

14-18 JULY 2025, LONDON

Positively  
Nuclear  
INFLUENCING OUR FUTURE

# Technical Tours



IN ASSOCIATION WITH



We have curated three different technical tours that will take place on Thursday 17th July. These tours can be purchased at the time of registering or you can purchase at a later date through the website.

### Overview of the tours

#### **Tour 1. United Kingdom Atomic Energy Authority (UKAEA) Abingdon, Oxford**

This tour at the Culham Campus offers a rare and exciting opportunity to witness firsthand the groundbreaking work being done in fusion energy by the UK Atomic Energy Authority (UKAEA). We'll start the day with an engaging talk about the basics of fusion energy, including its potential to provide a sustainable, low-carbon energy source for the future. This will then be followed by a tour of the facility.

(See page 3 for more information)

#### **Tour 2. Harwell Science and Innovation Campus, Oxford**

This tour provides a fascinating opportunity to explore cutting-edge nuclear science and technology, as well as the legacy of the UK's pioneering nuclear research.

(See page 5 for more information)

#### **Tour 3. The Science Museum**

The Science Museum in London is a treasure trove of knowledge and innovation, offering a unique blend of history and cutting-edge technology.

(See page 7 for more information)

# United Kingdom Atomic Energy Authority (UKAEA)

Date: Thursday 17th July 2025  
Location: Abingdon, Oxford  
Transport: Coach  
Time: 07.30hrs – 17.30hrs  
Travel time: Approx. 2.5 hours each way  
Ticket Price: £75

This tour at the Culham Campus offers a rare and exciting opportunity to witness firsthand the groundbreaking work being done in fusion energy by the UK Atomic Energy Authority (UKAEA). We'll start the day with an engaging talk about the basics of fusion energy, including its potential to provide a sustainable, low-carbon energy source for the future.

The tour of the facilities will then commence:

## 1. Joint European Torus (JET):

- o The world record breaking (JET) which was designed to study fusion in conditions approaching those needed for a power plant.

## 2. MAST Upgrade:

- o The UK's flagship fusion experiment, MAST Upgrade, which is tackling one of fusion's major challenges - plasma exhaust - and will contribute to the design of future fusion machines, such as STEP.

## 3. Remote Applications in Challenging Environments (RACE):

- o The cutting edge RACE facility, where UKAEA design, operate and deliver robotics for extreme industrial environments, working towards their end goal of bringing fusion energy to the grid.

## 4. Materials Research Facility (MRF):

- o The MRF laboratory at Culham is for UK nuclear researchers – both in fusion and fission – to study the materials needed for the reactors of the future. MRF is part of the UK Government's National Nuclear User Facility and the Henry Royce Institute for advanced materials.

## Interactive Experience with Experts

These tours will be led by engineers, scientists and technicians, who are currently working on the experiments – so you are guaranteed a genuine insight into fusion research and have the opportunity to directly ask our passionate researchers anything about work undertaken at UKAEA.

Whether you're a student, professional, or simply curious about the future of energy, this tour will give you an unparalleled view of the UK's cutting-edge efforts in fusion research.

For more details, you can visit the UKAEA's website for further information on their work and research at the Culham Centre for Fusion Energy

This is a must-see tour for anyone interested in the future of clean energy!

## Lunch

Lunch is kindly provided by our hosting organisation. Please let us know if you have any dietary requirements.

## Restrictions or requirements

The tour has been designed with your safety and comfort in mind. However you will need to wear comfortable, practical clothing and closed toe shoes. Visitors need to be fully mobile and expected to be able to walk around site – so the tour is not suitable for those with mobility issues. Please bring a suitable jacket as the UK weather can be unpredictable.

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**Please discuss with the organisers if you have any access requirements, or if you have medical device fitted by emailing [register@winglobal2025.uk](mailto:register@winglobal2025.uk)**

**Identification in the form of a photo driving license or passport will be required to access site.**

## Tour timings and content may be subject to changes.

A minimum number of places are required to be sold for the tour to go ahead. If this minimum number is not reached, the tour will be cancelled and delegates will be refunded.

# Harwell Science and Innovation Campus

Date: Thursday 17th July 2025

Location: Science and Innovation Campus, Oxford

Transport: Coach

Time: 06.30hrs – 19.00hrs

Travel time: Approx. 2.5 hours each way

Ticket Price: £75

This tour provides a fascinating opportunity to explore cutting-edge nuclear science and technology, as well as the legacy of the UK's pioneering nuclear research. Here's an overview of the special features you'll see during the tour:

## 1. Nuclear Waste Services (NWS)

Learn about the critical role of NWS in managing the safe disposal and storage of radioactive waste. This includes efforts around the long-term geological disposal of waste. Take a trip down into what a future **Geological Disposal Facility** for radioactive waste might look like using our Virtual Reality headsets.

