



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 **live webinars** with experts and professionals from prestigious institutions. The webinar's recordings are available at this [Youtube link](#).

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 facilities
- 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>



This project has received funding from the Euratom research and training programme 2019–2020 under grant agreement No. 945301 and from the Norwegian Research Council under grant agreement N° 313053.