

N03 Radiation & Radiological Protection

11th – 15th September 2017

Module lecturers: Gavin Smith (AGS), Kieran Flanagan (KTF), John Roberts (JWR),
Laboratory: Toby Wright (TW), Demonstrators: Mike Giles, Nick Sosnin

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

Timetable

Monday 11th September

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 – Interaction of radiation with matter (KTF-1)
14:20 – 14:50	Introduction to Laboratory (TW)
14:50 – 15:40	Lecture - Interaction of uncharged radiation with matter (KTF-2)
15:40 - 16:10	Coffee break
16:10 - 17:00	Lecture – (JWR-1)

Tuesday 12th September

09:00 - 09:50	Lecture - Detectors and instrumentation (KTF-3) Coffee break
10:15 – 13:15	Group 1: Laboratory Group 2: Tutorial; complete pre-course question sheet; Space Batteries briefing (TW)
13:15 – 14:00	Lunch
14:00 – 14:50	Lecture (JWR-2)
14:50 – 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 13th September

09:00 – 10:00	Lecture (KTF-4)
10:00 – 13:00	Group 1: Laboratory Group 2: Presentations (Groups 2a, 2b)(AGS/JWR); Space batteries exercise
Mid-morning	Coffee break
13:00 - 14:00	Lunch
14:00 – 15:00	Lecture by Mike Renouf (Sellafield Ltd) <i>Radiological protection in the nuclear industry</i>
15:00 - 18:00	Group 1: Presentations (Groups 1a, 1b)(AGS/JWR); Space batteries exercise Group 2: Laboratory
Mid-afternoon	Coffee break

Thursday 14th September**(DL student residential day)**

- 09:00 – 11:30 Group 1: Laboratory
 Group 2: Space batteries exercise; IAEA short film
 Coffee break as required
- 11:30 – 12:30 Lecture by Zahid Riaz (Office of Nuclear Regulation)
 Radiation Shielding
- 12:30 – 13:30 Lunch
- 13:30 – 14:30 Lecture by Prof. Richard Wakeford:
 Scientific evidence for risks to health from radiation
- 14:30 – 15:00 Coffee break
- 15:00 – 17:30 Group 1: Space batteries exercise; IAEA short film
 Group 2: Laboratory

Friday 15th September

- 09:00 - 10:00 Lecture (JWR-3)
- 10:00 - 10:45 Space batteries – discussion of results (TW)
- 10:45 - 11:00 Coffee break
- 11:00 - 12:00 Lecture (JWR-4)
- 12:00 - 12:30 Module Review (AGS/JWR/KTF/TW)

Case study allocation

Group 1a Case Study Number

Marcus Cobb	1
Matthew Dawson	2
Juliet Fullwood	3
Alexander Hartley	4
Andrew Kiang	5

Group 1b

Xinyao Li	1
Matthew Lockwood	2
Benjamin Mundow	3
Jiovanni Nunez	4
Daniel O'Brien	5

Group 2a

Timothy Pickin	1
Sulaimaan Rangel	2
Faith Rukundo	3
Ashley Smith	4
Reuben Soja	5

Group 2b

George Swallowell	1
Daniel Turner	2
Abubakar Yahaya	3
Nizam Yasin	4