

Environmental Radioactivity

Diploma in Experimental Physics

Included as “*Libre configuración*” year 2009/2010 2nd Semester
6 ECTS

EXPERIMENTAL WORK at the LABORATORY

Departamento de Física Moderna. Facultad de Ciencias.

Lecturers: Saturnino Marcos and Ángel Mañanes (angel.mananes@unican.es)



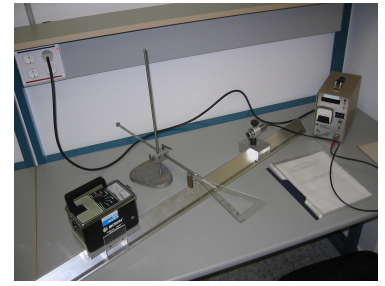
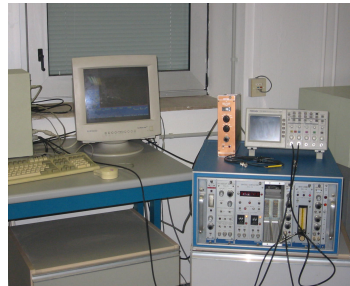
I. Shielded Ge-(HP) detector for gamma and X-ray



II. Scintillator detector NaI(Tl) for gamma radiation



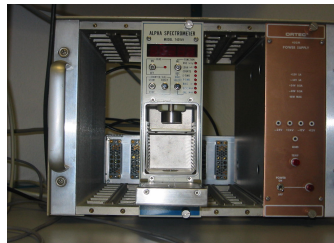
III. Neutron activation analysis. Radioactive decay.
Am-Be neutron source



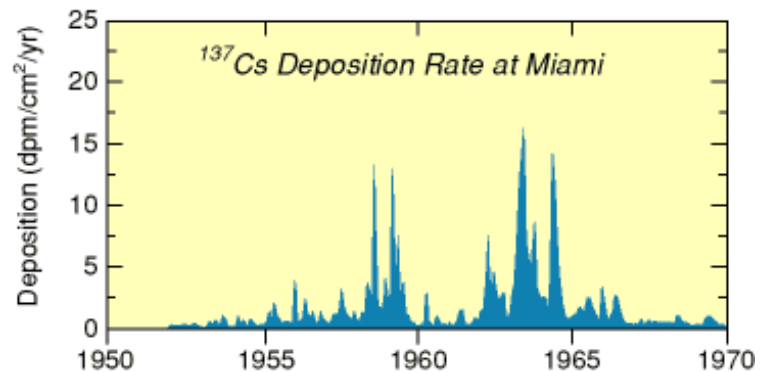
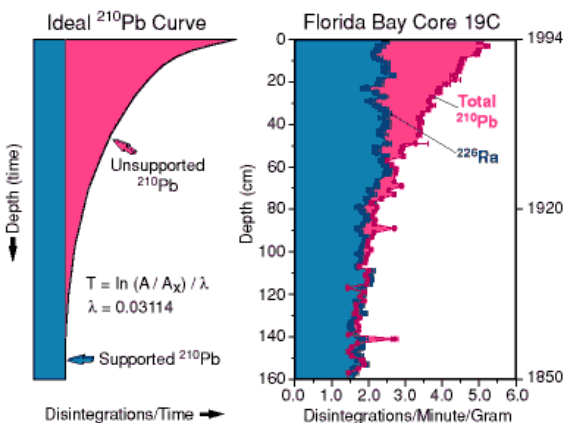
IV. Gamma and X-ray dosimetry



V. Alpha radiation detector (Semiconductor detector in a vacuum chamber)



I. Shielded Ge-(HP) detector



A weekly session at the Laboratory of Radioactivity (3-4 hours). Second Semester Adjustable Timetable. Faculty of Sciences. Five experiments. Two sessions per experiment: 1st session: Data capture, 2nd session: Numerical treatment of the data and discussion (10 sessions total)
Evaluation: Deliver 5 reports with the results + Continuous assessment without examination
Small groups (5 students / teacher). Individual realization of the experiments