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Location of the Conference:

Grimaldi Forum
10 Avenue Princesse Grace
MC 98001 Monaco

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Working Language: English

Resolutions: No resolutions may be submitted for consideration on any subject; no votes will be taken.

TIMETABLE

Time/Place	Camille Blanc	Auric	Apollinaire	Bosio	IAEA-MEL
Sunday, 24 October 2004					
16:00 – 18:00	Registration				
Monday, 25 October 2004					
08:00	Registration				
10:00	Opening of the Conference				
10:40	Plenary Session I				
12:30	Lunch				
14:00	Parallel Session 1.1 The Mediterranean	Parallel Session 2.1 Climate change	Parallel Session 3.1 Radioecology		
15:30	Coffee				
16:00	Parallel Session 1.2 The Mediterranean	Parallel Session 2.2 Climate change	Parallel Session 3.2 Radioecology		
18:00	Reception				
Tuesday, 26 October 2004					
09:00	Plenary Session II				
11:00	Coffee				
11:30	ATOMS-Med* Workshop 1.1	Parallel Session 4.1 Modelling	Parallel Session 5 Stable isotopes in water		
12:30	Lunch				
14:00	ATOMS-Med Workshop 1.2	Parallel Session 4.2 Modelling	Parallel Session 6 Atmosphere		
16:00	Coffee				
16:30	ATOMS-Med Workshop 1.3				
16:30-18.00	Poster Session I				
	*ATOMS-Med (Atomic Techniques for Observing Marine Systems-Eastern Med.)				

Time/Place	Camille Blanc	Auric	Apollinaire	Bosio	IAEA-MEL
Wednesday, 27 October 2004					
9:00	Plenary Session III			ATOMS-Med	El Niño CRP Meeting
11:00	Coffee			Workshop 1.4	
11:30	Parallel Session 7.1	Parallel Session 8.1	Parallel Session 9	ATOMS-Med	
	Hydrology	Mass spectrometry	<i>In situ</i> techniques	Workshop 1.5	
12:30	Lunch				
14:00	Parallel Session 7.2	Parallel Session 8.2	Parallel Session 10.1	ATOMS-Med	
	Hydrology	Mass spectrometry	Biomonitors	Workshop 1.6	
16:00	Coffee				
16:30-18.00	Parallel Session 7.3	Parallel Session 8.3	Parallel Session 10.2	ATOMS-Med	
	Hydrology	Mass spectrometry	Biomonitors	Workshop 1.7	
Thursday, 28 October 2004					
09:00	Plenary Session IV				El Niño CRP Meeting
11:00	Coffee				
11:30	Parallel Session 11.1 GSI*	Parallel Session 12 Stable isotopes in org. matter	Parallel Session 14.1 Underground labs*		
12:30	Lunch				
14:00	Parallel Session 11.2 GSI	Parallel Session 13 Pacific and Southern Oceans	Parallel Session 14.2 Underground labs		
16:00	Coffee				
16:30	Parallel Session 11.3 GSI				
16.30-18.00	Poster Session II				
17.00-18.00	CGSI Meeting				
	*GSI = <u>G</u> roundwater- <u>S</u> eawater <u>I</u> nteractions <u>W</u> orkshop		*CELLAR (<u>C</u> ollaboration of <u>E</u> uropean <u>L</u> ow-level <u>U</u> nderground <u>L</u> aboratories) Workshop		

Time/Place	Camille Blanc	Auric	Apollinaire	Bosio	IAEA-MEL
Friday, 29 October 2004					
09:00	Plenary Session V				El Niño
10:30	Coffee				Meeting
11:00	Parallel Session 15 Radionuclide studies of sediments	Parallel Session 16 Data management	CELLAR Meeting		
12:30	Lunch				
14:00	Plenary Session VI Contaminants in sediments		CELLAR Meeting		
16:00	Closing of the Conference				
16:15	Farewell Cocktail				

SUNDAY, 24 OCTOBER 2004

16:00-18:00 Registration

MONDAY, 25 OCTOBER 2004

08:00 Registration

10:00-10:40 Opening Addresses:

HSH Prince Albert

W. Burkart, Deputy Director General,
Head Department of Nuclear Sciences
and Applications, IAEA

**Representatives of
Sponsoring Organizations**

R.F.C. Mantoura, Director, IAEA-MEL

10:40-12:30 **PLENARY SESSION I:
(Salle Camille Blanc)**

Chairpersons: **M. Betti, Germany**
 R.F.C. Mantoura, IAEA

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
1	W. Kutschera	Austria	Reading the Isotope Language
2	N.J.P. Owens	UK	The Use of ¹⁵ N in Unravelling the Marine Nitrogen Cycle
3	R. Dunbar D. Fleitmann D. Mucciarone	USA	Interannual to Decadal Climate Variability in the Pacific and Indian Oceans Revealed by Isotopic Studies of Corals

12:30–14:00 **Lunch Break**

MONDAY, 25 OCTOBER 2004

14:00-15:30 **PARALLEL SESSION 1.1:
THE MEDITERRANEAN
(Salle Camille Blanc)**

Chairpersons: **M. Boisson, Monaco
J.A. Sanchez-Cabeza, IAEA**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
4	J-C. Miquel B. Gasser A. Rodriguez y Baena S.W. Fowler J.K. Cochran	IAEA USA	Carbon Export Assessed by Sediment Traps and $^{234}\text{Th}/^{238}\text{U}$ Disequilibrium during the Spring Summer Transition in the Open NW Mediterranean
5	R. Delfanti C. Tsabaris C. Papucci H. Kaberi R. Lorenzelli, <i>et al.</i>	Italy Greece Italy Greece Italy	Re-distribution of ^{137}Cs Chernobyl Signal in the Aegean Sea
6	H. Florou C. Kehagia A. Savidou G. Travidou	Greece	Natural Radionuclides in Metallic and Thermometallic Springs in the Ikaria Island - Eastern Aegean Sea - Greece
7	W. Plastino M. Laubenstein G. Etiope P. Favali	Italy	The Benthic Boundary Layer: Radioactivity and Oceanographic Data from the GEOSTAR-2 Observatory
8	M. Giani V. Zangrando D. Berto	Italy	$^{13}\text{C}/^{12}\text{C}$ Isotope Ratios in the Organic Matter forming the Mucilaginous Aggregates in the Northern Adriatic Sea
9	R. Boudjenoun J-L. Teyssié O. Cotret J. Paganelli S.W. Fowler M. Warnau	Algeria IAEA	Bioaccumulation and Retention of ^{210}Pb in the Mediterranean Mussel <i>Mytilus galloprovincialis</i>

15.30-16.00 **Coffee Break**

MONDAY, 25 OCTOBER 2004

16:00-18:00 **PARALLEL SESSION 1.2:
THE MEDITERRANEAN
(Salle Camille Blanc)**

Chairpersons: **R. Delfanti, Italy; P. Masque, Spain**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
10	S-H. Lee R.F.C. Mantoura P.P. Povinec A. Mahjoub M. Benmansour, <i>et al.</i> Morocco	IAEA	Contamination Studies in the South Mediterranean Sea – IAEA Regional Technical Co-operation Project RAF/7/004
11	M. Benmansour A. Laissaoui M. Ibn Majah S. Mulsow P.P. Povinec, <i>et al.</i>	Morocco IAEA	Distribution of Anthropogenic Radionuclides in the Moroccan Marine Environment
12	A. Noureddine M. Menacer R. Boudjenoun A. Hammadi M. Benkrid	Algeria	Concentration of ¹³⁷ Cs in Surface and Deep Water along the Algerian Coast
13	A. Ugur G. Yener S. Topçuoğlu S. Aközcan U. Sunlu	Turkey	²¹⁰ Po in Mussels (<i>Mytilus Galloprovincialis</i> L.1758) and Sediments of the Aegean Sea, Turkish Coast, Measured by Alpha Spectroscopy
14	I. Osvath M. Samiei A. Chupov V. Egorov G. Goktepe, <i>et al.</i>	IAEA Ukraine Turkey	Black Sea Radioactivity Assessment and Tracer Studies: A Regional Technical Co-operation
15	N. Güngör E. Güngör B.G. Göktepe G. Köksal	Turkey	²¹⁰ Po Concentration in Fish, Algae, Mussel and Beach Sand Samples in Turkish Coast of the Black Sea
			End of the Session Discussion

18:00 **Reception**

MONDAY, 25 OCTOBER 2004

14:00-15:30 **PARALLEL SESSION 2.1:**
CLIMATE CHANGE
(Salle Auric)

