

**IAEA Regional Training Course on
Advanced Radioactive Tracer Applications
in Marine Pollution Studies
RAS/7/020**

ENEA, La Spezia, 05 - 09 March 2012

Programme

Monday	
9.00 - 9.30	Registration
9.30 - 10.00	Welcome and opening
10.00 - 10.30	Programme, General Information, Presentation of the participants and Lecturers
10.30 - 11.00	Coffee Break
11.00 - 12.30	Lecture 1: Radionuclides in the environment and general aspects (R. Delfanti/ J.M. Abril)
12 h 30 - 13.30	Lunch
13.30 - 15.00	Lecture 2 : Sampling strategy and sampling techniques (R. Delfanti/C. Papucci)
15.00 - 15.30	Coffee Break
15.30 - 17.00	Lecture 3 : Overview on the radioanalytical procedures (L.Liong, A. Schirone)
17.00 - 18.00	Lecture 4: Analytical Quality Control (L.Liong, F. Conte)
Tuesday	
9.00 - 10.30	Group1 - Practical session 1: Radiochemical separation of ²¹⁰ Pb (L.Liong, F. Conte, R. Delfanti) Group 2 - Practical Session 2: Core sectioning (M. Barsanti, A. Schirone, C. Papucci)
10.30 - 11.00	Coffee Break
11.00 - 12.30	Group1 - Practical session 1: Radiochemical separation of ²¹⁰ Pb (L.Liong, F. Conte, R. Delfanti) Group 2 - Practical Session 2: Core sectioning (M. Barsanti, A. Schirone, C. Papucci)
12.30 - 13.30	Lunch
13.30 - 15.30	Group 1 - Practical Session 2: Core sectioning (M. Barsanti, A. Schirone, C. Papucci)

	Group2 - Practical session 1: Radiochemical separation of ^{210}Pb (L.Liong, F. Conte, R. Delfanti)
15.30 – 16.00	Coffee Break
16.00 – 17.30	Group 1 - Practical Session 2: Core sectioning (M. Barsanti, A. Schirone, C. Papucci) Group2 - Practical session 1: Radiochemical separation of ^{210}Pb (L.Liong, F. Conte, R. Delfanti)
Wednesday	
9.00 – 10.30	Lecture 5 : Classical dating models using ^{210}Pb (J.M.Abril)
10.30 – 11.00	Coffee break
11.00 – 12.30	Lecture 6 : Dating models using Man-Made radionuclides (^{137}Cs , ^{239}Pu , ^{240}Pu , ^{241}Am ...) (G. Buffoni, R.Delfanti, J.M.Abril)
12.30 – 13.30	Lunch
13.30 – 15.30	Practical Session 3: Application of the dating models – Programmes /softwares and exercises (All Lecturers)
15.30 – 16.00	Coffee break
16.00 – 17.30	Practical Session 3 (Cont.): Application of the dating models and exercises (All Lecturers)
Thursday	
9.00 – 10.30	Lecture 7: ^{137}Cs dating models of lacustrine and marine sediments (J.M.Abril and G. Buffoni)
10.30 – 11.00	Coffee break
11.00 – 12.30	Lecture 8: Case studies on Marine Pollution (examples from Italia, Spain, Morocco and relevant work from bibliography) (R.Delfanti, J.M.Abril)
12.30 – 13.30	Lunch
13.30 – 15.30	Practical Session 3: Application of the dating models – Programmes /softwares and exercises (All Lecturers)
15.30 – 16.00	Coffee break
16.00 – 17.30	Practical Session 3 (Cont.): Application of the dating models – Programmes /softwares and exercises (All Lecturers)
Friday	
9.00 – 10.30	Practical Session 4 : Evaluation of the results from the practical sessions - Assessment of the knowledge of the participants – Open discussion (All lecturers)
10.30 – 11.00	Coffee break
11.00 – 11.30	Practical Session 4 (Cont.): Evaluation of the results from the practical sessions 1 and 2 - Assessment of the knowledges of the participants.
11.30 – 12.00	Presentation of the certificates
12.00 – 12.30	Closing Ceremony
12.30 – 13.30	Lunch

15.00 – Transfer to PISA by bus