

Direct Research Portfolio 2019/20 Q2
Lot A - University Interactions

Updated October 2019

Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
PhD Bursary Scheme 2015*	<i>Direct support of capability in targeted areas</i>	NNL	£554,561	Maintaining Skills	Ongoing (completion in 2019)
PhD Bursary Scheme 2016*		NNL	£547,434	Maintaining Skills	Ongoing (completion in 2020)
PhD Bursary Scheme 2017*		NNL	£476,640	Maintaining Skills	Ongoing (completion in 2021)
PhD Bursary Scheme 2018*		NNL	£547,142	Maintaining Skills	Ongoing (completion in 2022)
PhD Bursary Scheme 2019*		NNL	£467,617	Maintaining Skills	Ongoing (Completion in 2023)
Optioneering Study on Robot controlled Laser Cutting System for Decommissioning*		NNL	£18,312	Informing Strategy / Maintaining Skills	Complete
17CCR05 - Bursary Project K.Morris, Uni of Manchester		NNL	£11,000	Maintaining Skills	Ongoing
Uranium-active HIP trials - PDRA research		NNL	£255,727	Inform Strategy / Maintaining Skills	Ongoing (completion in 2020)
Funding for PhD Student Awards		University of Leeds	£250	Maintaining Skills	Ongoing
Industrial Supervision of NDA sponsored PHD Students 2018/19	<i>Direct support of industrial supervisors for NDA funded PhD projects</i>	NNL	£289,610	Maintaining Skills	Complete
Industrial Supervision of NDA sponsored PHD Students 2019/20		NNL	£300,601	Maintaining Skills	Ongoing
iCASE Awards 2015*		NNL	£60,020	Innovation / Maintaining skills	Ongoing (completion in 2019)
iCASE Awards 2016*		NNL	£40,176	Innovation / Maintaining skills	Ongoing (completion in 2020)

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iCASE Awards 2018*	<i>Support the development and delivery of Research Council programmes</i>	NNL	£56,600	Innovation / Maintaining skills	Ongoing (completion in 2022)
DISTINCTIVE PhDs (UCL and Strathclyde)*		NNL	£66,000	Innovation / Maintaining skills	Complete
Next Generation Nuclear (NGN) PhDs (Sheffield and Liverpool)*		NNL	£119,961	Innovation / Maintaining skills	Complete
Next Generation Nuclear (NGN) PhD (Leeds)*		NNL	£49,252	Innovation / Maintaining skills	Ongoing (Completion 2019)
Next Generation Nuclear (NGN) PhD (Lancaster)*		NNL	£63,730	Innovation / Maintaining skills	Ongoing (Completion in 2020)
TRANSCEND		NNL	£839,068	Innovation / Maintaining skills	Ongoing (Completion in 2023)
H2020 Project MEET-CINCH - Training Resources for Nuclear Chemistry	<i>Support the development and delivery of nuclear decommissioning specific academic capability - Working with other interested parties to identify and support appropriate areas of academic technical capability</i>	NNL	£35,000	Maintaining Skills	Ongoing (Completion in 2020)
Impact Analysis of NDA funded University Interactions FY17/18		NNL	£26,836	Informing Strategy	Complete
Impact Analysis of NDA funded University Interactions FY18/19		NNL	£33,069	Informing Strategy	Ongoing
Support to Horizon 2020 project: GENIORS		NNL	£200,000	Maintaining Skills	Ongoing
NDA Membership to the Research Centre for Non-Destructive Evaluation (RCNDE) 18/19		NNL	£102,478	Informing Strategy / Maintaining Skills	Complete
NDA Membership to the Research Centre for Non-Destructive Evaluation (RCNDE) 19/20		NNL	£121,994	Informing Strategy / Maintaining Skills	Ongoing
Providing Facilities Support for NDA funded Academics		NNL	£50,341	Maintaining Skills	Complete

