

PhD position GELINA facility (1.0 FTE) (221308)

Job description

We are looking for a PhD candidate who will perform measurements of $(n, xn\gamma)$ cross sections using GAINS spectrometer at the GELINA facility. These cross sections are required for improvement of the current nuclear databases. In the nuclear-energy applications these databases are used to model range of processes from a critical zone of the reactor to a shielding of the core and radioactive waste. Improvement of the modelling precision might potentially reduce construction costs of a nuclear reactor, since less conservative estimation of building material would be required.

Responsibilities and tasks:

- preparation and conduction of experiments at GELINA facility
- performing computer Monte-Carlo simulations of the measured reactions
- performing analysis of the acquired data
- preparation of scientific articles and conference contributions
- contributing to and participating in scientific conferences
- teaching activities (15% of total workload) include mostly supervision of Bachelor and Master students.

Qualifications

The candidate should hold a MSc degree in Physics. Some background in nuclear physics is required. Knowledge of a programming language (C, C++ or Python) is beneficial. For the motivated and skilled student, excellent verbal and written communication skills in English are mandatory.

Organisation

The University of Groningen has an international reputation as a dynamic and innovative centre of higher education offering high-quality teaching and research. Balanced study and career paths in a wide variety of disciplines encourage the 36.000 students and researchers to develop their own individual talents. Belonging to the best research universities in Europe and joining forces with prestigious partner universities and networks, we are truly an international place of knowledge.

The Faculty of Science and Engineering harbours a kaleidoscope of

disciplines and research strengths. Our programmes in research and education range from nanomaterials and bio-machinery to astronomy, from mathematics to pharmacy, from neurosciences to computer science, and from molecular and evolutionary biology to marine biology.

The Energy and Sustainability Research Institute (ESRIG) is a highly multidisciplinary institute performing research on energy and sustainability. Activities include experimental and model studies as well as studies into the societal interaction with scientific knowledge. The research of the Nuclear Energy group within ESRIG is focusing on the merits and applicability of nuclear energy in the era of energy transition, in addition to the measurements required to improve the technology. Technical aspects will be studied in detail to provide feedback to the scientific community dealing with nuclear energy as well as to policy makers should the need arise.

Conditions of employment

We offer the successful candidate in accordance with the Collective Labour Agreement for Dutch Universities:

- a salary of €2,395 gross per month in the first year, up to a maximum of €3,061 gross per month in the fourth and final year for a full-time working week
- a holiday allowance of 8% gross annual income and an 8.3% year-end bonus
- a full-time (1.0 FTE) position for four years; first, you will get a temporary position of one year with the option of renewal for another three years; extension of the contract is contingent on sufficient progress in the first year so that successful completion of the PhD thesis within the contract period is to be expected.

A PhD training programme is part of the agreement and the candidate will be enrolled in the Graduate School of the Faculty of Science and Engineering.

Candidates are expected to start preferably before 1 November 2021.

Application

To be successful the application has to include:

- cover letter
- curriculum vitae
- transcripts from your Bachelor's and Master's degree
- contact details of three potential referees

- any other relevant documents (e.g., short research statement, awards, publications, language certifications).

You can submit your application until 15 July 11:59pm / before 16 July 2021 Dutch local time (CET) by means of the application form (click on "Apply" below on the advertisement on the university website).

We are an equal opportunity employer and value diversity at our University. We are committed to building a diverse faculty, so you are encouraged to apply. Our selection procedure follows the guidelines of the Recruitment code (NVP), and European Commission's European Code of Conduct for recruitment of researchers, <https://euraxess.ec.europa.eu/jobs/charter/code>

Unsolicited marketing is not appreciated.

Information

For information you can contact:

- Dr Myroslav Kavatsyuk, m.kavatsyuk@rug.nl

Please do not use the e-mail address(es) above for applications.

[Apply](#)