:*

* Cover letter (statement of motivation, summarizing scientific work and research interest)
* CV
* A research plan describing the applicant’s scientific ambitions for the position (1-2 pages)
* An education philosophy statement (1-2 pages)
* A list of no more than 10 academic works that the applicant would like to be taken into consideration in the assessment, including full references
* Complete list of scientific production with bibliographic references
* A portfolio containing documentation of teaching experience, capability of external fund raising and other qualifications the applicant wants to have considered
* PhD Diploma
* List of reference persons: 2-3 references (name, relation to candidate, e-mail and phone number)

The application with attachments must be delivered 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:**

The successful candidate who at the time of appointment cannot document basic teaching qualifications will be required to obtain such qualifications within a two-year period.

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 has an [agreement for all employees](http://www.uio.no/english/for-employees/employment/work-results/agreement-rights-to-work-results.html), aiming to secure rights to research results a.o.

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

The University of Oslo has a goal of recruiting more women in academic positions. Women are encouraged to apply.

**Contact persons:**

Professor Anders Malthe-Sørenssen, phone: +47 22856477 / +47 91198853,

e-mail: anders.malthe-sorenssen@fys.uio.no