Lot A - University Interactions

NDA facilities support for academics working in Central Laboratory under the NDA-DCF agreement	<i>Support the access to specialist facilities for academia - Academic access to Central Laboratory</i>	NNL	£147,628	Maintaining Skills	Complete
Academic access to NNL facilities 18/19		NNL	£200,000	Maintaining Skills	Complete
Use of NNL Facilities by Academic personnel: DCF Central Lab access 18/19		NNL	£63,949	Maintaining Skills	Ongoing
Use of NNL Facilities by Academic Personnel: Central Laboratory Access FY 16/17 Cohort 3		NNL	£18,906	Maintaining Skills	Complete
Academic access to NNL facilities 18/19		NNL	£21,104	Maintaining Skills	Complete
Academic Access to NNL Facilities		NNL	£22,728	Maintaining Skills	Ongoing
Academic Access to Facilities		NNL	£33,460	Maintaining Skills	Ongoing
Bursary Facilitation 2018/19			NNL	£55,912	Maintaining Skills
Bursary Facilitation 2019/20	NNL		£69,308	Maintaining Skills	Ongoing
University Contract Management 2018		NNL	£33,250	Maintaining Skills	Ongoing
University Contract Management 2019		NNL	£24,250	Maintaining Skills	Ongoing

* In the case of PhDs & PDRAs, this value covers the entire PhD which is paid in the first year

**Direct Research Portfolio 2019/20 Q2
Lot B - Integrated Waste Management**

Updated October 2019

Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
Thermal Treatment of Low Level and Intermediate-Level Waste: Active Trials of Surrogate Waste Stream Vitrification	<i>Higher Activity Wastes - Alternative Waste Treatment - with a particular focus on volume reduction - Understanding and, where appropriate, addressing the technical barriers to implementation of new thermal, mechanical and chemical treatment technologies across the NDA estate</i>	Galson Sciences	£2,986,000	Inform Strategy / Innovation / Maintain Skills	Ongoing
Solid Waste Characterisation Guidance Document	<i>Development of technologies to improve the application of the Waste Hierarchy (e.g. waste characterisation technologies, sorting and segregation technologies, understanding technical barriers to material re-use)</i>	Wood	£253,414	Informing Strategy / Maintaining Skills	Ongoing
Evaluation of characterisation approaches for populations of small-volume /high number redundant laboratory chemicals		Arup	£112,950	Innovation	Ongoing
Exploring the use of blending, mixing, dilution or averaging in the management of radioactive wastes.		Eden Nuclear and Environment Limited	£74,206	Inform Strategy / Innovation	Ongoing
Feasibility of Techniques for the management of Radiologically Contaminated Mercury	<i>Technologies that may lead to better treatment of unique waste streams at an NDA estate-wide level (e.g. contaminated oils and solids)</i>	Eden Nuclear and Environment Limited	£46,547	Informing Strategy / Innovation	Ongoing
Informing the Development of a Strategic Approach for Encapsulation	<i>Higher Activity Wastes - Alternative Encapsulants - Consolidate work and understanding on improving existing encapsulation technology</i>	Eden Nuclear and Environment Limited	£180,819	Inform Strategy / Innovation,	Ongoing

Direct Research Portfolio 2019/20 Q2
Lot B - Site Remediation and Decommissioning

Updated October 2019

Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
Decommissioning					
Overview of International R&D Workstreams and Projects relevant to Integrated Waste Management and Site Decommissioning and Remediation and involve UK Collaboration	<i>Underpin the international collaboration objectives, accessing and sharing international good practice and innovation and proactively identifying opportunities for collaboration.</i>	Arup	£105,400	Innovation/Inform Strategy/Maintain Skills	Ongoing
Identification of Synergies between AGR and Magnox Reactor Decommissioning	<i>Strategic approach to prioritisation of decommissioning and remediation activities - Influence of different factors such as using asset condition to determine decommissioning priority</i>	Wood	£196,833	Inform Strategy	Ongoing
Unmanned Aerial Vehicles (UAVs) in Nuclear Decommissioning – Current Use and Future Opportunities	<i>Improved characterisation to support decommissioning - Improved remote characterisation technologies</i>	Wood	£54,047	Innovation	Ongoing
Remote Visual Inspection (RVI) HSE &NDA Research Programme		HSE	£50,000	Innovation	Ongoing
Land Quality Management					
Briefing notes on emerging issues in Land Quality Management for the Nuclear Industry	<i>Improved characterisation of land and groundwater - Improving the approach to land and groundwater characterisation</i>	Arup	£92,300	Maintaining Skills	Ongoing
Real World Behaviour of Artificial Radionuclides in Near Surface Hydrogeological Environments		Wood	£53,440	Innovation	Ongoing
Application of Radiation survey equipment for in situ / ex situ characterisation of ground and in-ground structures relative to the management and remediation of land contamination		Arup	£106,100	Innovation / Maintaining Skills	Ongoing
Guidance on Soil Contamination Data		Wood	£4,000.00	Informing Strategy	Ongoing
Site End States					
One year membership to CL:AIRE for NDA and its SLCs (19/20)	<i>Mechanisms for communicating Site End States and the preceding journey</i>	CL:AIRE Ltd	£3,000	N/A	Ongoing

