

NuSec Collaboration Research Grants Awarded to Date @6th August 2023

University	Award(s)	Project	NNSA Consortia/ DTRA URA/ UK	US or UK Collaborator
Bristol	PDRA, Research Materials and Travel Grants	Enhancing 'Big-Data' Visualisation and Presentation in Data-Rich Nuclear Security Scenarios	ETI	Pacific Northwest National Laboratory
Bristol	Research Visit	Identifying Opportunities for UK-US Collaborations in Micro-Particle Nuclear Forensics	ETI	Pacific Northwest National Laboratory
Bristol	PDRA	Machine Learning Integrated Quadrant Gamma Detectors for Enhanced Safeguards, Security and Inspection	NSSC	University of Berkeley California
Bristol	Research Visit	Optimisation of drone-based aerial mapping sensors for distinguishing NORM from anthropogenic gamma sources.	NSSC	University of Nevada and US Govt. Dept. of Energy NISA
Cambridge	Research Visit	Pulsed Neutron-Gamma Die Away Experiments for ^{Cl-35} Nuclear Data Validation	NSSC	University of California Berkeley and Lawrence Livermore National Laboratory
Glasgow	PDRA	Develop a Geant 4 simulation framework to optimize a multimodal detector for tomographic imaging of used nuclear fuel casks	ETI	Colorado School of Mines
Glasgow	Research Visit	Test An Organic Scintillator EJ-276, and an Inorganic Scintillator CLLBC, on a Detector Prototype using both the neutron generators (D-D and D-T) and alternative radioisotope neutron sources in a US Neutron Science Laboratory	MTV	University of Michigan
Kings College London	Research Visit	Water-based quantum dots detector for near-field nuclear fission reactor monitoring detectors	MTV	University of Michigan
Manchester	PDRAs, Travel Grant (Conference), and US Research Visit	A fast and portable camera for detection and monitoring of nuclear materials	NSSC	Brookhaven National Laboratory
Manchester	PDRA, Research Visit and Conference	Novel imaging technique for thermal and slow neutrons using a single photon fast optical camera	MTV	Brookhaven National Laboratory
Oxford	Conference	Collaboration with the LLNL AI Inertial Confinement Fusion group	ETI	Lawrence Livermore National Laboratory

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Sheffield	PDRA	Boron Loaded Opaque Scintillator for Low-Cost Directional Neutron Sensing	N/A	N/A
Surrey	PDRA	Development of Perovskite Scintillators	ETI	Georgia Tech
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Surrey	Summer UG Project	Isomer cross sections	N/A	N/A
Surrey	PDRA	Large area CsPbBr ₃ Perovskite detectors for Nuclear Security Applications	IIRM	Applied Radiation Laboratory, Penn State University
Surrey	PDRA, Training & Travel Grants	Sigma Data Evaluation and Optimisation for Threat Response	N/A	N/A
York	PDRA	Neutron and X-ray imaging in extreme environments	MTV	University of Michigan
York	PDRA	Neutron Detector Development Using Novel ³ He Encapsulated Foils	N/A	N/A