Chairpersons: **R. Dunbar, USA; E.R.M. Druffel, USA**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
16	E.R.M. Druffel	USA	Decadal and Centennial Variability of Climate Change in the Pacific Ocean
17	R. Dunbar A. Ravelo A. Leventer E. Domack	USA	Holocene Climate Variability along the Antarctic Peninsula and Linkage with a Terrestrial Paleoclimate Record from South America
18	J.W. Beck T. Correge G. Burr	USA New Caledonia USA	High-Resolution Bomb Pulse Radiocarbon Records from Corals, Spanning the Central and Southeastern Pacific Ocean
19	D. Fink Q. Hua U. Zoppi	Australia	Cosmogenic Isotopes in Rocks and Tree-rings - Aspects of Nuclear Geophysics in Climate Change Studies
20	G. Skilbeck M. Gagan I. Goodwin M. Watson D. Fink	Australia	Century-to-Decade Scale Modulation of ENSO Recorded by Postglacial Laminated Sediments from the Peru Continental Margin
21	S. Al-Rousan J. Pätzold S. Al-Moghrabi G. Wefer	Jordan Germany Jordan Germany	Invasion of Anthropogenic CO ₂ Recorded in Stable Isotopes of Planktonic <i>Foraminifera</i> from the Northern Gulf of Aqaba, the Red Sea

15:30-16:00 **Coffee Break**

MONDAY, 25 OCTOBER 2004

16:00-18:00 **PARALLEL SESSION 2.2:**
CLIMATE CHANGE
(Salle Auric)

Chairpersons: **J.W. Beck, USA; D. Fink, Australia**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
22	A. Henderson-Sellers K. McGuffie	Australia	Amazonian Climatic Change: Water Isotope Detection of Deforestation and Greenhouse Impacts
23	S. Reynaud N. Hemming A. Juillet-Leclerc P. Gattuso	Monaco USA France	Effect of pCO ₂ and Temperature on the Boron Isotopic Composition of the Zooxanthellate Coral <i>Acropora</i> sp.
24	M. Uchida Y. Shibata K. Ohkushi N. Ahagon M. Hoshiba	Japan	Global Climate Change Linkage with Episodic Methane Release Event in the Western North Pacific in the Last Glacial Period
25	A.B. Arkaah M. Kaminski N. Ogle L. Apaalse D. Atta-Petters, <i>et al.</i>	Ghana UK Ireland Ghana	Predictability of Paleogene Climate and Primary Productivity of the Eastern Central Atlantic
27	I. Forizs Z. Kern B. Nagy Zs. Szántó L. Palcsu	Hungary	Isotopic Composition of Perennial Cave Ice as a Proxy for Palaeoclimate: the Focul Viu Ice Cave, Bihor Mts., Romania
			End of the Session Discussion

18:00 **Reception**

MONDAY, 25 OCTOBER 2004

14:00-15:30 **PARALLEL SESSION 3.1:
RADIOECOLOGY
(Salle Apollinaire)**

Chairpersons: **P.J. Kershaw, UK; V. Barci, France**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
28	K. Sihra A. Bexon J. Aldridge	UK	Comparison of MARINA II with CSERAM for estimating Concentrations of Radionuclides in UK Waters
29	A. Gouzy D. Boust O. Connan G. Billon M. Agarande, <i>et al.</i>	France	Post Depositional Reactivity of the Plutonium in Marine Sediments: New Evidence from Solid Partitioning
30	T. Gaefvert I. Færevik A.L. Rudjord	Norway	Assessment of the Discharge of NORM to the North Sea from Produced Water by the Norwegian Oil and Gas Industry
31	G. Lujanienė K. Jokšas R.B. Šilobritienė R. Morkūnienė	Lithuania	Physical and Chemical Characteristics of ¹³⁷ Cs in the Baltic Sea
32	R. Saxén	Finland	Long-term Behaviour of ¹³⁷ Cs in Finnish Lakes
33	O. Zhukova M. Germenchuk N. Shiryaeva V. Drozdovich	Belarus	Transfer of Chernobyl Radionuclides in the Aquatic Systems

15:30-16:00 Coffee Break

MONDAY, 25 OCTOBER 2004

16:00-18:00 **PARALLEL SESSION 3.2:**
RADIOECOLOGY
(Salle Apollinaire)

Chairpersons: **D. Boust, France; H. Pettersson, Sweden**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
34	O. Voitsekhovych Y. Soroka T. Lavrova	Ukraine	Uranium Mining and Ore Processing in Ukraine and its Radioecological Effects on to the Dnieper River Water Ecosystem and Human Health
35	G. Jia G. Torri P. Innocenzi A. Di Lullo	Italy	Concentration and Characteristics of Uranium Isotopes in Water Collected in Central Italy and Balkan Regions
36	H. Thorring J.E. Brown M. Iosjpe A. Hosseini	Norway	The "EPIC" Exposure Assessment Methodology - a Case Study for Arctic Marine Systems
37	K. Beaugelin-Seiller B. Fiévet J. Garnier-Laplace	France	Theoretical Dose Reconstruction along Life-Cycle for Plaices (Pleuronectes platessa) living in the Northern Cotentin Waters after 1966
38	M. Schertz H. Michel G. Barci-Funel V. Barci	France	Transuranic Elements and Fission Products Analyses on Soils from an Alpine Wetland, Boreon (France)
39	M. Furukawa	Japan	Data Synthesis for Terrestrial Gamma Radiation Level Measured on the Japanese Islands and its Adjacent Ocean Floor
			End of the Session Discussion

18:00 **Reception**

TUESDAY, 26 OCTOBER 2004

9:00-11:00 **PLENARY SESSION II**
(Salle Camille Blanc)

Chairpersons: **N.J.P. Owens, UK; W. Kutschera, Austria**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
40	D. Allemand C. Ferrier-Pagès P. Furla S. Puverel S. Reynaud, <i>et al.</i>	Monaco France Monaco	Use of Coral Skeleton as Environmental Archives: The Biological Basis
41	A.J.T. Jull G.S. Burr J.W. Beck G. Hodgins D. Biddulph, <i>et al.</i>	USA	Applications of Accelerator Mass Spectrometry to Environmental and Paleoclimate Studies
42	E.R.M. Druffel	USA	Radiocarbon in Corals: A Tracer of Past Changes in the Carbon Cycle and Climate
43	M. Betti L. Aldave de las Heras, G. Tamborini	Germany	From Bulk to Particle Analysis – A New Challenge for Radioecology

11:00-11:30 Coffee Break

TUESDAY, 26 OCTOBER 2004

11:30-12:30 ATOMS-Med WORKSHOP 1.1 (Salle Camille Blanc)

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
	R.F.C. Mantoura	IAEA	ATOMS-Med Initiative
	W. Roether	Germany	The Eastern Mediterranean Deep Waters in 2001, 10 Years into the Big Transient

12:30-14:00 Lunch Break

14:00-16:00 ATOMS-Med WORKSHOP 1.2 (Salle Camille Blanc)

	A. Lascaratos	Greece	Atmospheric and Oceanic Interannual Variability in the Mediterranean
	Y. Halim	Egypt	The Nile and the Levantine Sea
	R. Delfanti	Italy	Anthropogenic Radionuclides in the Eastern Mediterranean: Input, Inventories and their Use as Tracers of Marine Processes
	F. Thingstad	Norway	Radiolabelled Phosphorous as a Tool to Study Transfer of P Between Compartments in the Pelagic Microbial Food Web

16:00-16:30 Coffee Break

16:30-18:00 ATOMS-Med WORKSHOP 1.3 (Salle Camille Blanc)

	M. Krom	UK	Why is the Eastern Mediterranean P Limited and Other Important Insights Obtained from a Total Nutrient Budget
	B. Herut	Israel	Atmospheric Aerosols as a Nutritional Source to the East Mediterranean; Uncertainties in the Current State of Knowledge
182	F. Abousamra	UNEP	Input of Pollutants from Land Based Sources into the Mediterranean Sea

16:30-18:00 POSTER SESSION I

TUESDAY, 26 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 4.1:
MODELLING
(Salle Auric)**

Chairpersons **P. Vojtyla, CERN; H.M. Fernandez, Brazil**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
44	M.J. Karcher I.H. Harms F. Kauker	Germany	Tracer Studies with Arctic and Subarctic Coupled Ice-ocean Models: Dispersion of Radionuclides and Oxygen Isotopes
45	T Arsouze C. Jeandel F. Lacan N. Ayoub J-C. Dutay	France USA France	Modelling the Oceanic Nd Isotopic Composition on a Global Scale
46	M. Nakano	Japan	Simulation of the Advection-Diffusion-Scavenging Processes for ¹³⁷ Cs and ^{239,240} Pu in Japan Sea
48	K. Yoshimura T. Oki	Japan	Development of an Atmosphere-Land Surface Coupled Isotope Circulation Model

12:30-14:00 **Lunch Break**

TUESDAY, 26 OCTOBER 2004

14:00-16:00 **PARALLEL SESSION 4.2:**
MODELLING
(Salle Auric)

