

2019 Distinguished Guest Lecture & Symposium

21st Century Chemistry: Disposing of our Nuclear Legacy

This one day Distinguished Guest Lecture & Symposium organised by the Environmental Chemistry Group of the Royal Society of Chemistry explores the intersection of geology, biology and chemistry around radionuclides. The 2019 ECG Distinguished Guest Lecture will be provided by Professor Melissa Denecke (University of Manchester).

Where: **The Royal Society of Chemistry, Burlington House, Piccadilly, London, W1J 0BA**

When: **Wednesday 27th March 2019**

Registration

EARLY BIRD before 27th February 2019: £50/£35 for ECG members (free to join as an RSC member)
STANDARD £65/£50 **STUDENT** £22.50

<http://www.rsc.org/events/detail/36807/21st-century-chemistry-disposing-of-our-nuclear-legacy>

Programme

12.00 Lunch and Coffee

13.00 Symposium begins, opening by the Chair of the Environmental Chemistry Group (Dr Tom Sizmur)



Dr Joanna Renshaw (Strathclyde University)

Dr Renshaw is a microbiologist and radiochemist with extensive experience of research into microbial interactions with radionuclides and metals, working at the interface between microbiology and analytical & radio-chemistry. She is one of the very few people in the UK who is experienced in both microbiology and the chemistry of transuranic and fission product elements. Her current research is focusing on developing novel methods for limiting radionuclide migration in the environment using bacterial biomineralisation processes.

“The Nuclear Legacy and the Environment”

Dr Joanna Renshaw will provide the introduction to the symposium and overview of the subject area.



Professor Mike Wood (University of Salford)

Professor Wood is a Chartered Radiation Protection Professional and research leader in the field of radioecology, with extensive experience of delivering research, consultancy and capacity building of relevance to the nuclear sector. He is a core member of various International Atomic Energy Agency working groups on environmental radiation protection and currently leads a 5-year research programme in the Chernobyl Exclusion Zone. Professor Wood is a recipient of the prestigious Times Higher Education (THE) Research Project of the Year award. Other areas of his research include: (i) the development and application of new technologies for ecological research; and (ii) the management of ecosystem services.

Talk title TBC

Professor Mike Wood will speak on the environmental impact of our nuclear legacy on the biosphere.

14.30 Tea/Coffee and the ECG Annual General Meeting

15.30 Symposium resumes, chaired by the DGL organiser (Dr Laura Newsome)



Dr Juliet Long (Environment Agency)

Dr Long is Head of Legacy & Waste Issues in the Radioactive Substances Regulation team at the Environment Agency. She is a well-known and authoritative lead on matters of radioactive substances regulation across UK nuclear and non-nuclear industries. Dr Long successfully promotes big-picture strategic thinking, underpinned by sound technical knowledge, focusing on outcomes and opportunities to realise improvements. She leverages impact for the Environment Agency and the UK through the ways she work with others and has delivered significant changes in the strategic direction and ways of working of Government, regulators and industry, driving improved environmental performance.

Talk title TBC

Dr Juliet Long will speak on the policy of disposing of radioactive waste.



Distinguished Guest Lecture: Professor Melissa Denecke (University of Manchester)

Professor Denecke is the Scientific Director of the Dalton Nuclear Institute. She is an international expert in the field of speciation of radioactive material on a molecular scale, with nearly 30 years' experience in X-ray spectroscopy, and in R&D related to the nuclear fuel cycle, notably deep geological disposal of radioactive waste, assessment of contamination legacies and nuclear waste streams separation. Professor Denecke was awarded the Becquerel Medal of the Royal Society of Chemistry for an outstanding contribution to research in radiochemistry. She is experienced in the design, construction, commissioning and operation of advanced X-ray instrumentation for radioactive studies at large scale accelerator facilities.

"Radiochemistry research for safe nuclear disposal"

Professor Melissa Denecke will present the Distinguished Guest Lecture.

General Discussion

17.15 Close