**N03 Radiation & Radiological Protection**

9th – 13th September 2024

Module lecturers: Gavin Smith (AGS), Kara Lynch (KL), Stuart Christie (SC)

Laboratory demonstrators: Toby Wright (TW), Adhitya Sehkar (AS) William Hillman(WH)

**Radiation users please note: Radioactive sources will be used in the laboratory**

**Timetable**

**Monday 9th September – Blackett Lecture theatre – Ground Floor, Schuster Building**

09:00 - 09:30 Welcome and Introductions

09:30 - 10:30 Lecture (AGS-1)

10:30 - 11:00 Coffee break

11:00 - 11:45 Lecture (AGS-2)

11:45 – 12:30 Lecture (AGS-3)

12:30 - 13:30 Lunch

13:30 - 14:20 Lecture – (KL-1)

14:20 – 14:50 Introduction to Laboratory (TW,AS,WH)

14:50 – 15:40 Lecture - (KL-2)

15:40 - 16:10 Coffee break

16:10 - 17:00 Lecture – (SC-1)

**Tuesday 10th September – Blackett lecture theatre – Ground Floor, Schuster Building**

09:00 - 09:50 Lecture - (SC-2)

09:50 – 10.40 Lecture – (SC-3)

 Coffee break

11:00 - 13:00 Group 1: Laboratory (with a break for lunch)

 Group 2: Tutorial; complete pre-course question sheet; Space Batteries briefing (TW)

13:00 – 14:00 Lunch

14:00 – 15:00 Lab & Tutorials (cont’d)

15:00 – 15:10 Coffee break

15:10 – 18:10 Group 1: Tutorial; complete pre-course question sheet; Space Batteries briefing (TW)

 Group 2: Laboratory

Before 6:10 pm Hand in completed pre-course answer sheet to AGS or NTEC Office

**Wednesday 11th September – Blackett lecture theatre – Ground Floor, Schuster Building**

09:00 – 10:00 Lecture (KL-3)

10:00 – 13:00 Group 2: Laboratory

 Group 1: Presentations (Groups 1a, 1b)(KL/AGS); Space batteries exercise

Mid-morning Coffee break

13:00 - 14:00 Lunch

14:00 – 15:00 External Lecture by Prof. Richard Wakeford

 *Epidemiology of Radiation-Induced Cancers*

15:00 - 18:00 Group 2: Presentations (Groups 2a, 2b)(KL/AGS); Space batteries exercise

 Group 1: Laboratory

Mid-afternoon Coffee break **Thursday 12th September – Blackett lecture theatre – Ground Floor, Schuster Building**

09:00 – 11:30 Group 1: Laboratory

 Group 2: Space batteries exercise; IAEA short film

 Coffee break as required

11:30 – 12:30 Industry Lecture by Ahmed Aslam (Jacobs)

 *Radiation Shielding*

12:30 – 13:30 Lunch

13:30 – 14:30 Industry Lecture by Dr. Mick Salt (TÜV SÜD – Nuclear Technologies Division)

 *LWR/BWR Source Terms and Radiation Protection in the Industry*

14:30 – 15:00 Coffee break

15:00 – 17:30 Group 1: Space batteries exercise; IAEA short film

 Group 2: Laboratory

**Friday 13th September – Blackett lecture theatre – Ground Floor, Schuster Building**

09:00 - 10:00 Lecture (KL-4)

10:00 - 10:45 Space batteries – discussion of results (TW)

10:45 - 11:00 Coffee break

11:00 - 12:00 Lecture (SC-4)

12:00 - 12:30 Module Review (AGS/KL/SC/AS/WH)