Chairpersons: **C. Jeandel, France; M. Karcher, Germany**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
49	M. Iosjpe	Norway	Environmental Modelling: Modified Approach for Compartmental Models
50	L. Davulienė N. Tarasiuk N. Špirkauskaitė	Lithuania	Validation of Hydrodynamic Model of the Lithuanian Part of the Baltic Sea for ¹³⁷ Cs Modelling
51	M.R. Franklin P.C.C. Rosman H.M. Fernandes	Brazil	Modelling of the Transport of ³ H and ¹³⁷ Cs Released with the Liquid Effluents of Angra dos Reis Nuclear Power Plants into Ilha Grande Bay – Rio de Janeiro – Brazil
52	Y. Tateda A. Wada	Japan	3D Modeling Technique of Time-series ¹³⁷ Cs Concentration in Coastal Organisms in Case of Short Term Introduction
53	J. Vives i Batlle R.C. Wilson P. McDonald T.G. Parker	UK	A Biokinetic Model for the Uptake and Release of Radioiodine by the Edible Periwinkle <i>Littorina littorea</i>
54	J. Noble U.S. Kumar U.P. Kulkarni S.V. Navada I. Gupta, <i>et al.</i>	India	Performance Evaluation of the Recently Commissioned Worli Submarine Outfall, Mumbai, India Using Radiotracer Studies and Mathematical Modelling
			End of the Session Discussion

16:00-16:30 **Coffee Break**

16:30-18:00 **POSTER SESSION I**

TUESDAY, 26 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 5:
STABLE ISOTOPES IN WATER
(Salle Apollinaire)**

Chairpersons **E. Boaretto, Israel, L. Coppola, Sweden**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
55	A. Henderson-Sellers P. Airey D. Stone K. McGuffie A. Williams	Australia	Stable Water Isotopes: Revolutionary Tools for Global Water Cycle Disturbance Diagnosis
56	J.M. Landwehr T.B. Coplen	USA	Line-Conditioned Excess: A New Method for Characterizing Stable Hydrogen and Oxygen Isotope Ratios in Hydrologic Systems
57	B. Mayer L. Rock L. Hogberg L. Jackson M. Varner, <i>et al.</i>	Canada	Delineating Sources of Sulfate and Nitrate in Rivers and Streams by Combining Hydrological, Chemical and Isotopic Techniques
58	M. Ogrinc K. Szramek E. Williams T. Kanduc J. McIntosh, <i>et al.</i>	Slovenia USA Slovenia USA	Carbon Cycling and Mineral Weathering in the Sava River Catchment in Slovenia

12:30-14:00 **Lunch Break**

TUESDAY, 26 OCTOBER 2004

14:00-16:00 **PARALLEL SESSION 6:
THE ATMOSPHERE
(Salle Apollinaire)**

Chairpersons: **K. Komura, Japan; H. Florou, Greece**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
59	E. Holm M. Leisvika P. Roos	Sweden	^{210}Pb , ^{210}Po and ^7Be in Oceanic Air from the North Pole to the Antarctic
60	J. Paatero J. Hatakka C. Leck V. Aaltonen Y. Viisanen	Finland Sweden Finland	Observations of Airborne ^{210}Pb and ^7Be during the Arctic Ocean 2001 Expedition
61	K. Ichiyangi K. Yoshimura M.D. Yamanaka	Japan	FORSGC Network for Isotopes in Precipitation over the Monsoon Asia
62	M.K. Pham J. Gastaud S.H. Lee P.P. Povinec	IAEA	Deposition Rates of Radionuclides in Monaco in 2002 and 2003
63	P.M. Carreira P. Valério D. Nunes M.F. Araújo	Portugal	Temporal and Seasonal Variations of Stable Isotopes ($\delta^2\text{H}$ and $\delta^{18}\text{O}$) and Tritium in Precipitation over Portugal
64	L. Palcsu E. Svingor Z. Szántó I. Futó M. Molnár, <i>et al.</i>	Hungary	Explanation of Temporal Changes of Isotopic Composition in Precipitation in Hungary by Meteorological Data and Satellite Images
65	S. Grabowska J.W. Mietelski	Poland	Cosmogenic ^{22}Na and ^7Be in Ground Level Air in Kraków (Poland)
			End of the Session Discussion

16:00-16:30 **Coffee Break**

16:30-18:00 **POSTER SESSION I**

WEDNESDAY, 27 OCTOBER 2004

9:00-11:00 **PLENARY SESSION III**
(Salle Camille Blanc)

Chairpersons: **P. Schlosser, USA; J.J. Gibson, Canada**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
66	P. Aggarwal	IAEA	Advances in Isotope Hydrology at the IAEA
67	F.W. Schwartz	USA	Opportunities and Challenges in Research on Ground-Water Modelling
68	C. Kendall S.R. Silva B.E. Bemis D.H. Doctor S.D. Wankel	USA	Tracing Sources of Organic Matter and Nitrate in the San Francisco Bay-Delta-River Ecosystem using Isotopic Techniques
69	R.L. Michel	USA	Use of Tritium Time Series to Estimate Physical Parameters of Hydrologic Systems

11:00-11:30 **Coffee Break**

9:00-11:00 **ATOMS-Med WORKSHOP 1.4**
(Salle Bosio)
S. Migeon

Sediment Dispersal and Deposition in the Nile Deep-sea fan. Impact of Gravity Flows and Mass-wasting Events.

11:00-11:30 **Coffee Break**

11:30-12:30 **ATOMS-Med WORKSHOP 1.5**
(Salle Bosio)

Round Table Discussion

12.30-14.00 **Lunch Break**

14:00-16:00 **ATOMS-Med WORKSHOP 1.6**
(SalleBosio)

Drafting of Project Documents

16:00-16:30 **Coffee Break**

16:30-18:00 **ATOMS-Med WORKSHOP 1.7**
(Salle Bosio)

Drafting of Project Documents

16:30-18:00 **POSTER SESSION I**

WEDNESDAY, 27 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 7.1:**
HYDROLOGY
(Salle Camille Blanc)

Chairpersons: **C. Kendall, USA; F.W. Schwartz, USA**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
70	J.R. Gat	Israel	Scale-dependent Isotope Tracing of the Continental Water Balance under Wet and Dry Climate Conditions
71	J.J. Gibson K. Bennett	Canada	Isotope Tracing of Throughflow, Residency and Runoff to Lakes for Regional Assessment of Critical Acid Loadings to Aquatic Ecosystems
72	I. Carmi M. Stiller J. Kronfeld Y. Yechieli M. Bar-Matthews	Israel	¹⁴ C _{DIC} Gradient in the Unsaturated Region of the Judea Group Aquifer, Israel
73	A.M. Kreuzer W. Aeschbach-Hertig C. Zongyu	Germany P. R. China	Environmental Tracers in Groundwater of the North China Plain

12:30 **Lunch Break**

WEDNESDAY, 27 OCTOBER 2004**14:00-16:00** **PARALLEL SESSION 7.2:
HYDROLOGY
(Salle Camille Blanc)****Chairpersons:** **R.L. Michel, USA; I. Carmi, Israel**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
74	V.I. Ferronsky V.A. Polyakov V.S. Brezgunov Yu.A. Karpychev P.N. Kuprin, <i>et al.</i>	Russian Federation	Isotopic Studies of Environmental Changes in the Caspian and Aral Sea Basins
75	N. Horvatinčić B. Obelić J. Barešić R. Čalić S. Babinka, <i>et al.</i>	Croatia Germany	A Geochemical and Isotope Hydrological Study of Eutrophication Processes in the Plitvice Lakes, Croatia
76	E.H. Fisher S.F. Crowley S. Barnes J.D. Marshall	UK	The Relationship between the Isotopic Composition of Lake and Inflow Waters and the Limnology of a Small Carbonate Lake in NW England
77	M. Molnár L. Palcsu É. Svingor Z. Szántó I. Futó, <i>et al.</i>	Hungary	Determination of Old and Fresh Water Mixing in a Hungarian Karstic Aquifer using Isotope Methods
78	J. Deák	Hungary	Estimation of Groundwater Recharge and Vulnerability by Tritium Data in Hungary
79	N.K. Kortelainen J.A. Karhu H. Lallukka K. Lindqvist	Finland	Evolution of Groundwater in a Carbonate-Bearing Glacigenic Aquifer, SW Finland: Hydrochemical and Isotopic Evidence
80	F. Gal C.Y.J. Renac D. Tisserand	France	Tracing Water-Rock Interactions: Application to CO ₂ -Rich and Thermal Mineral Waters of the Forez Graben, Eastern French Massif Central
81	K. Knoeller C. Vogt S. Weise	Germany	Are Oxygen Isotopes of Sulfate a Useful Tool for the Quantification of Sulfate Reduction in a BTEX Contaminated Aquifer?