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<p>Creation of guidance to SLCs to assist them in determining optimum end state associated with off-site structures</p>	<p><i>Technically underpin approach to defining and optimising Interim and Site End States (for land, structures and infrastructure)</i></p> <ul style="list-style-type: none"> - <i>Influence of asset management (e.g. tools to support decision making)</i> - <i>Understand the appropriateness of when to implementation on-site or in-situ disposal of waste across the NDA estate</i> 	<p align="center">Wood</p>	<p align="center">£87,207</p>	<p align="center">Informing Strategy / Innovation</p>	<p align="center">Ongoing</p>
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Direct Research Portfolio 2019/20 Q2
 Lot C - Spent Fuels and Nuclear Materials

Updated October 2019

Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
Literature review of AGR-relevant corrosion modelling and simulation	<i>Potential strategic option to extend wet fuel storage beyond 25 years Improve understanding of the impact of extended wet storage on fuel condition, notably of mechanisms and influential factors rates during storage of AGR fuel,</i>	NNL	£47,750	Informing Strategy / Maintaining Skills	Ongoing
Desk-top study into the variations in Advanced Gas-cooled Reactor (AGR) cladding specifications and manufacturing processes		Wood	£33,817	Informing Strategy	Ongoing
Desktop Study - Investigation on the influence of radiation microstructural changes on stainless steel susceptibility to InterGranular Attack (IGA)		Wood	£40,667	Informing Strategy / Maintaining Skills	Ongoing
Review of the potential contribution of PSE to the NDA Oxide Fuel Strategy		NNL	£49,700	Informing Strategy	Ongoing
Desktop review of the techniques available for characterisation of AGR cladding composition, microstructure and corrosion behaviour		Wood	£34,818	Informing Strategy / Maintain Skills	Complete
Empirical Work to further evaluate alternative techniques for online pond water monitoring		Wood	£99,663	Innovation	Ongoing
Electrochemical model for AGR Cladding relevant to long-term pond storage		Wood	£74,408	Informing Strategy	Ongoing
Programme to pursue non-active experimental drying trials on intact and failed fuel pins		<i>Potential fuel drying and dry storage - Understand fuel drying characteristics and process options, including potential technical basis for drying storage of AGR, typically drying process options and achievable dryness levels</i>	NNL	£14,264	Informing Strategy / Maintaining Skills
NNL Staff attendance at the AGR Technical Forum Meeting	NNL		£5,750	Informing Strategy	Complete

Direct Research Portfolio 2019/20 Q2
Lot C - Spent Fuels and Nuclear Materials

Updated October 2019

Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
Support to the Fuel Drying Forum (DRP Framework)		Orano	£15,500	Informing Strategy	Complete
Literature review of dry storage conditions and impact on AGR fuel behaviour		NNL	£42,950	Informing Strategy / Maintaining Skills	Complete
Desktop Study - Investigation on the influence of stress on stainless steel susceptibility to Intergranular Corrosion (IGC)	<i>Potential fuel drying and dry storage- Understand fuel behaviour in dry storage environments and options for short or extended dry storage periods</i>	Wood	£49,886	Informing Strategy / Innovation	Ongoing
Investigation of Propensity for Zircaloy to undergo corrosion in chloride solution and contact with mild steel		Wood	£78,762	Informing Strategy	Ongoing
Exploring Innovative means to manage and monitor pressure build-up in sealed spent fuel containers	<i>Improved technical options for long term storage of exotic fuel materials</i>	NNL	£49,150	Innovation	Ongoing
	<i>Improving our understanding of spent fuel storage - Modelling the impact of operational changes on the oxide spent fuel strategy</i>				

