

NUCLEAR ENERGY CASE STUDY

Supporting the Decontamination and Effluent Treatment Centres of Expertise for Sellafield Ltd.

The background

Sellafield Ltd is responsible for safely decommissioning the UK's nuclear legacy facilities at Sellafield, as well as managing intermediate and high-level nuclear waste and fuel recycling on behalf of the Nuclear Decommissioning Authority (NDA).

The challenge

Sellafield is the only UK site for the reprocessing of spent nuclear fuel from the country's civil nuclear programme. Many legacy facilities at Sellafield are being prepared for, or are in the process of being decommissioned. This presents some of the most complex nuclear challenges in world.

£1.2m

investment to support
Sellafield Ltd Centres
of Expertise

The solution

A £1.2 million investment in a centre to support the Decontamination and Effluent Treatment Centres of Expertise has been established by The University of Manchester's Dalton Nuclear Institute with the support of Sellafield Ltd to carry out research into decontamination technologies and the treatment of nuclear waste.

Research at this centre focuses on:

- nuclear effluent and decontamination chemistry
- abatement technologies and decontamination technologies
- finding effective and sustainable approaches to decontamination and effluent treatment

The benefits

For Sellafield Ltd...

The development of new ways to decontaminate old facilities and treat the recovered effluents.

For The University of Manchester...

The expertise developed provides significant resources and specialist knowledge for further research, innovation, collaborations, consultancy and advisory services in this specialist area.

For society...

The centre offers research-based training in decontamination and effluent treatment in the form of PhD studentships. Students receive excellent training in decontamination and effluent treatment, providing highly-skilled professionals for the sector to meet the changing future skills requirement.

“ This centre is an opportunity for the University to enhance its nuclear research and to strengthen its links with a vital part of the nuclear industry. It will form part of the Dalton Nuclear Institute, which was established to foster collaboration across conventional discipline boundaries to allow interdisciplinary approaches to nuclear research challenges.

*Professor Francis Livens,
School of Chemistry*

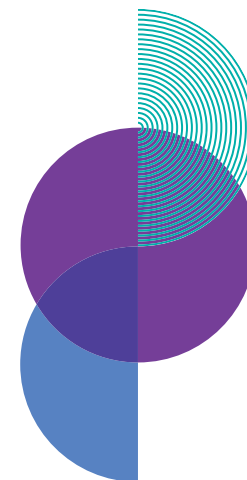
MANCHESTER
1824

The University of Manchester

The University of Manchester and Sellafield Ltd are working together on the most effective ways to safely decontaminate legacy facilities and treat nuclear effluents.



Image supplied by Sellafield Ltd.
www.sellafieldsites.com



Summary

Sellafield is the only UK site for the reprocessing of spent nuclear fuel from the country's civil nuclear programme. Many legacy facilities at the site are being prepared for, or are in the process of, being decommissioned. Decommissioning activities present some of the greatest engineering challenges in the world. That's where we come in.

With the support of Sellafield Ltd, The University of Manchester has established a £1.2 million investment for a centre to provide support for the Decontamination and Effluent Treatment Centres of Expertise. It will explore and focus research and development expertise on these challenges, complementing existing research at the University and elsewhere in academia.

Together with Sellafield Ltd, we are developing expertise and training in this highly specialised area, developing new ways to safely decommission legacy facilities and process nuclear waste.

THE WORLD WORKS BETTER WITH US