16:00-16:30 **Coffee Break**

WEDNESDAY, 27 OCTOBER 2004

16:30-18:00 **PARALLEL SESSION 7.3:**
HYDROLOGY
(Salle Camille Blanc)

Chairpersons: **V.I. Ferronsky, Russian Federation**
 N. Horvatinčić, Croatia

<i>No of Paper</i> <i>IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member</i> <i>State/Organization</i>	<i>Title of Paper</i>
82	A.N.N. Muzuka	Tanzania	Stable Isotope Compositions of Sedimentary Organic Carbon and Nitrogen Recovered from East African Crater Lake
83	M. Schubert H-C. Treutler H. Weiss J. Dehnert	Germany	²²² Rn as Natural Tracer for the Estimation of Groundwater Infiltration at the Sediment/Water Interface of Rivers
84	D.C. Lauria R.R. de Almeida	Brazil	Radium Isotope Ratio as Indicator of Natural Contamination Input in Groundwaters
85	A.I.M. Aly M.A. Hamed S.G. Abd El- Samie E.A. Eweida	Egypt	Environmental Isotopes and Hydrochemistry Approach to evaluate the Source of Recharge and Pollution Load in Manzala and Bardawil Lakes, Egypt
86	I. Flett H. Hejnis K. Harle G. Skilbeck	Australia	Myall Lakes – Isotope Dating of Short Term Environmental Changes in a Coastal Lake System - Anthropogenic Pressures causing Blue-Green Algae Outbreaks in a National Park

End of the Session Discussion

WEDNESDAY, 27 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 8.1:
MASS SPECTROMETRY
(Salle Auric)**

Chairperson: **G. Korschinek, Germany
P. Roos, Denmark**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
87	A. Priller M. Auer R. Golser W. Kutschera P. Steier, <i>et al.</i>	Austria	VERA, a Versatile Facility for Accelerator Mass Spectrometry
88	D.L. Biddulph G.S. Burr	USA	An 84-Year Record of ¹²⁹ I from Coral Skeletons in the South Pacific
89	S. Bürger R. Buda H. Geckeis G. Huber J.V. Kratz, <i>et al.</i>	Germany	Isotope Selective Ultratrace Analysis of Plutonium for Environmental Studies by Laser Mass Spectrometry
90	E. Wyse S.H. Lee A. Rodriguez y Baena S. Azemard J.C. Miquel, <i>et al.</i>	IAEA	Measurement of Radioisotopes in Marine Samples by Sector Field ICP-MS

12:30-14:00 Lunch Break

WEDNESDAY, 27 OCTOBER 2004**14:00-16:00** **PARALLEL SESSION 8.2:
MASS SPECTROMETRY
(Salle Auric)****Chairpersons:** **D.L. Biddulph, USA; Y. Ikeuchi, Japan**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
91	P. Roos	Denmark	Pu-isotope Measurements at Femtogram Levels using Sector Field ICP-MS
92	A. Gerdes S. Weyer G. Brey	Germany	Environmental Monitoring of Long-lived Radionuclides using Multi-Collector ICPMS
93	W.J.F. Standring P. Børretzen D.H. Oughton L.K. Fifield	Norway Australia	Uranium and Plutonium Atom Ratios and Concentration Factors in Reservoir 11 and Asanov Swamp, Mayak PA
94	M.H. Lee Y.J. Park W.H. Kim	Republic of Korea	Distribution of the Pu and Am Isotopes in the BOMARC Missile Site Soil
95	F. Pointurier J.P. Fontaine S. Baude R. Chiappini	France	Detection of Reprocessing Activities through Stable Isotope Measurements of Atmospheric Xenon by Mass Spectrometry
96	C.R. Quetel E. Ponzevera I. Tresl E. Vassileva	Belgium	Matrix Effects during Magnetic Sector-field Inductively Coupled Plasma Mass Spectrometry Uranium Isotope Ratio Measurements in Complex Environmental/Biological Samples
97	M.L. Godoy J.M. Godoy L.A. Roldão	Brazil	Uranium and Thorium Isotopic Determination in Environmental Samples by ID-FI-ICP-MS
98	O. Shouakar-Stash R.J. Drimmie S.K. Frape	Canada	Determination of Bromine Stable Isotopes in Inorganic Samples using Continuous-Flow Isotope Ratio Mass Spectrometry

16:00-16:30 **Coffee Break**

WEDNESDAY, 27 OCTOBER 2004

16:30-18:00 **PARALLEL SESSION 8.3:
MASS SPECTROMETRY
(Salle Auric)**

Chairperson: **E. Holm, Sweden**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
99	T. Sawyer	UK	Improving High-Resolution Analysis of Corals using LA-ICP-MS: Matrix Limitations of the 266 nm Wavelength Unit
100	I.I. Petrov C.R. Quéstel P.D.P. Taylor	Belgium	Critical Evaluation of an Isotope Dilution ICP-MS method for the Measurement of the Fe Content in Seawater
181	J.P. Snell C.R. Quéstel	Belgium	A New ²⁰² Hg Isotopically Enriched methylmercury Spike Material with SI-traceable Reference Values for Isotope Dilution Measurements in Biological and Environmental Samples End of the Session Discussion

WEDNESDAY, 27 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 9:
IN SITU TECHNIQUES
(Salle Apollinaire)**

Chairpersons: **C. Tsabaris, Greece
J.W. Mietelski, Poland**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
101	A. Tyler R. Wakefield P. McDonald M. Rainey P. Atkin	UK	Remote Sensing of Intertidal Sediment Bound Radionuclide Storage, Remobilization and Deposition: Case Study in the Ribble Estuary
102	J. Toole M. Liddiard J. Cassidy	UK	The Use of Sodium Iodide Detectors to locate Buried Radioactive Particles in the Seabed off Dounreay Nuclear Facility
103	Z. Bayramov	Azerbaijan	Development of a Device for Marine Gamma Survey of Seabed on the Azerbaijani Section of the Caspian Sea
104	W. Plastino	Italy	Radon Groundwater Monitoring in the Gran Sasso Aquifer

12:30-14:00 **Lunch Break**

WEDNESDAY, 27 OCTOBER 2004**14:00-16:00** **PARALLEL SESSION 10.1:
BIOMONITORS
(Salle Apollinaire)****Chairpersons:** **S. Charmasson, France; S.W. Fowler, IAEA**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
105	E. Ilus V-P. Vartti T.K. Ikäheimonen J. Mattila	Finland	Recent Observations of ⁹⁹ Tc in Finnish Coastal Waters
106	J. Carroll K. Rissanen T. Haug	Norway Finland Norway	Bioaccumulation of Radiocaesium in Arctic Seals
107	R.A. Jeffree S.J. Markich J.R. Twining S. Gale	IAEA Australia	Tolerance of Fish to Contaminated Habitats: Underlying Mechanisms Probed with Isotopic Tracers
109	A.L. Rudjord A.K. Kolstad H.E. Heldal	Norway	Concentration Factors for ⁹⁹ Tc in Lobsters (<i>Hommarus gammarus</i>) from Norwegian Coastal Areas
110	C. Rouleau Y. Clermont S. St-Pierre	Canada	Uptake of Waterborne ¹⁰⁹ Cd(II) in the Scallop (<i>Chlamys islandica</i>) Studied by <i>in vivo</i> Gamma Counting and Quantitative Whole-body Autoradiography
111	L. Hedouin M. Métian O. Cotret J-L. Teyssié J. Paganelli, <i>et al.</i>	IAEA	Delineation of Heavy Metal Uptake Pathways (Seawater, Food and Sediment) in Tropical Marine Bivalves using Metal Radiotracers
112	R.A. Jeffree R. Szymczak G.A. Peck	IAEA Australia	²¹⁰ Po and ²¹⁰ Pb Concentration Factors for Zooplankton and Faecal Pellets in the Oligotrophic South-West Pacific
113	T. Ciesielski M. Waszczuk- Jankowska P. Fodor Zs. Bertenyi R. Bojanowski, et al.	Poland Hungary Poland	Distribution and Interelement Correlation between Chemical Elements and Radionuclides in the Marine Mammals from the Southern Baltic Sea

16:00-16:30 **Coffee Break**

WEDNESDAY, 27 OCTOBER 2004

16:30-18:00 **PARALLEL SESSION 10.2:
BIOMONITORS
(Salle Apollinaire)**

Chairperson: **J. Carroll, Norway; R. Jeffree, IAEA**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
114	M. Metian L. Hédouin E. Giron E. Buschiazzo V. Borne, <i>et al.</i>	IAEA	Bioaccumulation of Selected Heavy Metals in the Brown Alga <i>Lobophora variegata</i> : A Radiotracer Study
115	M.S. Al-Masri S. Mamish M.A. Haleem	Syria	Distribution Coefficients (K_d s) of Naturally Occurring Radionuclides in River Sediments
116	B. Pornthepkasemsan K. Srisuksawad	Thailand	Water to Swamp Morning Glory Transfer of ^{226}Ra
117	H.K. Rifaat Babiker A.K. Sam O.I. Osman D.A. Sirelkhatim J. La Rosa	Sudan IAEA	Anthropogenic Radionuclides in Fish, Shellfish, Algae and Sediments from the Sudanese Red Sea Coastal Environment
118	R.A. El-Motaium C. Morel	Egypt France	Phosphorus Availability to Ryegrass from Urban Sewage Sludges assessed by Isotopic Labeling and Dilution Technique: Effect of Irradiation
			End of the Session Discussion

