

Realising a Fusion Power Plant
08 and 09 November 2017 at Wolfson College, University of Oxford

Day One - 08 November 2017

Registration and networking from 9.30 with a 10.00 start

Keynote Address: **The Fusion Landscape**

Professor Ian Chapman, Chief Executive Officer of the UK Atomic Energy Authority

Session One: **The Landscape for Fusion Power**

Chaired by: Professor Ian Chapman

- The Impact of Political and Public Acceptance in Nuclear Power
Tom Greatrex, Chief Executive, Nuclear Industry Association
- The Social and Economic Considerations of Realising Fusion Power Plants
Richard Kembleton, Socio-economic Studies Co-ordinator, EuroFUSION
- Opportunities in Technology Development and R&D in the Nuclear Sector
Duncan Steel, Head of Innovation, Research and Development, Sellafield Sites Ltd

Panel Session for questions and discussion

Networking LUNCH

Session Two: **Connecting Fission and Fusion Technologies**

Chaired by: Dr. Paul Howarth, Managing Director, National Nuclear Laboratory

- Opportunities for Industry in the Supply Chain and Routes to Market
Greg Willets, Vice President, Consultancy & Defence, AMEC Foster Wheeler
- Disruptive Manufacturing Technologies
Steve Lawler, Operations Director, Nuclear Advanced Manufacturing Research Centre
- Materials Challenges to be Overcome – The Overlap and Distinction between Fission and Fusion
Dr. Thomas Scott, Professor in Materials, South West Nuclear Hub and NRC Co-director, University of Bristol

Coffee and Careers Talk

- The Need for Remote Handling and Testing in the Nuclear Environment
Rob Buckingham, RACE Director, UKAEA

Panel Session for questions and discussion

Student Tech Talks Students attending will be invited to submit an abstract for review and selection to present.

A drinks reception will be held at Wolfson Hall to conclude the first day at approximately 6pm

Day Two – 09 November 2017

Networking from 9.00 with a 09.30 start

Session Three: Fusion Specific Technologies

CHAIR: Dr. Elizabeth Surrey, Technology Department Head, UKAEA

- Plasma Confinement and Resulting Constraints on Fusion Power Plant Design
Clive Challis, Tokamak Science Programme Leader, UKAEA
- Magnetic Field Generation and Superconducting Technological Challenges for Fusion
Professor Damian Hampshire, Head of the Superconductivity Research Group and Director of the European Reference Laboratory for Fusion Energy (Superconducting Technologies), Durham University
- The Challenges of Tritium
Damian Brennan, Active Operations Department Head, UKAEA

Networking Break

- Challenges of Heating, Current Drive and Fuelling
Margaret Graham, Project Manager, Heating & Current Drive Division, ITER Organization
- From Plasma to the Grid: Engineering and Technology Challenges
Dr Michael Porton, JET Chief Engineer, UKAEA

Panel Session for questions and queries discussion

Final networking over lunch which closes the conference

Optional Technical Tour

****Only 50 places available****

As part of the joint NI and UKAEA Realising a Fusion Powerplant conference, delegates will have an opportunity to not only hear about the latest, cutting edge developments in fusion science and engineering at first hand ... but see it for themselves with a visit to UKAEA's world-leading fusion research centre at Culham in South Oxfordshire.

Booking is essential and will be available on receipt of a delegate booking form.

*This is a provisional programme with further speakers to be added. Circumstances may occur that prevent as published participation and could lead to a slight speaker or topic alteration.