

## DISTINCTIVE 1<sup>st</sup> Annual Meeting


Wednesday 15<sup>th</sup> – Thursday 16<sup>th</sup> April 2015

### Agenda

#### Wednesday 15<sup>th</sup> April

Cadman/Arundel Room, Millennium Gallery, Sheffield, S1 2PP

Time	Title	Presenter
10:00 – 11:00	Delegate Registration, Poster Board Set Up, Coffee/Tea/Pastries	
11:00 – 11:20	Introduction and Housekeeping	Prof. Michael Fairweather ( <i>Session Chair</i> ) University of Leeds
11:20 – 12:00	Chemicals: Creating a Compelling Nuclear Value Proposition Through Co-production	Prof. Eric McFarland University of Queensland
<b>Theme 1 - AGR, Magnox and Exotic Spent Fuels</b>		
12:00 – 12:20	Decisions, Decisions... How Research Supports the NDA's Spent Fuel Strategies	Danny Fox ( <i>Session Chair</i> ) NDA
12:20 – 12:40	Layers of Complexity; A Thin Film Approach to Spent Nuclear Fuel	James Darnbrough (PDRA) University of Bristol
12:40 – 13:40	Lunch, Coffee/Tea/Juice, Posters	
13:40 – 12:00	Corrosion of Nuclear Fuel: Radiolysis Driven Dissolution at the UO <sub>2</sub> /Water Interface	Sophie Rennie (PhD) University of Bristol
14:00 – 14:20	Uranium Measurements by Time Resolved Laser Induced Fluorescence Spectroscopy	Oliver Preedy (PDRA) Loughborough University
<b>Theme 2 – PuO<sub>2</sub> and Fuel Residues</b>		
14:20 – 14:40	PuO <sub>2</sub> Storage - Chemistry in a Can. What Does the Industry Need?	Howard Sims ( <i>Session Chair</i> ) NNL
14:40 – 15:00	CaUTi <sub>2</sub> O <sub>7</sub> Ceramics for Actinide Disposition	Shi-Kuan Sun (PDRA) University of Sheffield
15:00 – 15:20	The Development of Glass-Ceramic Wasteforms by Hot Isostatic Pressing for Actinide Immobilisation	Steph Thornber (PhD) University of Sheffield
15:20 – 15:50	Afternoon Break, Coffee/Tea/Biscuits, Posters	
15:50 – 16:10	Crystal Microbalance Investigation of the Interaction of Water with Plutonium Oxide Analogues	Dominic Laventine (PDRA) Lancaster University

16:10 – 16:30	Towards Water Adsorption on Actinide Oxide Surfaces	Bengt Tegner (PDRA) UCL
<b>Cross-Cutting Themes</b>		
16:30 – 16:50	Engagement and Impact with a Distinctive Edge	Prof. Neil Hyatt ( <i>Session Chair</i> ) University of Sheffield
16:50 – 17:10	An Overview of the U.S. Department of Energy’s Office of Environmental Management	Rodrigo Rimando U.S. Department of Energy
17:10 – 17:30	A Life Cycle Approach as a Decision Tool for Nuclear Waste Management	Andrea Paulillo (PhD) UCL
17:30 – 18:30	Break	
18:30 – 19:30	Drinks and Canapé Reception	
19:30 – 22:00	Evening Dinner	
22:00	End of Day	

**Note:**

The drinks and canapé reception and the evening dinner will be held at the Mercure St Paul’s Hotel and Spa, Sheffield:

- Drinks and Canapé Reception – Yard Lounge
- Evening Dinner – City Suite A & B

**Thursday 16<sup>th</sup> April**

Cadman/Arundel Room, Millennium Gallery, Sheffield, S1 2PP

Time		
9:00 – 9:30	Delegate Registration, Poster Board Set Up, Coffee/Tea/Pastries	
9:30 – 9:40	Introduction and Housekeeping	Prof. Michael Fairweather ( <i>Session Chair</i> ) University of Leeds
9:40 – 10:20	Overview of Immobilization R&D Programs at the Vitreous State Laboratory	Prof. Ian I. Pegg Catholic University of America
<b>Theme 3 – Legacy Ponds and Silo Wastes</b>		
10:20 – 10:40	Legacy Ponds and Silos – Key Challenges for Waste Disposal	Cristiano Padovani ( <i>Session Chair</i> ) NDA RWM
10:40 – 11:00	In-line Rheometry and Flow Characterisation in Pipe Flow Using Acoustic Methods	Hugh Rice (PDRA) University of Leeds
11:00 – 11:30	Morning Break, Coffee/Tea/Biscuits, Posters	
11:30 – 11:50	Study of Glass Degradation in a Simulated Crack	Chinnam Krishna (PDRA) Imperial College London
11:50 – 12:10	Enhanced Shear Microfiltration	Keith Schou (PhD) Loughborough University
12:10 – 12:30	Novel Ion Exchange Materials	Evin Chen (PDRA) University of Birmingham
12:30 – 13:30	Lunch, Coffee/Tea/Juice, Posters	
<b>Theme 4 – Structural Integrity</b>		
13:30 – 13:50	Structural Integrity - A Nuclear Licensed Site Perspective	John Riding ( <i>Session Chair</i> ) Sellafield Ltd.
13:50 – 14:10	In situ Monitoring and Characterisation of the Radioactive Sludge in the Legacy Ponds and Silos at Sellafield	Olusola Ayoola (PhD) University of Manchester
14:10 – 14:30	Novel Nanoparticle Cement for Crack Sealing and Water Transport	Riccardo Maddalena (PhD) University of Strathclyde
14:30 – 15:00	Afternoon Break, Coffee/Tea/Biscuits, Posters	
15:00 – 15:20	Use of Colloidal Silica Ground Barriers in Decommissioning	Matteo Pedrotti (PDRA) University of Strathclyde
15:20 – 15:40	NDA PhD Student Awards	 Nuclear Decommissioning Authority

	Closing Remarks	Rick Short NDA  Michael Fairweather University of Leeds
15:40	End of Day	