THURSDAY, 28 OCTOBER 2004

9:00-11:00 **PLENARY SESSION IV**
(Salle Camille Blanc)

Chairpersons: **A.J.T. Jull, USA; W.E. Kieser, Canada**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
119	W. Burnett	USA	Measurement and Potential Importance of Submarine Groundwater Discharge
120	R.M. Key	USA	Bomb-Radiocarbon: Distribution, Inventory, and Change
121	P. Schlosser B. Newton A. Spieler	USA	Distribution of Tritium (³ H) in the Southern Ocean: Implications for Formation Rates, Circulation Patterns and Mean Residences of Major Water Masses
122	M. Aoyama M. Fukusawa K. Hirose R.F.C. Mantoura P.P. Povinec, <i>et al.</i>	Japan IAEA	Southern Hemisphere Ocean Tracer Study (SHOTS)

11:00-11:30 Coffee Break

THURSDAY, 28 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 11.1:
GROUNDWATER-SEAWATER
INTERACTIONS – GSI WORKSHOP
(Salle Camille Blanc)**

Chairpersons: **W. Burnett, USA
E. Kontar, Russian Federation**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
123	P.K. Aggarwal K.M. Kulkarni P.P. Povinec L-F. Han M. Groening	IAEA	Environmental Isotope Investigation of Submarine Groundwater Discharge in Sicily, Italy
124	A. Aureli A.M.G. Privitera	Italy	Salt Water Intrusion in the Aquifers in the South Oriental Coastal Zones of Sicily
125	A. Aureli G. Barrocu G. Cusimano D. Fidelibus G.M. Zuppi, et al.	Italy	Hydrochemistry and Isotopic Characteristics of the Submarine Springs of South-Eastern Sicily
126	I. Levy-Palomo J.F. Comanducci P.P. Povinec	IAEA	Investigation of Submarine Groundwater Discharge in Sicilian and Brazilian Coastal Waters using an Underwater Gamma-ray Spectrometer

12:30-14:00 **Lunch Break**

THURSDAY, 28 OCTOBER 2004

14:00-16:00 **PARALLEL SESSION 11.2:
GROUNDWATER-SEAWATER
INTERACTIONS – GSI WORKSHOP
(Salle Camille Blanc)**

Chairpersons: **H. Bokuniewicz, USA; G.M. Zuppi, Italy**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
127	E. Garcia-Solsona P. Masqué J. Rapaglia H. Bokuniewicz L. Zaggia, <i>et al.</i>	Spain USA USA Italy	Radium Isotopic Tracers of Submarine Groundwater Discharge into the Venice Lagoon
128	Y. Weinstein B. Herut G. Lessa B. Burnett P. Swarzenski, <i>et al.</i>	Israel USA	Submarine Groundwater Discharge (SGD) along the Mediterranean Coast of Israel
129	W.C. Burnett R. Peterson H. Dulaiova	USA	Groundwater Inputs via ²²² Rn and Ra Isotopes off Ubatuba, Brazil
130	J. de Oliveira M. Charette M. Allen V.V. Furtado	Brazil USA Brazil	Coastal Water Exchange Rates at the Southeastern Brazilian Margin, using Natural Ra Isotopes as Tracers
131	E. Kontar A. Salokhiddinov N. Takhirov	Russian Federation Uzbekistan	Assessment of Groundwater-Seawater Interactions in the Aral Sea Basin and Pollution Control
132	P.M. Carreira P.A. Galego Fernandes D. Nunes M.F. Araújo M.O. Silva	Portugal	Contribution of Environmental Isotopes in the Identification of Groundwater Salinization Mechanisms in the Lower Tagus - Lower Sado Basin – Portugal
133	G. Kim D.-W. Hwang Y.-W. Lee K.S. Park	Republic of Korea	Biogeochemical Consequences of Submarine Groundwater Discharge in the Coastal Ocean
134	J.W. Ryu G. Kim	Republic of Korea	Submarine Groundwater Discharge into the Yellow Sea

16:00-16:30 **Coffee Break**

THURSDAY, 28 OCTOBER 2004

16:30-17:00 **PARALLEL SESSION 11.3:
GROUNDWATER-SEAWATER
INTERACTIONS – GSI WORKSHOP
(Salle Camile Blanc)**

Chairperson: J. de Oliveria, Brazil

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
135	P. Ollivier C. Claude O. Radakovitch B. Hamelin	France	Radium Constraints on Groundwaters and Coastal Waters Dynamics in the Rhone Delta, France
136	R.M. Qureshi A. Mashiatullah C.B. Gaye M.A. Tasneem T. Javed	Pakistan Austria Pakistan	Isotope Hydrochemical Investigation of Saline Intrusion in Coastal Aquifer of Karachi-Pakistan

16:30-18:00 **POSTER SESSION II**

17:00-18:00 **Meeting of the Commission for
Groundwater-Seawater Interactions
(Salle Camille Blanc)**

Chairperson: E. Kontar, Russian Federation

THURSDAY, 28 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 12:
STABLE ISOTOPES IN ORGANIC MATTER
(Salle Auric)**

Chairpersons: **S. de Mora, IAEA;
A. Henderson-Sellers, Australia**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
137	A. Bode P. Carrera C. Porteiro	Spain	Stable Isotopes Reveal Weak Dependence of Trophic Position of Planktivorous Fishes from Individual Size: A Consequence of Omnivorism and Mobility
138	R. Bonaccorsi	Italy	Using Stable Isotopes (C, N) to constrain Organics in Sub-Basement Fossil Soils (Ocean Drilling Program-Leg 197; N. Pacific): a Possible Example of Isolated Atmosphere-Land-Ocean Systems
139	L. Coppola Ö. Gustafsson P. Andersson M. Uchida T.I. Eglinton	Sweden USA	Hydrodynamic Sorting of Washington Margin Sediments using SPLITT Fractionation
140	K. Omoto	Japan	Isotope Fractionations and Radiocarbon Ages of Beach Rock Samples Collected from the Nansei Islands, Southwest of Japan

12:30-14:00 **Lunch Break**

THURSDAY, 28 OCTOBER 2004

14:00-16:00 **PARALLEL SESSION 13:
PACIFIC AND SOUTHERN OCEANS
(Salle Auric)**

Chairpersons: **K. Hirose, Japan; N. Yoshida, Japan**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
141	M. Aoyama K. Hirose K. Komura K. Nemoto	Japan	Temporal Variation of ¹³⁷ Cs Distribution and Inventory along 165 deg. E in the North Pacific since 1960s to the Present
142	K. Hirose M. Aoyama C.S. Kim C.K. Kim P.P. Povinec	Japan Republic of Korea IAEA	Plutonium Isotopes in Seawater of the Western North Pacific: Effect of Close-in Fallout
143	Y. Ikeuchi	Japan	Temporal Variations and Behavior of ⁹⁰ Sr and ¹³⁷ Cs in Precipitation (Rain), River and Sea Water in Japan
144	G.H. Hong C.S. Chung S.H. Lee H.M. Lee S.H. Kim, <i>et al.</i>	Republic of Korea IAEA Republic of Korea	Artificial Radionuclides in the Yellow Sea
145	S-H. Lee P.P. Povinec J. Gastaud B. Oregioni L. Coppola, <i>et al.</i>	IAEA France	Radionuclide Tracing of Water Masses in the Southern Ocean (Indian Sector) - ANTARES IV cruise
146	A.M. Rodriguez y Baena J.C. Miquel P. Masqué J. La Rosa E. Isla, <i>et al.</i>	IAEA Spain IAEA Spain	Dynamics of a Late Spring Phytoplankton Bloom in the Eastern Weddell Sea: Short-Timescale Changes in ²³⁴ Th/ ²³⁸ U Disequilibrium
148	P.P. Povinec A. Aarkrog K.O. Buesseler R. Delfanti K. Hirose, <i>et al.</i>	IAEA Denmark USA Italy Japan	Worldwide Marine Radioactivity Studies (WOMARS)
16:00-16:30	Coffee Break		
16:30-18:00	POSTER SESSION II		

THURSDAY, 28 OCTOBER 2004

11:30-12:30 **PARALLEL SESSION 14.1:
UNDERGROUND LABORATORIES –
CELLAR WORKSHOP
(Salle Apollinaire)**

