

Ross Peel



Research interests

Nuclear safeguards; nuclear security; non-proliferation; nuclear energy; nuclear fuel cycle; disarmament; arms control;

Qualifications

Theology, Associate of King's College, King's College London

Sept 2020 → Jun 2023

Award Date: 1 Nov 2023

Nuclear science and technology, Doctor of Philosophy, The Preparation and Application of Thorium-based Nuclear Fuels, University of Sheffield

14 Sept 2011 → 11 Sept 2017

Award Date: 11 Sept 2017

Mechanical Engineering with French, Master of Engineering, The Use of Intercarriage Gap Covers to Improve the Aerodynamics of High-speed Trains, University of Sheffield

25 Sept 2007 → 20 Jul 2011

Award Date: 22 Jun 2011

Employment

Research outputs

Insider Threat Security Considerations for Advanced and Small Modular Reactors

Homan, Z. & Peel, R., Oct 2024, (Accepted/In press). 8 p.

Nuclear Industry Views on the Security of Small Modular Reactors: Results of a pilot survey

Cavellec, R., Paterson, N. & Peel, R., Oct 2024, (Accepted/In press). 9 p.

Security Considerations for Floating Nuclear Power Plants when Stationary

Peel, R., Oct 2024, (Accepted/In press). 6 p.

Nuclear Weapons Production Complexes in a Disarmed World

Elbahtimy, H. & Peel, R., 10 Dec 2023, In: Journal for peace and nuclear disarmament. 6, 2, p. 263-291 29 p.

Nuclear security for next-generation reactors

Aghara, S. K. & Peel, R., 22 May 2023, *The Oxford Handbook of Nuclear Security*. Oxford University Press, p. 341-357 17 p.

Mapping Manufacturers and Exporters of Items Listed in the Model Additional Protocol Annexes for Outreach Activities

Peel, R. & Gwadera, Z., 2 Nov 2022.

Promoting Safeguards-by-Design in Evolutionary and Innovative Reactor Technology Development

Peel, R., Stoetzel, A. & Aghara, S., 1 Nov 2022.

A different kind of nuclear weapon: Russian abuse of Ukrainian nuclear power plants

Peel, R., 27 Oct 2022

Transportation Security Considerations of Small Modular and Mobile Reactors

Peel, R. & Burnett, G., 5 Oct 2022.

Innovation and International Security in Tension: Challenges in Applying Technology Transfer Risk Management Measures in Research Organisations

Peel, R., 8 Jul 2022.

Nuclear Security and Safeguards Considerations for Novel Advanced Reactors: An overview of how the unique features of small and advanced modular reactors create opportunities to deliver optimised nuclear security and safeguards while reducing lifetime operating costs.

Peel, R., Foster, G. & Aghara, S., 28 Mar 2022, King's College London. 40 p.

Nuclear Security within Academic and Research Organisations: A Handbook of Global Case Studies

Chung, J., Dewey, K., Hobbs, C., Homan, Z., Park, E., Peel, R., Scott, E. & Tzinieris, S., 25 Mar 2022, King's College London.

An Overview of Legislation and Guidance for Technology Transfer Management in Research Organisations

Peel, R., Scott, E. & Trajkovska, K., 23 Dec 2021, In: Trade & Security. 2, p. 76-85

Nuclear Fuel Reserves

Peel, R., 23 Jun 2021, *Kirk-Othmer Encyclopedia of Chemical Technology*. Ley, C. (ed.).

Catalogue of Case Studies on Intangible Technology Transfers from Universities and Research Institutes: Revised edition

Scott, E., Peel, R., Ruechardt, F. & Mitchell, N., 29 Sept 2020, King's College London. 64 p.

US Designates New Iran Centrifuge Material Supply Networks

Peel, R., Scott, E. L., Liu, D. & Stewart, I. J., 7 Aug 2019, 8 p.

Brexatom - The Nuclear Impacts of Brexit on the UK

Peel, R. & Jorant, C., 26 Mar 2018

Three-component U-Pu-Th fuel for plutonium irradiation in heavy water reactors

Peel, R., Van Den Durpel, L., Ogden, M. D. & Whittle, K. R., 6 Jun 2016, In: European Physical Journal - Nuclear Sciences & Technologies. 2, p. 29 12 p.

Activities

World Nuclear Association (Publisher)

Peel, R. (Editor)

13 Jun 2025

New governance approaches for critical dual-use technologies

Peel, R. (Speaker), Kolliarakis, G. (Speaker), Sanchez Cobaleda, A. (Speaker) & Kanetake, M. (Speaker)

8 Jul 2022

Awards

Improving Global Implementation of Maritime Sanctions on North Korea – Part 2

Moran, M. (Primary Investigator), Osborne, S. (Co-Investigator) & Peel, R. (Co-Investigator)

DOS US Department of State: £267,017.59

1/04/2021 → 30/06/2022