

Call for Proposals - NuSec Network PhD Studentships

Background

The STFC [Nuclear Security Science network \(NuSec\)](#) is pleased to announce a further call for part-funded PhD studentships to support research in areas of Nuclear Security which are aligned with the STFC science remit.

This call is a follow-up to our previous awards in December 2019 when three PhD studentships were awarded at the following universities:

University	Phd Title
Bristol	Developing the next-generation shipping container scanning system
Sheffield	Development of mixed field radiation detection techniques for oil and gas well logging.
University College London	Larger area semiconductor detectors based on novel inorganic polycrystalline perovskite materials

Objectives and Remit

We invite proposals for a further 3 PhD studentships, each for a duration of 42 months, which will be supported at a 50% funding level by NuSec. During Autumn 2020 an open call will be made for applications from Universities to apply for a NuSec studentship.

Research proposals must support the aims of the NuSec network, to deliver research activities which have clear objectives in Nuclear Security Science. Applications are welcomed in areas that include the following topics:

- 1. Detection systems for nuclear security**
- 2. Algorithms, data and autonomous decision making**
- 3. Alternative technologies for industrial use of radiation sources**
- 4. Other innovative technologies for nuclear security applications**

Applications **must** be primarily focused on research that is **within the remit of STFC** to be eligible for this call.

Application Process

The lead supervisor from the host University must submit an application to NuSec using the NuSec PhD proposal application form which can be obtained from the NuSec website.

A signed letter of commitment must also be submitted with the application form confirming the financial commitment to the remaining 50% of the project costs. The letter of commitment is required from the Project Partner, which can be either the host University or an industrial/external partner.

Timetable

Midday Monday 14th December 2020 – Deadline for receipt of proposals, including a letter of commitment for the project partner for direct funding of 50% of the value of the proposal. Receipt of your application will be confirmed via an e mail from the NuSec network within 24 hours. If you do not receive an e mail within 24 hours of your submission, then please e mail e.fletcher@surrey.ac.uk

January 2021 – Successful proposals will be announced. The host University for each project can start to advertise and recruit the student. An offer letter for NuSec funding will be issued to the host University by Surrey.

1st October 2021 – Start date for students

30th June 2023 – End of NuSec funding for the studentship (21 months)

31st March 2025 – Final completion date for the student (42 months)

Assessment Criteria

Assessment of the proposals will be made by the NuSec Management Group. Any group members with an interest in a particular proposal will be excluded from that assessment.

All proposals must have secured external funding for 50% of the project costs in order to be eligible for this call.

The following assessment criteria will be used:

1. Scientific quality of the proposed research.
2. Alignment to the objectives of NuSec and the remit of STFC.
3. Potential for Impact.
4. Quality of the supervisory team and project management.
5. Industrial/3rd party partnership.

Funding Scope and Eligibility

The NuSec award will be made to the host University from Surrey University. The NuSec award will cover 21 months of funding, up to a maximum value of £42,750, for the period 1st October 2021 to 30th June 2023. This will be the limit of NuSec's liability to the host University.

The proposal should request funding across the following categories:

UK PhD tuition fee¹: £4,407* per annum

PhD Stipend: £15,285* per annum or London Rate (£17,285)*

Training and Support: up to £5,000 per annum

* 2020/2021 Rates . Actual funding for UK tuition fee and stipend will be adjusted to reflect the prevailing UKRI rates for 2021/2022 and 2022/2023, and the requirement to pay additional London Rate. Training and support values may be further reduced to reflect any annual increases in the UKRI tuition fee and stipend amounts. The maximum total cost of the proposal is **£85,500** for a period of 42 months, supported 50% by NuSec.

The amount of the NuSec funding will not exceed the value of the committed funds from the host or external partner. Specifically, the tuition fee element of the NuSec funding will not exceed 50% of the value of a UK tuition fee.

Any standard terms and conditions that STFC requires for studentship funding will be passed by Surrey to the host University.

Reporting Requirements

The NuSec-funded PhD students will be required to present a review of their project at the NuSec Network Conference, which is provisionally planned for Summer 2023. Any outputs from the research should acknowledge funding from the STFC NuSec network.

Payments

An invoicing and payment schedule between Surrey and the host University will be provided at the time of award.

¹ EU applicants from outside the UK are permitted although NuSec funding will comply with the current STFC funding rules.