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Lot C - Spent Fuels and Nuclear Materials

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Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
Radiation Induced Sensitisation (Modelling and Experimental)	<i>Alternative long-term storage options to wet storage such as dry storage - Establish technical basis for dry storage of AGR i.e. How dry does the fuel need to be to reduce corrosion to the minimal levels observed in wet storage? This will include establishing the behaviour of reactor-induced sensitised stainless steel AGR cladding under dry storage conditions</i>	Wood	£386,122	Informing Strategy / Maintaining Skills	Ongoing
Attendance at RIS Workshop		Wood	£14,508	N/A	Complete
Attendance at RIS Workshop		NNL	£17,750	N/A	Complete
Further assessment of MIMIAS-type fuel line at Central Laboratory	<i>Understanding the suitability of the UK's plutonium inventory for re-use as MOx - Investigation of methods to enable the re-use of the vast majority of UK plutonium as MOx fuel</i>	NNL	£172,250	Informing Strategy / Maintaining Skills	Ongoing
Reduction and Characterisation of Oxidised and Oxidised reduced MOX Materials		NNL	£251,592	Informing Strategy / Maintaining Skills	Ongoing
Preliminary Design and Safety Assessment of a technical solution to manage an increase in hydrogen concentration in gas feeds in the manufacture of Mox fuels in Central Laboratory		NNL	£288,207	Informing Strategy / Maintaining Skills	Ongoing
Determining the Mass Balance of Gaseous Species in Plutonium Storage Cans		NNL	£42,238	Informing Strategy / Maintaining Skills	Ongoing
Assessing the Risk of Helium Pressurisation Impacting on SNM Disposition		NNL	£48,383	Informing Strategy / Maintain Skills	Ongoing
Literature Review of Radiation Damage and Leach Rates for Plutonium Bearing Ceramic Wasteforms		Wood	£48,844	Informing Strategy / Maintaining Skills	Ongoing

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Lot C - Spent Fuels and Nuclear Materials

Updated October 2019

Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
Review of analytical capabilities to carry out specialist Pu analysis in UK and overseas and development of a small scale research sample preparation and management service to carry out that work.		NNL	£49,622	Informing Strategy	Ongoing
Update on Applicability of Fast Reactor Technology for Pu Disposition paper.		Wood	£43,433	Informing Strategy / Maintaining Skills	Ongoing
Desktop study on Horizon scanning of alternative approach to plutonium immobilisation	<p align="center"><i>Immobilisation of Plutonium</i> <i>- Development of immobilisation technologies for all types of plutonium including oxide powder, MOX manufacturing scraps and residues</i></p>	NNL	£41,190	Informing Strategy	Ongoing
Desktop study on HIP Can Filling Methodology - Options Assessment		Wood	£46,070	Informing Strategy / Maintain Skills	Complete
Inactive HIP Trails in Support of Cl-contaminated Plutonium Disposal		NNL	£199,902	Informing Strategy / Maintaining Skills	Ongoing
DoE-NDA Filling System Demonstrator Collaboration		NNL	£237,998	Informing Strategy / Maintaining Skills	Ongoing
Desk Top Study on Choice of Neutron Poisons for Pu Immobilisation		NNL	£37,149	Informing Strategy	Complete
Desk Top Study on Mill Design for HIP Process		NNL	£44,973	Informing Strategy	Complete
Desktop study on Pre-Heat Treatment Specification for Plutonium		NNL	£52,432	Informing Strategy	Complete

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Title	5 year plan R&D Topic	Lead Supplier	Full PO Value	R&D Driver	Project Status
Inactive Trials of Flash Sintering on Simulated Plutonium Wasteforms		Wood	£89,458	Informing Strategy	Ongoing
Modelling the Temperature and Pressure of Immobilised HIP Product in Cask Storage	<i>Long-term storage of plutonium - Understanding the behaviour of plutonium in extended long-term storage including the behaviour of the plutonium and the storage package and compatibility with potential future management strategies</i>	Wood	£39,400	Informing Strategy	Complete
Desk Top review of Powder Granulation Options for a HIP based Plutonium Immobilisation Process (10973)		NNL	£41,880	Informing Strategy / Maintaining Skills	Ongoing
Development of an acceptable route for the immobilisation and disposal of sodium diurate	<i>Options for long-term management of uranium enriched fuels and materials - Characterisation, storage, treatment and disposal</i>	NNL	£38,672	Informing Strategy	Ongoing

