

Education and Training Initiatives in the Radioecology Alliance

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E&T WP leader in STAR



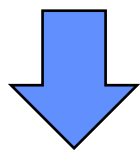
- The OECD/Nuclear Energy Agency's report: "Nuclear Education and Training: Cause for Concern?" (2000) demonstrated that many nations were training too few scientists to meet the needs of their current and future nuclear industries.
- Needs for post-graduates with skills in radiochemistry, radioecology including environmental modelling, and radiation protection including radiobiology and dosimetry.
- EURAC, ENEN, ENEN-II suggested developing new MSc degree programmes :
 - European MSc Radiation Protection
 - European MSc Analytical Radiochemistry
 - European MSc Radioecology

Overarching aims

- 1) To strengthen and secure a sustainable integrated European training and education platform in radioecology that will attract top-level graduates,
- 2) To maintain a relevant workforce that is in a position to meet future economic and societal needs within the nuclear sciences,
- 3) To enhance the mobility of teachers and STAR scientists as a means of securing competence building.

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- MSc in Radioecology (Bologna Model) – syllabus revision and new course modules (in consultation with stakeholders)
- E&T Platform – Website with links to other nuclear E&T activities
- Professional Development Courses – combined ECTS and vocational credits

Common Modules

Radiation and
radio-analytical
techniques

Project
management and
research methods

Industry and
waste
management

Research project

Specialist Radiological Protection Modules

Dosimetry and
risk assessment

Risk management
and emergency
planning

Instrumentation,
measurements and
security

Specialist Radiochemistry Modules

Radio-analytical
techniques II

Advanced
techniques

Biokinetics and
bioassays

Specialist Radioecology Modules

Behaviour of
radionuclides in
the Environment

Assessing risk to
man and the
environment

Risk management
and emergency
planning

Common modules
for all three masters
3x10 ECTS

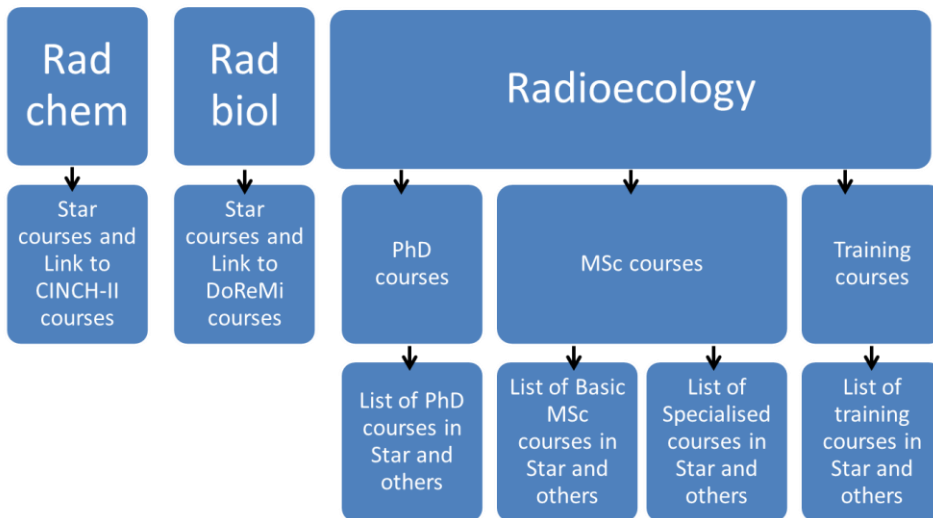
Specialist modules
Radioecology
3x10 ECTS

