

# Organisational Update - NNL

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# THE ADVANCED FUEL CYCLE PROGRAMME (AFCP)

A UK programme working globally

- Over 80 UK organisations, developing at-risk skills, capability & capacity in advanced fuels
- >10 UK world leading universities
- Supporting >50 postdocs and Ph.D.s
- >£4m investment in UK academic institutions
- Leveraging >£100m from international programmes

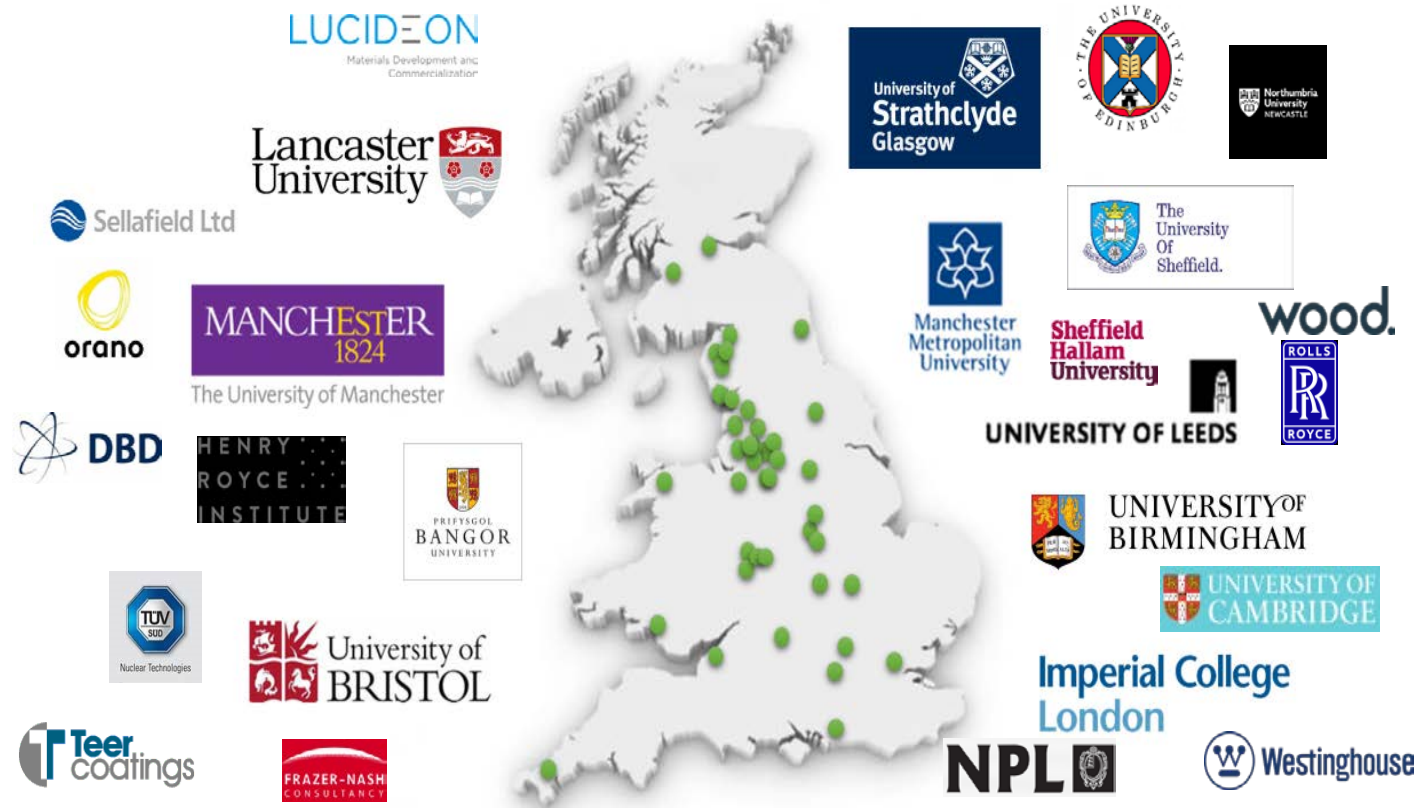
## ADDRESSING KNOWLEDGE GAPS

NIRAB has reported a low total number of staff, PhDs and postdoctoral researchers working on fuel fabrication, spent fuel handling and advanced reactors. Compared to the **entire combined nuclear sector**, AFCP alone:\*

**PDRAs**  
 Doubles the number of fuel postdocs and more than matches the number of recycle and waste management postdocs

**PhDs**  
 Accounts for >10% of total UK PhDs in each of these areas

NIRAB landscape survey, March 2020.