Lot A - PhDs

University	Title	Type	Status
Sheffield	Characterisation of thermal treatment products	TRANSCEND	Not Yet Started
Sheffield Hallam University	Process monitoring of thermal treatment of nuclear wastes	TRANSCEND	Not Yet Started
University of Surrey	Predicting Gamma Dose Rates based on Limited Information	TRANSCEND	Not Yet Started
Birmingham University	Computational Modelling of PuO ₂ : Ageing and Storage Phenomena	TRANSCEND	Not Yet Started
Lancaster University	The Recombination of Hydrogen and Oxygen on Metal Oxide Surfaces	TRANSCEND	Not Yet Started
University of Leeds	Characterisation of perforated AGR fuel and its behaviour during drying	TRANSCEND	Not Yet Started
University of Bristol	Multi-scale Characterisation of Residual Stress in AGR Fuel Cladding	2018/19 Bursary	Not Yet Started
University of Manchester	Printed graphene based sensors for real-time and wireless monitoring of nuclear waste storage containers	2018/19 Bursary	Not Yet Started
University of Manchester	Evaluation of Uranium Retention in Geological Minerals at the Sub-Micron Level	2018/19 Bursary	Not Yet Started
Loughborough University	Bad Laser Cutting to get Good Laser Fume	2018/19 Bursary	Not Yet Started
London South Bank University	An acoustic analysis tool for detecting hydrogen gas in sealed pressurised storage packages and containers	2018/19 Bursary	Not Yet Started
University of Birmingham/University of Surrey/National Physical Laboratory	Development of novel radiochemical methods for the analysis of challenging nuclides in nuclear decommissioning samples.	2017/18 Bursary	Not started yet
University of Manchester	Radiochemistry Sensors for use on Robotic Inspection Vehicles	2017/18 Bursary	Not started yet
University of Manchester	Experimental and modelling approaches to support the management of radioactive discharge pipelines	2017/18 Bursary	Not started yet
University of Warwick	In-situ non-contact pressure measurement in sealed cans using acoustic methods	2017/18 Bursary	Not started yet

Lot A - PhDs

University	Title	Type	Status
University of Strathclyde	Measurement of waste package dimensions and deformations using robotically deployed optical methods	2017/18 Bursary	Not started yet
University of Sheffield	An Efficient One-Pot Process for Conditioning and Encapsulation of Contaminated Mercury Waste	2017/18 Bursary	Not started yet
University of Liverpool	Atomic scale insights into the mobility of radionuclides in the plasma vitrification of simulant plutonium contaminated materials	2017/18 Bursary	Not started yet
University of Sheffield	Cements of the Future, and Future Nuclear Cements	2017/18 iCASE	Not started yet
University of Lancaster	Photo detectors base in-situ measurement of total beta in groundwater	NGN	Ongoing
University of Sheffield	Remote magnetic monitoring of swelling in intermediate waste canisters	2016/17 Bursary	Ongoing
University of Sheffield	Understanding the effectiveness of plutonium surrogates for waste and stockpile immobilisation	2016/17 Bursary	Ongoing
University of Birmingham	Advanced control of robotic manipulators for cutting and resizing	2016/17 Bursary	Not started yet
University of Sheffield	Conditioning of damaged and degraded spent fuel materials	2016/17 Bursary	Not started yet
Loughborough University	Rapid onsite detection of radionuclides using nanoparticle and paper based assays	2016/17 Bursary	Ongoing
University of Manchester	Radionuclide behaviour at the cement/subsurface interface	2016/17 Bursary	Ongoing
University of Lancaster	The Electrochemical Treatment of Problematic Wastes	2016/17 iCASE & NGN	Ongoing
University of Manchester	Understanding the Effect of Microstructure Strain and Cold Work on Intergranular Corrosion of AGR Fuel Cladding	2016/17	Ongoing
University of Southampton	Development of novel extractant test stick technology for the rapid screening of radionuclides.	2015/16 Bursary	Ongoing
University of Surrey	Automated Visual Detection of Plant Anomalies	2015/16 Bursary	Ongoing
University of Leeds	Assessment of the impact of leak zone processes in the natural attenuation of radionuclides	2015/16 Bursary	Ongoing
University of Birmingham	Preventing hydrogen pressure build-up inside sealed vessels containing degraded spent nuclear fuel.	2015/16 Bursary	Not started yet