Chairpersons: **M. Hult, Belgium; G. Heusser, Germany**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
149	P. Vojtyla P.P. Povinec	CERN IAEA	Modelling Background Characteristics of HPGe Detectors Placed Inside Anticompton Shields
150	J-F. Comanducci I. Levy-Palomo P.P. Povinec F. Garaud	IAEA	Underground Anticoincidence – Coincidence Gamma-Ray Spectrometers for Analysis of Radionuclides in the Environment
151	W. Plastino L. Kaihola	Italy Finland	Radiocarbon Measurements by Liquid Scintillation Spectrometry at the Gran Sasso National Laboratory
152	Y. Hamajima K. Komura	Japan	Depth Profile of Environmental Neutron Flux in Water

12:30-14:00 **Lunch Break**

THURSDAY, 28 OCTOBER 2004

14:00-16:00 **PARALLEL SESSION 14.2:
UNDERGROUND LABORATORIES –
CELLAR WORKSHOP
(Salle Apollinaire)**

Chairpersons: **M. Hult, Belgium; D. Arnold, Germany**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
153	G. Heusser M. Laubenstein	Germany Italy	Low-Level Germanium Gamma Spectroscopy at the μ Bq Level and Future Developments towards Higher Sensitivity
154	J. Verplancke M. Berst M.O. Lampert O. Tench	Belgium France USA	Low Background Germanium Detector Technology from Canberra
155	M. Laubenstein	Italy	The Gran Sasso National Laboratories (L.N.G.S.): Status and Outlook
156	M. Hult J. Gasparro	Belgium	Neutron Fluence Measurements Using Underground HPGe-Detectors
157	S. Neumaier D. Arnold	Germany	Low Level Gamma-Ray Spectrometry at the PTB Underground Laboratory UDO
158	K. Komura N. Manikandan Y. Yamaguchi M. Inoue Y. Murata	Japan	Activity Levels of Airborne Radionuclides at Hagra Island, Japan
159	J.W. Mietelski Z. Hajduk L. Hajduk J. Jurkowski	Poland	Some Background Effects Observed with a Low-Level Gamma-Spectrometer with Muon Veto Detector
			End of the Session Discussion

16:00-16:30 **Coffee Break**

16:30-18:00 **POSTER SESSION II**

FRIDAY, 29 OCTOBER 2004

9:00-10:30 **PLENARY SESSION V**
(Salle Camille Blanc)

Chairpersons: **R. Key, USA; A. Priller, Austria**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
160	W.E. Kieser A.E. Litherland X-L. Zhao J. Cornett J.N. Smith, <i>et al.</i>	Canada	New Directions for Accelerator Mass Spectrometry Technology
161	G. Korschinek M. Poutivtsev T. Faestermann K. Knie G. Rugel, <i>et al.</i>	Germany	⁵³ Mn in Ferromanganese Encrustations
162	P.J. Kershaw K.S. Leonard J.N. Aldridge G.J. Hunt	UK	Recent Trends in Marine Radioecology

10:30-11:00 **Coffee Break**

FRIDAY, 29 OCTOBER 2004

11:00-12:30 **PARALLEL SESSION 15:
RADIONUCLIDE STUDIES OF SEDIMENTS
(Salle Camille Blanc)**

Chairpersons: **G.H. Hong, Republic of Korea
T. Shimmield, UK**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
163	F. Eyrolle C. Duffa B. Rolland C. Antonelli	France	The Extreme Rhone River Flood of December 2003 (South East France) – Consequences on the Translocation of Artificial Radioactive Contaminants onto the Flooded Areas
164	B. Rolland F. Eyrolle D. Bourlès	France	Removal of Sedimentary Stocks and Associated Radioactivity in the Lower Rhône River (South Eastern France)
165	A. Nalbandyan V. Ananyan W. Burnett J. Cable	Armenia USA	On Radioactivity of Lake Sevan Bottom Sediments
166	S-H. Lee P.P. Povinec E. Wyse G-H. Hong C-S. Chung, <i>et al.</i>	IAEA Republic of Korea	Latitudinal Distribution and Sedimentation of ⁹⁰ Sr, ¹³⁷ Cs, ²⁴¹ Am and ^{239,240} Pu in Bottom Sediment of the Northwest Pacific Ocean
167	J. Mattila H. Kankaanpää E. Ilus	Finland	Use of ¹³⁷ Cs, ^{239,240} Pu and ²¹⁰ Pb as Tracers in Characterization of Modern Sediment Accumulation in the Baltic Sea
168	R.T. Saito R.C.L. Figueira M.G. Tessler I.I.L. Cunha	Brazil	A Model of Recent Sedimentation on the Cananeia-Iguape Estuary

12:30-14:00 **Lunch Break**

FRIDAY, 29 OCTOBER 2004

11:00-12:30 **PARALLEL SESSION 16:
DATA MANAGEMENT
(Salle Auric)**

Chairpersons: **M. Aoyama, Japan; T. Honda, Japan**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
176	M.K. Pham J. Gastaud J. La Rosa S-H. Lee I. Levy-Palomo, <i>et al.</i>	IAEA	IAEA Reference Materials for Radionuclides in the Marine Environment
177	M.L. Romero R. Salas	Spain	Evaluating Laboratory's Performance in Drinking Water Samples
178	R. Wellum A. Stolarz L. Benedik C. Quétel W. De Bolle, <i>et al.</i>	Belgium	NUSIMEP: An External QC Programme for Measuring Nuclear Isotopes in Environmental Samples
179	T.K. Ikäheimonen S. Klemola P. Vesterbacka	Finland	Quality Assurance Practices in Radiochemical Procedures of Research and Environmental Surveillance at STUK, Finland
180	M. Llauradó C. Navarrob I.Vallés	Spain	Accreditation in University Environmental Radioactivity Laboratories
			End of the Session Discussion

11:00-12:30 **CELLAR Meeting
(Salle Apollinaire)**

Chairperson: **M. Hult, Belgium**

12:30-14:00 **Lunch Break**

FRIDAY, 29 OCTOBER 2004

14:00-16:00 **PLENARY SESSION VI:
CONTAMINANTS IN SEDIMENTS
(Salle Camille Blanc)**

Chairpersons: **P.K. Aggarwal, IAEA; C. Papucci, Italy**

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
169	P.F. Rodríguez-Espinosa V.M.V. Vidal L. F.V. Vidal L.	Mexico	Natural Gamma Radionuclides in Sediments of Gulf of Mexico: An Approach to Radio-Tracers Transport and Distribution of Sediments in Marine Environments
170	C. Alonso Hernandez S. Perez Santana C. Brunori R. Morabito C. Papucci, et al.	Cuba Italy	Historical Trend in Heavy Metal Pollution in the Sediments of Cienfuegos Bay (Cuba), defined by ²¹⁰ Pb and ¹³⁷ Cs Geochronology
171	H. Heijnis K.J. Harle J. Harrison	Australia	Western Tasmania - A Reconstructed History of Wide-Spread Aerial Pollution in a Formerly "Pristine" Area - the Use of ²¹⁰ Pb & ²²⁶ Ra in Retrospective Monitoring of the Environment
172	S. Hollins R. Szymczak P. Airey W.L. Peirson T. Payne	Australia	Application of Neutron Activatable Tracers (NATs) for Cohesive Sediment Transport Studies in Contaminated Estuaries
173	F.P. Siringan R.V. Azanza J.P. Duyanen E.Z. Sombrito N. Macalalad, <i>et al.</i>	Philippines	Sediment Geochemical Properties and Dinoflagellate Cyst Distribution in Manila Bay, Philippines
174	J. Miralles A. Véron O. Radakovitch P. Deschamps	France	Pollutant Lead Deposition in the Gulf of Lions over the Last Century Reconstructed from Sedimentary Records
175	T. Shimmiel G. Shimmiel T. Sawyer L. Vare	UK	The Origin and Transport of Pollutant Lead (Pb) to the Svalbard Area of the Arctic
			End of the Session Discussion
16:00	Closing of the Conference		
16:15	Farewell Cocktail		

POSTERS

POSTER SESSION I

16:30 – 18:00 Tuesday, 26 October 2004

TOPICS: Oceans and Seas
Radioecology
Atmosphere
Stable Isotope Studies
Biomonitors
Radiochemical Techniques