- Initiative to improve academic access to ROYCE & NNUF facilities at NNL
- Idea presented in Feb 2020 & formally launched in July 2020

Jul	Aug	Sep	Oct / Nov	Dec / Jan	Feb / Mar / Apr	May	Jun
Call Opened	Call closed						
	Panel Assessments	Applicants informed of panel decision	Planning for postal expts	"Postal" Experiments – performed by NNL on behalf of client			
			Security Clearance, Preparation and planning for on-site experiments and access	User Access for "Hands in Pockets" and "Hands on" experiments			

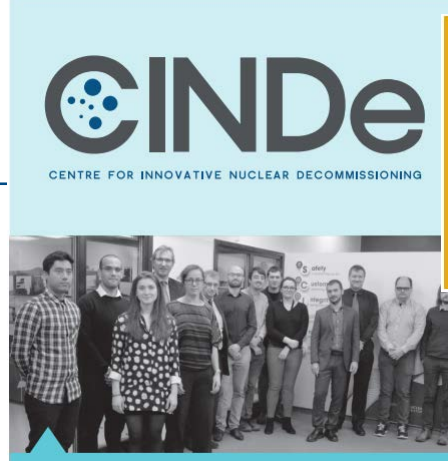
- **Fantastic response from academic community**
  - ~25 attendees at briefing seminar resulting in 16 proposals aligned to AFCP
- **Ranked by Panel involving two independent members**
  - Number of successful applicants limited by our capacity rather than quality of applications
  - Applicants currently being notified of decisions

- Alpha Resilience and Capability (ARC) is a collaboration between the UK Government and the nuclear sector **to sustain and enhance the UK's world-leading alpha skills capabilities**; those required to work on **programmes related to alpha-emitting materials**.
  - **Examples include the launch of an enhanced alpha remediation programme and delivery of the UK Government's plutonium disposition strategy.**
- Currently seeking proposals from organisations and early career individuals interested in creating upskilling opportunities.
  - Technical interventions - These are funded projects or collaborations which enable the development of new skills and knowledge within ARC partner organisations or alpha-related organisations.
  - Travel bursaries - Funding towards the cost of attending visits, meetings or training events related to alpha skills development, or dissemination of related knowledge, either technical or practical
  - Secondment grants - Support for individuals to spend time working in ARC partners' facilities to enhance their research or skills

For more info, contact [cassie.staines@uknnl.com](mailto:cassie.staines@uknnl.com) or <https://www.nnl.co.uk/innovation-science-and-technology/collaborations/alpha-resilience-and-capability/call-for-proposals/>



# UNIVERSITY COLLABORATION IN 2020 AT THE NATIONAL NUCLEAR LABORATORY



**97** PHD STUDENTS  
**AND**  
**26** PDRAs

ACROSS  
**10** CORE  
SCIENCE THEMES

AT  
**22**  
UNIVERSITIES

**8** INDUSTRIAL ICASE AWARDS FROM EPSRC

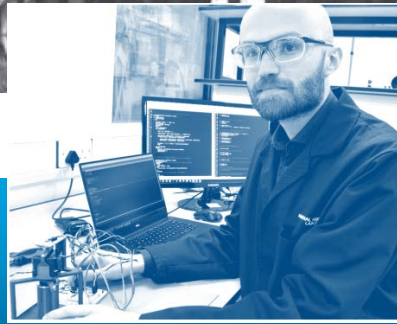


ACCESS TO OUR WORLD CLASS FACILITIES



INVOLVING  
A TEAM OF  
**61**  
INDUSTRIAL SUPERVISORS

TEACHING AT 9  
UNIVERSITIES TO INSPIRE  
THE NEXT GENERATION



SUPERVISING  
RESEARCHERS  
ON BEHALF  
OF **NDA**

SUPPORTING RESEARCH THROUGHOUT THE UK

A map of the United Kingdom with several yellow dots indicating research locations across the country.

A photograph of a person in a white lab coat and gloves working in a laboratory setting.