Lot A - PhDs

University	Title	Type	Status
University of Cardiff	Element specific smart media for fast, low cost radionuclide analyses	2015/16 Bursary	Ongoing
University of Bath	Development of nonlinear acoustic techniques for the detection of cracks in storage containers	2015/16 Bursary	Not started yet
University of Sheffield	Brannerite glass ceramic wasteforms for immobilisation of nuclear fuel residues.	2015/16 Bursary	Ongoing
University of Sheffield	Immobilisation of problematic wastes in geopolymers	2015/16 Bursary	Ongoing
University of Leeds	Development of a pre-treatment process for disposal of Magnox and Exotic Fuels	NGN	Ongoing
University of Manchester	Societal Value of Decommissioning and Remediation	2015/16 iCASE	Ongoing
University of Lancaster	GPR Integrated Mixed-field Imaging Approach for Radiological Characterisation of Decommissioning Nuclear Sites and Facilities	2015/16 iCASE	Ongoing
University of Edinburgh	Polyoxo Actinide Chemistry	2014/15 Bursary	Ongoing
University of Leeds	Benchmarking Nuclear Decommissioning	2014/15 Bursary	Ongoing
UCLAN University of Central Lancashire	Zirconium doped titanium silicate ion-exchange materials	2014/15 Bursary	Ongoing
University of Lancaster	Autonomous mobile robotic systems for remote handling and decommissioning	2014/15 Bursary	Ongoing
University of Lancaster	Long-range scanning based detection of Alpha-Induced Air Fluorescence even under daylight conditions (AI-AF dc)	2014/15 Bursary	Ongoing
University of Lancaster	In-situ Real-time Monitoring of Waterborne Low Energy Betas	2014/15 Bursary	Ongoing
University of Manchester	Optimising bioremediation end-points for the safe and effective long-term stewardship of UK radwaste impacted land	2014/15 Bursary	Ongoing
University of Manchester	Effective models for engaging and supporting SMEs in delivering technological innovation in nuclear decommissioning	2014/15 iCASE	Ongoing
University of Sheffield	Understanding actinide sorption and binding to cement materials for radioactive waste management	2014/15 iCASE & DISTINCTIVE	Ongoing

Lot A - PhDs

University	Title	Type	Status
University of Cambridge	Developing an understanding of the relationship between the durability of simplified and complex UK nuclear waste glasses	2014/15 iCASE on behalf of RWM	Ongoing
Imperial College	Options for Exotic Carbide Fuels	2014/15 iCASE & DISTINCTIVE	Ongoing
University of Birmingham	Computational modelling of PuO ₂ ageing and fuel residues	2014/15 iCASE & DISTINCTIVE	Ongoing
University of Sheffield	The dissolution of UK HLW glass: an advanced flow-through and surface analytical approach to mechanistic understanding	NGN (on behalf of RWM)	Ongoing
University of Liverpool	Enhanced nuclear waste assay	NGN	Ongoing
University of Strathclyde	Monitoring of moisture and chloride in contaminated storage structures	2014/15 DISTINCTIVE (top up)	Ongoing
University College London	A life cycle approach as a decision tool for nuclear waste management and decommissioning of existing and future plants	2014/15 DISTINCTIVE (co-fund)	Ongoing
University of Manchester	The impact of ethylene diamine tetra-acetic acid (EDTA) and other carboxylate complexants on contaminant transport in low level radioactive waste	2014/15 iCASE on behalf of LLWR	Ongoing
University of Lancaster	Enhancing the information content of near-real-time geoelectrical imaging applied to nuclear site characterisation	2013/14 Bursary	Ongoing
University of Surrey	Development of a Novel Gamma-ray Detection System for Fission Fragment Decay Data Measurement and Evaluation	2013/14 Bursary	Ongoing
University of Glasgow	Development & Industrial Testing Of Multi-Radiation Systems For Characterisation of Nuclear Facilities	2013/14 Bursary	Ongoing