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
Oceans and Seas			
1P	C. Jeandel R.F. Anderson G. Henderson R. François M. Frank	France USA UK USA Switzerland	GEOTRACES : An International Program to Study the Global Marine Biogeochemistry of Trace Elements and Isotopes
2P	F. Lacan R. Francois M. Bothner J. Cruisius C. Jeandel	USA France	Cadmium Isotopic Composition in the Ocean
3P	L. Liong Wee Kwong P.P. Povinec C. Ferrier-Pages A.J.T. Jull	IAEA Monaco USA	Coral Skeleton as Proxy Records: Assessment of Carbon Isotopes in Laboratory Cultured Corals, and Coral Heads from French Polynesia
4P	D.G. Matishov G.G. Matishov N.E. Kasatkina	Russian Federation	¹³⁷ CS Exchange Processes in the Azov Sea
5P	S. Shima S. Gasa K. Iseda M. Kamamoto H. Kofuji, <i>et al.</i>	Japan	Distributions of Long-lived Anthropogenic Radionuclides (¹⁴ C, ¹²⁹ I, and ²³⁹⁺²⁴⁰ Pu) in Coastal Water Columns off Sanriku, Japan
6P	P.P. Povinec Ph. Scotto I. Osvath H. Ramadan	IAEA	The Marine Information System (MARIS)

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Radioecology			
7P	F. Abbasisar T. Hosseini A. Fathivand	Iran	Determination of Uranium Isotopes in Water Samples
8P	F. Legarda N. Alegria M. Herranz R. Idoeta	Spain	Study of Exposure to Radiation in a Lost Wax Foundry
9P	R. Aliev St. Kalmykov Yu. Sapozhnikov	Russian Federation	Artificial Radionuclides in the Black Sea Sediments
11P	N. Çelebi G. Karahan C. Özüag B. Ataksor E. Güngör, <i>et al.</i>	Turkey	Off-Site Environmental Monitoring for Radiological Safety
12P	L. Choura G. Ardisson V. Karataev G. Barci-Funel H. Michel, <i>et al.</i>	France Russian Federation France	Environmental Monitoring of γ - and α - emitters in Areas Near Tomsk City (Siberia, Russia)
13P	A.A. Fathivand Khalili J. Amidi A. Messineh-Asl	Iran	Use of Gamma-Ray Spectrometry for Analysis of Uranium Isotopic Composition in Soil of Iran
14P	I. Sværen H.E. Heldal P. Alvestad L. Føyn	Norway	Transport of Radionuclides in and to Norwegian waters – 10 Years of Monitoring the Marine Environment
15P	J. Gastaud B. Oregioni M.K. Pham S.V. Pagava P.P. Povinec	IAEA Georgia IAEA	Anthropogenic Radionuclides in Biota Samples from the Caspian Sea
16P	D. Gheorghiu R. Margineanu D. Slavnicu	Romania	Management of GIS Database and Multipurpose Customization of Computerized Models of the Contaminated Aquatic and Terrestrial Ecosystems
17P	M. Germenchuk O. Zhukova E. Shagalova	Belarus	The Prognosis of Radioactive Contamination of an Environment of Belarus after Catastrophe on Chernobyl NPP
18P	S. Hafezi A. Attarilar	Iran	Concentration of ^{226}Ra in Iranian Bottled Mineral Water

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
19P	A.B. Huseynov	Azerbaijan	Oil Industry and the Problems with Radioactive Pollution on Absheron Peninsula
20P	K. Kehagia S. Bratakos V. Koukoulidou C. Potiriadis	Greece	The Annual Variation of ^{238}U Concentration and $^{234}\text{U}/^{238}\text{U}$, $^{235}\text{U}/^{238}\text{U}$ Ratios in Greek Rivers
21P	N.V. Yesin R.D. Kos'yan	Russian Federation	Field Study of Sedimentation and Radionuclide Pollution of the Black Sea
22P	I.I. Kryshev A.I. Kryshev	Russian Federation	Plutonium in Components of the Techa - Ob River Ecosystem
23P	G.V. Laptyev O.V. Voitsekhovytch A.B. Kostezh I. Osvath	Ukraine IAEA	Mass Accumulation Rates and Fallout Radionuclides ^{210}Pb , ^{137}Cs and ^{241}Am Inventories Determined in Radiometrically Dated Abyssal Sediments of the Black Sea
24P	A. Mesineh Asl J. Amidi M. Esmaili Gheshlaghi	Iran	^{137}Cs Activity in the Persian Gulf (2000)
25P	A. Mesineh Asl J. Amidi M. Esmaili Gheshlaghi	Iran	^{137}Cs Concentrations in the Water and Sediments of the Caspian Sea (1999-2003)
26P	U.M. Mirsaidov I.Sh. Normatov	Tajikistan	New Isotope Methods and Radiation Biogeocenology in Defining the Migration and Space Allocation of Radionuclides
27P	G. Nicolaou N.F. Tsagas	Greece	Multivariate Statistics in the Identification of Unknown Nuclear Material
28P	G. Pantelić I. Tanasković V. Vuletić P. Vancsura A. Lengyel Varga, <i>et al.</i>	Serbia and Montenegro Hungary	Radioactivity Control of the Danube Ecosystem
29P	S. Rezzoug H. Michel F. Fernex G. Barci-Funel V. Barci	France	^{137}Cs Fallout Impact on Forest Soils and Lake Sediments in the Boreon Area, Mercantour Massif, SE France
30P	P. Rulik J. Tecl J. Skrkal	Czech Republic	Monitoring of the Activity Concentration in the Air - A Part of Radiation Monitoring Network of the Czech Republic

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31P	A. El-Gamal I.H. Saleh S. Nasr M. Naim	Egypt	Radiological Assessment of the Egyptian Mediterranean Coast
33P	J. Ferris J. Harrison E. Hoffmann T.E. Payne R. Szymczak	Australia	Environmental Monitoring at the Australian Nuclear Science & Technology Organisation (ANSTO)
34P	H. Umbara H. Suseno	Indonesia	Radionuclides in the Coastal Environment of Indonesia
35P	A. Varinlioğlu R. Kucukcezzar A. Kose	Turkey	Determination of Natural and Artificial Radioactivity Levels in Sediment in the Marmara Sea
36P	G.E. Lazorenko G. Polikarpov I. Osvath	Ukraine IAEA	²¹⁰ Po in the North-West Black Sea Ecosystem
Atmosphere			
37P	S. Bernard T. Roeckmann J. Kaiser J. Chappellaz J-M. Barnola, <i>et al.</i>	France Germany USA France	Changes of Methane and Nitrous Oxide in the Atmosphere: New Constraints from Stable Isotope Analyses in Polar Firn and Ice
38P	B.U. Chang Y.J. Kim C.S. Kim H.Y. Choi C.K. Kim, <i>et al.</i>	Republic of Korea	Seasonal Variations of Anthropogenic Radionuclides in Atmospheric Samples from Central Radiation Monitoring Station in Korea
39P	O. Magand C. Genthon M. Frezzotti S. Urbini M. Fily, <i>et al.</i>	France Italy France	Surface Mass Balance of the East-Wilkes / Victoria Region of Antarctica: An Update
40P	J.W. Mietelski P. Gaca S. Grabowska	Poland	Study of Radionuclides Content at ca. 11 km Altitude by Use of Cabin Filters from Airlines
41P	I. Sh. Normatov	Tajikistan	Development of Detailed Climatic Scenarios for the Central Asia Region

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
Stable Isotope Studies			
42P	W. Zahorowski S. Chambers A. Henderson-Sellers	Australia	Determination of Mid-latitude ²²² Rn Flux from the Southern Ocean using Atmospheric ²²² Rn Concentration. Measurements at an Island Ground Station
43P	D. Burdloff M.F. Araujo J.M. Jouanneau	Portugal	Sources of Fine Organic Matter on the Southwestern Iberian Continental Shelf
44P	A. Henderson-Sellers P. Airey D. Stone J. Bradd K. McGuffie	Australia	Temporal Analysis of Stable Water Isotopic Characteristics in the Murray Darling Basin
46P	K. Knoeller M. Schubert	Germany	Application of Stable Isotope Tracers to evaluate the Hydrodynamic Mechanisms of Heavy Metal Mobilization in Copper Ore Tailings
47P	M. Kondo M. Uchida H. Muraoka H. Koizumi	Japan	Seasonal Change of CO ₂ Recycling Rate by Understory Vegetation in a Cool-Temperate Forest in Japan
48P	A. Yilmaz Y. Çoban-Yıldız	Turkey	Photo- and Chemo-Synthetic Organic Carbon Production and its Fate in the Black Sea: Use of Isotopic Techniques and Tracing
49P	A.T. Bouzed M.K. Tabet A.M. Amari A.A. Shaban	Libya	Isotope Shift Investigations in the Even Configurations of Hafnium I
Biomonitors			
50P	F. Boisson C. Richard C. Ferrier-Pagès	IAEA Monaco	Zinc Uptake and Behaviour in the Scleractinian Coral <i>Stylophora Pistillata</i>
51P	R. Zbikowski R. Bojanowski P. Szefer A. Latala	Poland	Distribution of Radioactive Caesium, Potassium and Selected Chemical Elements in the Macrophytes from the Southern Baltic Waters and Application of Factor Analysis to study Interelemental Relationship
52P	S. Charmasson M. Agarande D. Louvat A-M. Neiva Marques P-M. Sarradin, <i>et al.</i>	France	High levels of Natural Radioactivity in Biota from Deep Sea Hydrothermal Vents