Research project
60 ECTS

EU Master in
Radioecology
established in
2008 at UMB

E&T Platform

Education and Training



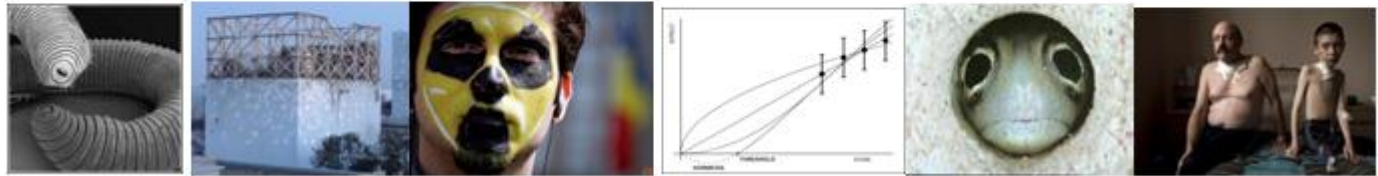
● For information on STAR E&T Platform:

● www.star-radioecology.org

Assessing Risk to Humans and the Environment

9-20th June 2014, UMB, Norway

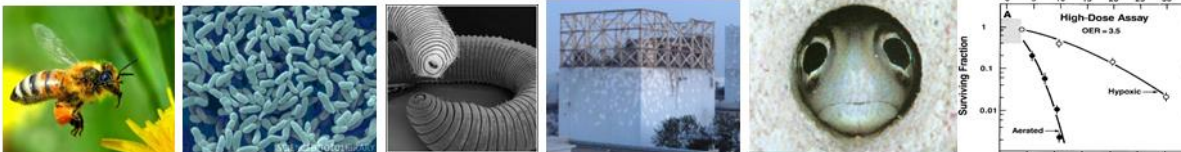
Organised by the Centre for Environmental Radioactivity (CERAD), Norwegian University of Life Sciences (UMB) and Stockholm University, supported by DoReMi and STAR



Environmental Radiobiology

24-28th June 2013, UMB, Norway

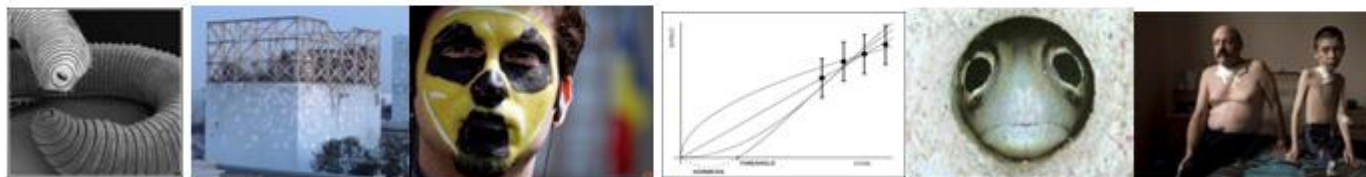
5 ECTS MSc/PhD Course organised by the Norwegian University of Life Sciences (UMB) and Stockholm University, supported by DoReMi and STAR



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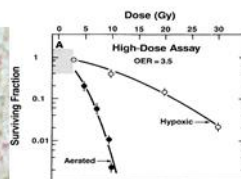


- Both courses already give ECTS under Bologna model
- Popular with professionals: 8 of 28 students in Environmental Radiobiology were professional
- Exploring combination with ECVET – Assessment tool and modelling part of the 2014 course