Lot A - PhDs

University	Title	Type	Status
University of Birmingham	Optical detection of stainless steel container corrosion	2013/14 Bursary	Ongoing
University of Manchester	Assessment of natural attenuation and targeted in situ remediation for in situ groundwater treatment sites	2013/14 Bursary	Ongoing
University of Manchester (DCF)	Wet Oxidation of Uranium Dioxide in Sealed and Unsealed Enclosures in Radiation Fields	2013/14 Bursary	Ongoing
University of Manchester	Investigation of Anomalous Radiolytic Hydrogen Production from Water Absorbed Oxides	2013/14 iCASE Award	Ongoing
University of Sheffield	Conditioning of legacy radioactive wastes requiring additional treatment	2013/14 iCASE Award	Ongoing
Newcastle University	Investigate the kinetics & mechanism of cracking of sensitised 20/25/Nb stainless steel	2013/14 Bursary	Ongoing
University of Lancaster	Computational simulations of storage pond sludge disturbance	2013/14 iCASE & DISTINCTIVE	Ongoing
University of Strathclyde	Nano cracking of cement phases: reactivity and dissolution	2013/14 iCASE & DISTINCTIVE	Ongoing
Queens University Belfast	Irradiated sludges, a joint theoretical/experimental study	2013/14 DISTINCTIVE	Ongoing
University of Birmingham	Vision-based trajectory control of unsensored robots to increase functionality, without robot hardware modification	2012/13 Bursary	Ongoing
University of Leeds	Co-treatment of mixed radionuclides in large volumes of contaminated water by carbonate precipitation reactions.	2012/13 Bursary	Ongoing
University College London	Optimising the absorption of radionuclides by graphene oxide flakes	2012/13 Bursary	Ongoing
Cardiff University	Rapid ⁹⁰ Sr Determination by Improved Liquid Scintillation Counting	2012/13 Bursary	Ongoing
Swansea University	Mapping of corrosion sites on AGR fuel cladding in long term pond storage	2012/13 Bursary	Ongoing

Lot A - PhDs

University	Title	Type	Status
University of Sheffield	Moisture movement in cemented wasteforms: the first 500 years	2012/13 Bursary	Ongoing
University of Sheffield	The development of glass ceramics for actinide immobilisation	2012/13 Lot 4 support	Ongoing
University of Manchester	Elucidating the Mechanism of Environment-Assisted Cracking of Stainless Steel Storage Cans in Hydrochloric-Acid Containing Vapour Environment	2012/13 NDA/SL co-funded	Ongoing
University of Manchester / Arvia Technology Ltd	The electrochemical break down of radioactive organic waste.	2011/12 Bursary	Ongoing
Loughborough University	Superplasticisers Tailored for Applications in Nuclear Decommissioning and Storage (STANDS)	2011/12 Bursary	Ongoing
Lancaster University	Real Time Nanogravimetric Monitoring of Corrosion in Radioactive Environments.	2011/12 Bursary	Ongoing
University of Southampton	Assessment of High Efficiency Sorbent Materials for Application in the Remediation of Radionuclide Contaminated Groundwater:	2011/12 Bursary	Student withdrawn from studies
Imperial College	Rapid & Accurate Assessment of Radiologically Contaminated Rubble.	2011/12 Bursary	Ongoing
Aberdeen University	Investigating uranic interactions in cementitious systems	2011/12 Lot 4 Support	Ongoing
University of Manchester	Development of a Mechatronic System for Underground Sensor Deployment	2011/12 iCase Award	Ongoing
University of Birmingham	Robot assisted decommissioning in Alpha contaminated environments	2010/11 Bursary	Ongoing
University of Manchester	Experimental studies and modelling of nitric acid radiolysis	2010/11 iCase Award	Ongoing