



Train the Trainers

Radiochemistry and

Medical Applications

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CHERNE Workshop 2019

New ERASMUS+ activity granted in 2018

Kick-off meeting in Hasselt October 2018

- Nuclear Reactors & Waste Management
- Environmental Radioactivity
- Radiochemistry & Medical Applications

- Selection of students by home institution
- Pre-pretraining materials on fundamental issues and dosimetry were provided from last activity on the moodle platform of NTUA
- Access test provided for all training activities
- Preparational Modules on Radiochemistry
- Group Task: Sustainability of Radionuclide Production (by reactors, by cyclotrons)

Organization of

- accomodation Mannheim Youth Hostel in vicinity of our campus at the banks of Rhine River
- class rooms on campus
- lab exercise
- equipping computers for simulation tasks with SRIM and FLUKA
- preparation of tasks and additional material
- arrangement of excursion
- arrangement of social dinner

Introduction of participants

Presentation of the results of the SDG task and discussion

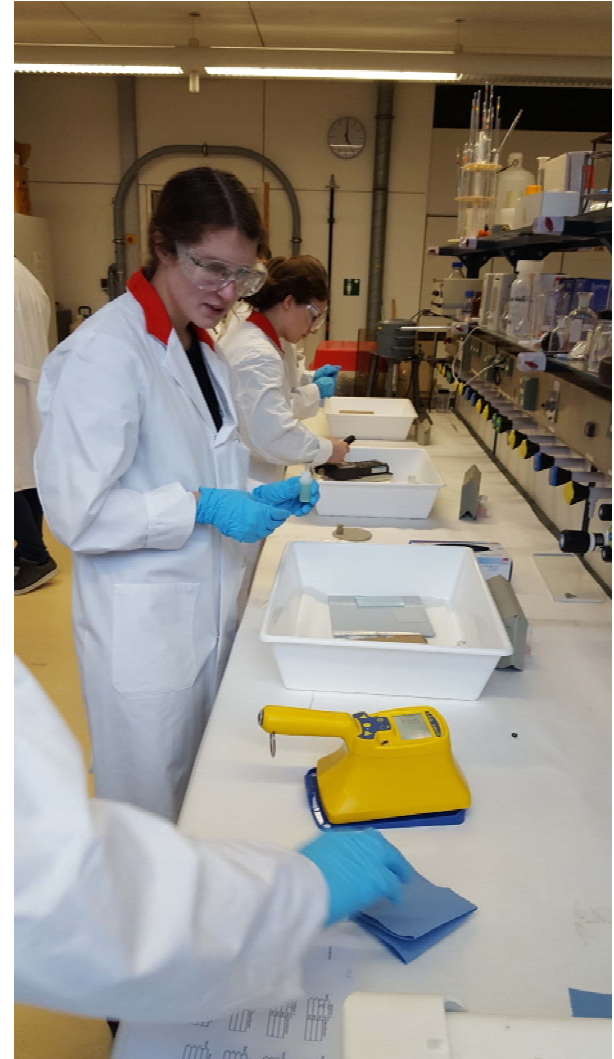
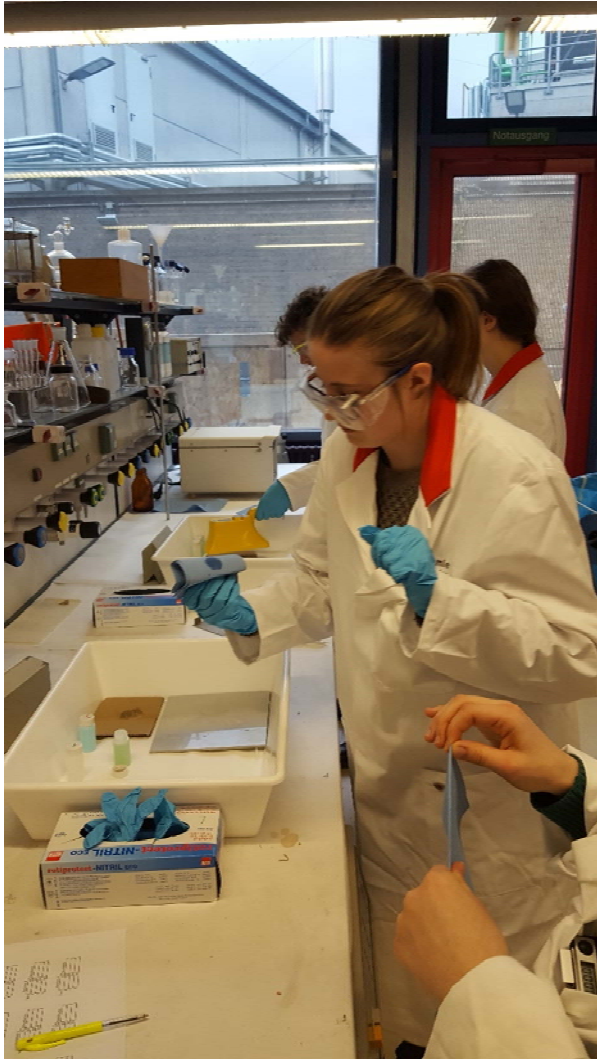
Introduction of program and tasks:

Role Play Game: Cancer Patient was delivered the wrong dose of the wrong radiopharmaceutical by a nurse.