Environmental Radiobiology

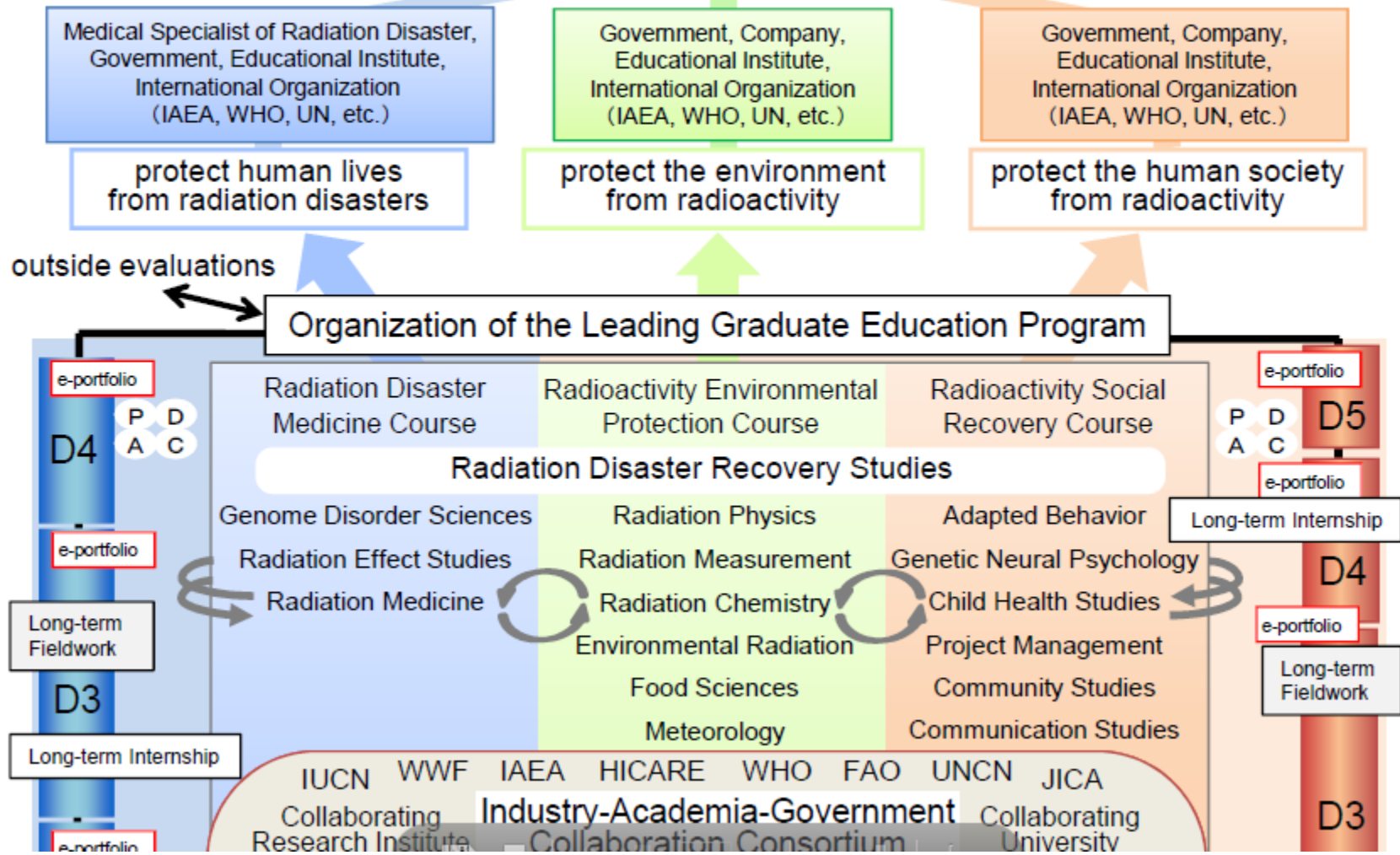
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Hiroshima University International PhD programme

Development of Phoenix Leader for Renaissance from Radiation Disaster (Hiroshima Initiative)



Consultation and Outreach

STAR

(Contract Number: Fission-2010-3.5.1-269672)

DELIVERABLE (D-N°6.1)

**Education and training in Radioecology:
Supply and Demand Stakeholder Workshops**

Author(s): Oughton, D.H., Barnett, C., Bradshaw, C., Real, A., Skipperud, L, Salbu, B.

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(Contract Number: Fission-2010-3.5.1-269672)

DELIVERABLE (D-N°6.2)

The Radioecology Education and Training Platform

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- For information on STAR E&T Platform:
 - www.star-radioecology.org

Thank you!

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