



Essential radiochemistry for society

AUDIENCE

The course is addressed to Bachelor students in scientific areas, who are interested in realising the involvement of Nuclear - and Radio - chemistry in everyday life and understanding the advantages it could introduce.

PREREQUISITE

Scientific background knowledge deriving from high school and higher education, in particular on chemistry, physics and math.

ACTIVITIES

During the course participants are involved in webinars by experts and professionals and live discussions.

COURSE SYLLABUS

Week 1 — Radiochemistry for the environment

- Module 1 — Natural Radioactivity
- Module 2 — Radioactivity from anthropogenic activities
- Module 3 — Environmental remediation

Week 2 — Radiochemistry for health

- Module 1 — Nuclear medicine
- Module 2 — Sterilization by ionizing radiation

Week 3 — Radiochemistry for industry

- Module 1 — Tracer technology
- Module 2 — Radiation processing

Week 4 — Radiochemistry for nuclear energy

- Module 1 — Reprocessing of spent fuel
- Module 2 — Confinement and Waste Management
- Module 3 — Decommissioning of nuclear/industrial plants

Week 5 — Radiochemistry for society

- Module 1 — Cultural heritage
- Module 2 — Nuclear forensics and proliferation

Workload 5-6 hours/week

Enroll on the course:
<https://www.pok.polimi.it>

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Open Knowledge



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