## 2. Diamond Light Source

The **Diamond Light Source** is a state-of-the-art research facility that acts like a giant microscope, generating intense beams of light using electrons. These beams allow scientists to investigate materials at a microscopic level.

**Visit a Beam Line:** You'll have the chance to visit one of the **beamlines** where research is being conducted. Scientists use the bright light produced by Diamond to study everything from **fossils to jet engines**, and even complex **viruses and vaccines**.

## 3. ISIS Neutron and Muon Source

The **ISIS Neutron and Muon Source** is a world-leading centre for research in the physical and life sciences. It operates a particle accelerator that produces intense beams of neutrons and muons. The way that these particle beams interact with materials can reveal structure and behaviour at the atomic level, offering insights that other techniques cannot.

The facility provides researchers with access to a suite of instruments, each optimised for studying different types of matter. Experiments at ISIS are helping researchers to improve our understanding of the world around us and enabling the development of new and improved materials with transformative applications in areas such as clean energy, healthcare, engineering, computing and more.

#### 4. Nuclear Restoration Services

Visit Harwell Nuclear Licenced Site and witness the **decommissioning of reactors and facilities** that were originally part of the UKAEA's research efforts at Harwell. These are part of **Nuclear Restoration Services** efforts to manage the legacy of the UK's nuclear research.

There will be the opportunity to take a look inside the **DIDO Reactor**: One of the early reactors, DIDO was the **prototype** that played a key role in developing reactor technology that many countries used for their own materials testing reactors.

This tour will give you an in-depth look at both the history and future of nuclear technology and research, along with opportunities to see firsthand some of the most advanced scientific techniques and infrastructure in the world today.

#### Lunch

Lunch is kindly provided by our hosting organisation. Please let us know if you have any dietary requirements.

#### Restrictions or requirements

The tour has been designed with your safety and comfort in mind. However you will need to wear comfortable, practical clothing and closed toe shoes. Visitors need to be fully mobile and expected to be able to walk around site – so the tour is not suitable for those with mobility issues. Please bring a suitable jacket as the UK weather can be unpredictable.

There are also a slight temperature increases in the facilities, so please wear loose comfortable clothing. Water will be provided.

Identification in the form of a photo driving license or passport will be required to access site.

#### Tour timings and content may be subject to changes.

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# The Science Museum

Date: Thursday 17th July 2025  
Location: Exhibition Road, London SW7 2DD  
Transport: Walk/Tube  
Time: 09.00hrs – 17.00hrs  
Travel time: Approx. 30 minutes each way  
Ticket Price: £20

The Science Museum in London is a treasure trove of knowledge and innovation, offering a unique blend of history and cutting-edge technology. Here's a breakdown of what you can expect from your visit:

## Tour Highlights:

- **Diverse Themes:** The museum covers a range of fascinating areas like engineering, space, technology, chemistry, and medicine. There's something for everyone, from historical inventions to future technologies.
- **Women in Science:** A wonderful focus on celebrating the contributions of women in science. You'll have the chance to learn about trailblazing women whose discoveries and innovations shaped various fields.
- **Guided Experience:** Volunteers will guide you through the exhibits in small groups, ensuring you are looked after during the tour.
- **Optional Visit to Harrods:** If you'd like a break from the museum and are in the mood for shopping, you can take a short walk to Harrods, the iconic luxury department store. It's a great way to experience a different side of London after soaking up all that science!

## Logistics:

- **No Coach Travel Required:** Since the Science Museum is easily accessible via the London Tube, there's no need to worry about transport—just hop on the tube and head straight there.
- **Flexible Itinerary:** You have the flexibility to decide how long you want to stay, whether you want to dive deep into the exhibits or explore just a section before heading off to Harrods or another part of the city.

The Science Museum is not only a great place to learn but also an inspiring environment that makes science feel both approachable and exciting. Enjoy the tour and the wonderful mix of education, exploration, and a bit of retail fun if you decide to visit Harrods!

## Lunch

Delegates will need to supply their own lunch. You can bring prepacked food which can be eaten in the picnic area or purchase food at one of the many Science Museum cafés.

## Restrictions or requirements

Whilst we will be travelling by tube train, some stations have stairs to navigate and there is a reasonable amount of walking to and from the stations and around the museum itself. Therefore all participants need to be reasonable fit and mobile to participate in this tour.

If you choose to leave the Science Museum tour early to visit Harrods or another part of the city, please be aware that you will need to make your own way back to the hotel. No guides or volunteers will be available to assist you during this time.

The tube train fare will be at delegates own cost.

## Tour timings and content may be subject to changes



## Disclaimers

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