Roles: Patient, Physician, Medical Physics Expert, Clinical Director, (nurse)



Day 1: Decontamination Exercise



FLUKA Exercise on radionuclide production by $^{89}\text{Y}(p,n)^{89}\text{Zr}$ reaction with data from literature using a template

MC approach was known to all students

Some specific information on FLUKA and the user interface FLAIR supplied

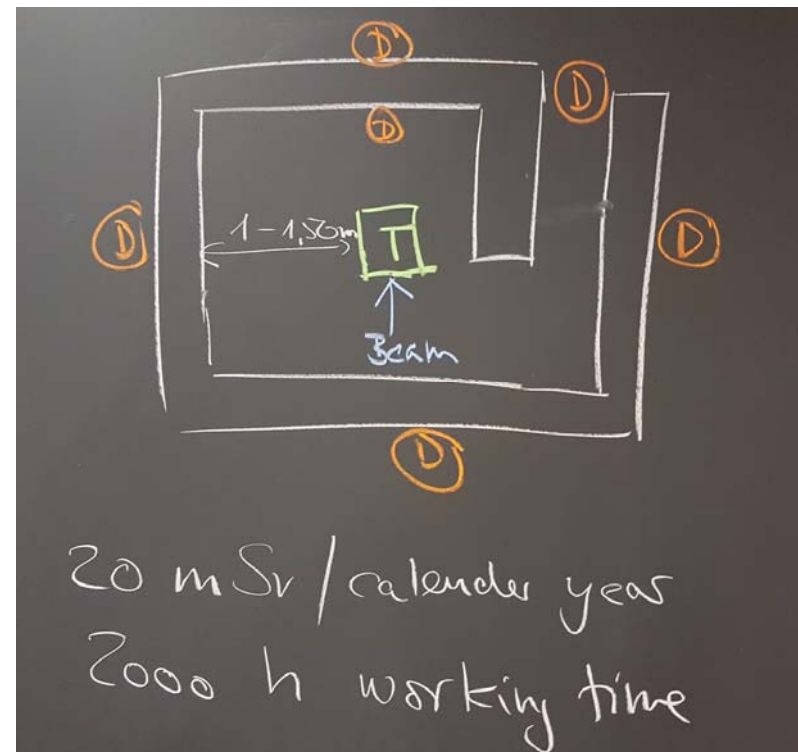
Idea:
students have to find out themselves and instruct each other

Time assigned for RPG by groups

Continuing FLUKA task Targetry

New Task: Construct shielding
around target

RPG ongoing



Visit at cyclotron site (Zyklotron AG, Karlsruhe)





Day 4 Social Dinner

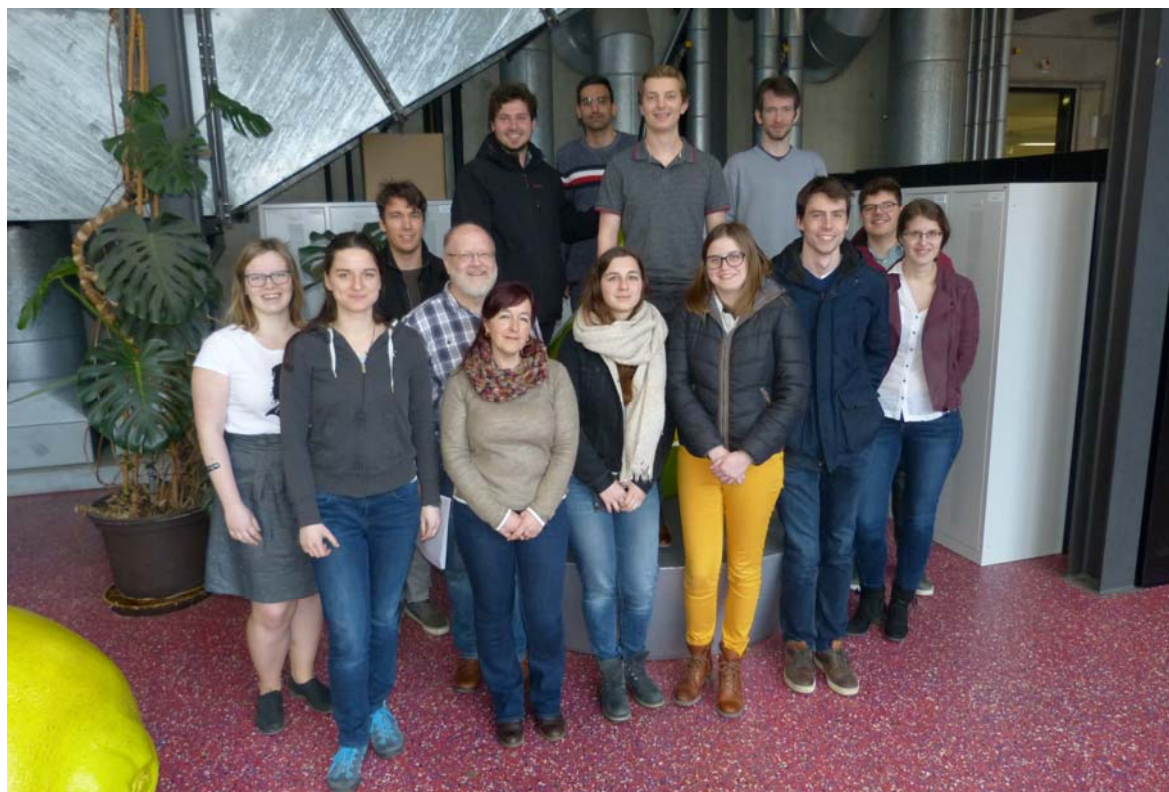


Role Play Game enacted:



Multiple Choice Test on Radiochemistry

Round Table discussion and quality questionnaire



Invite students for another feedback after 3 months

Start discussion about the program for next year

- Successfully organized a one week course
- Unfortunately, 10 participants, only
- Fundamental structure is good
- Improvements can be established

- Preparation for next year's course has started involving the future trainers.



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