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
53P	E. Giron E. Buschiazzo L. Hédouin M. Gomez Batista M. Metian, <i>et al.</i>	IAEA IAEA, New Caledonia Cuba IAEA	Influence of Ambient Dissolved Metal Concentration on their Bioaccumulation in Two Tropical Oysters: A Radiotracer Study
54P	R.A. Jeffree S.J. Markich	IAEA Australia	Systematic Model of Metal and Radionuclide Bioaccumulation in Crocodilian and Molluscan Calcified Tissues
55P	M.A. Malek M. Nakahara	Bangladesh Japan	¹³⁷ Cs Absorption Factors (Afs) Some Vegetable and Protein Samples in Cooking
57P	I.I. Rudneva L.S. Oven N.F. Shevchenko E.N. Skuratovskaya V. Zubachenko et al.	Ukraine	Use Fish Biomarker Response in the Evaluation of the Black Sea Coastal Ecosystem Health
58P	I.I. Rudneva V.G. Shaida N.S. Kuzminova V.L. Zubachenko	Ukraine	Use the Microcalorimetry Method in Pollution Response Evaluation of Marine Organisms
59P	A. El-Gamal T. Zaghoul I.H. Saleh S. Nasr M. Naim	Egypt	A Microbiological Study on Rashid Black Sand Sediments, Egypt
60P	A.I. Kryshev T.G. Sazykina	Russian Federation	Bioaccumulation of Artificial Radionuclides and Dose Assessment to Biota in the Yenisei River (Russia)
61P	J. Castillo J. Bermúdez L. Sajo-Bohus E. Greaves D. Palacios	Venezuela	Determination of γ-radiation Level and Elemental Composition in Water, Biota and Sediments from Cayo Punta Brava, Morrocoy National Park, Venezuela
64P	F. Bergin F. Kucuksezgin E. Uluturhan I.F. Barut E. Meric <i>et al.</i>	Turkey	Benthic Foraminiferal Response to Heavy Metal Pollution in Izmir Bay (Eastern Aegean Sea)
Radiochemical Techniques			
62P	M. Benkrid S. de Figueired	Algeria Austria	Determination of Th, U, Pu and Am Radionuclides in Soil and Marine Samples
63P	R. Bojanowski Z. Radecki	Poland IAEA	Validation of Alpha-spectrometric Methods for ²²⁶ Ra Measurements using a Double Tracer Technique

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65P	L. Génot H. Michel G. Barci-Funel V. Barci	France	Interaction of Plutonium with Humic Acid
66P	C. Hurel A. Delisee N. Marmier F. Fromage A.C.M. Bourg	France	Sorption of Caesium on Bentonite: The Role of Calcite
68P	G. Lujanienė B. Šilobritienė K. Jokšas	Lithuania	Caesium Sorption–Desorption Behaviour in Bottom Sediments
69P	J. Merešová M. Vršková K. Sedláčková	Slovakia	Pre-concentration and Determination of ^{210}Pb in Water by Liquid Scintillation Spectrometry
70P	O. Magand F. Arnaud E. Chapron M.-A. Melieres X. Boes	France Belgium France Belgium	Reconstructing Sedimentation History from Radionuclides (^{210}Pb , ^{137}Cs , ^{241}Am) and the Recognition of Geodynamic Events in Lakes Puyehue and Icalma (Chilean Lake District, Northern Patagonia)
71P	Ø.G. Selnæs M. Dowdall C. Davidsb, J.P. Gwynnb	Norway	Implications of Radiochemical Purity of $^{99}\text{Mo}/^{99}\text{Tc}$ Generator Eluates for the Determination of Low Levels of ^{99}Tc in Seawater
72P	R. Sidhu K. Østmo T. Bjerk R. Nordvi E. Strålberg	Norway	Development of a Procedure for the Determination of ^{226}Ra , ^{228}Ra and ^{210}Pb in Produced Water
73P	A. Zhang Y. Han Z. Wang Z. Shi	P. R. China	Measurement of Uranium Isotopes in Environmental Water of Taiyuan by Alpha Spectrometry

POSTER SESSION II

16:30-18:00 Thursday, 28 October 2004

TOPICS: Radiometrics and
Mass Spectrometry Techniques
Hydrology
Radionuclide Studies of Sediments
Contaminants in the Environment

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
Radiometrics and Mass Spectrometry Techniques			
74P	M. Ardid J.L. Ferrero	Spain	Design of a Low Background ZnS(Ag) Alpha Counter for Water Samples using a Plastic Veto Detector
75P	S. Baude F. Pointurier R. Chiappini	France	Precise Uranium Isotopic Measurements in Groundwater around the CEA's Vaujours Site
76P	A. Henderson-Sellers D. Stone S. Hollins M. Hotchkis D. Fink	Australia	Isotopes in Australian Environmental Analysis
77P	M. Herranz R. Idoeta A. Abelairas F. Legarda	Spain	Determination of ²²⁴ Ra, ²²⁶ Ra and ²²⁸ Ra by Gamma-Ray Spectrometry with Radon Retention
78P	S.F. Jerez Veguería J.M. Godoy	Brazil	Application of Analytical Methods for Environmental Evaluation of Natural Radionuclides in the Vicinity of the Produced Water Discharges into the Sea
79P	M. Kedhi	Albania	Evaluation of the Infinite Radius of a Radioactive Water Environment
80P	C.S. Kim B.H. Rho U.W. Nam K.I. Seon	Republic of Korea	Development of Monitor for Multiple Beta-ray Nuclides in Liquid Radioactive Waste
81P	M.H. Lee H.Y. Pyo Y.J. Park K.Y. Jee S.B. Clark	Republic of Korea USA	Development of an in-situ Fission Track Analysis for Detecting Fissile Actinides in Soils and Sediments Contaminated with Actinides
82P	W. Plastino P. De Felice	Italy	Radon Alpha and Gamma-Ray Spectrometry with YAP:Ce Scintillator

<i>No of Paper IAEA-CN-118</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
83P	C. Rouleau É. Pelletier	Canada	The LuTERASE: State-of-the-art New Laboratory for the Use of Radioisotopes in Marine Environmental Studies
84P	T. Suzuki T. Kitamura S. Kabuto O. Togawa H. Amano	Japan	AMS Measurement of ¹²⁹ I and its Application as an Oceanographic Tracer
85P	R. Szymczak A. Henderson-Sellers R.T. Lawson R. Chisari	Australia	ISO 9001 Accreditation in an R&D Environment - Is it Possible?
86P	A. Camacho I. Vallés X. Ortega	Spain	The Quality Control System in Environmental Water Radioactivity Laboratories
87P	I.V. Zhuk O.I. Yaroshevich V.A. Bryileva M.K. Kievets E.M. Lomonosova	Belarus	Nuclear and Physical Methods of Monitoring of the Content of Technogeneous (Pu, Am) and Nature (Rn) Radionuclides in the Environment used in Belarus
88P	J. Bartocci H. Ramadan I. Osvath P.P. Povinec	IAEA	Development of a Laboratory Information Management System at IAEA-MEL
89P	C. Tsabaris I. Thanosa and Th. Dakladasb	Greece	<i>In-situ</i> Gamma-ray Spectrometry with the K-A-TE-RINA Submersible Detector
145P	C. Dovlete I. Osvath	France IAEA	Optimisation of Sample Geometry for Gamma-spectrometric Measurements through Monte Carlo Simulation
Hydrology			
90P	M.K. Ahmed M.H. El Kabir	Sudan	Environment of Paleowater in Sudan
91P	M.F. Ben Hamouda K. Zouari J. Tarhouni C.B. Gaye M.N. Oueslatie	Tunisia Austria Tunisia	Hydrogeochemical and Isotopic Study of Groundwater Mineralisation in the Oriental Coastal Aquifer of Cap Bon, Tunisia
92P	A. Blivi	Togo	Predictions of Sea-Level Rise for Coastal Geosystem of Togo (between Volta and Mono Rivers in the Gulf of Benin/West Africa) ; Physical and Economic Manifestations

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93P	D.M. Bonotto J.L.N. De Lima	Brazil	^{210}Po in Meteoric and Surface Waters at Corumbataí River Basin, São Paulo State, Brazil
94P	S. Castañeda T. Garcia L. Fernandez L. Ascaño A. Ramos <i>et al.</i>	Philippines	Isotope Techniques Application in Understanding the Recharge Process of the Davao City Aquifers
95P	F. Gal C.Y.J. Renac D. Tisserand	France	Residence Times for Surface Waters in Altered Granite Area : Example of the "Furan" Water Catchment, East French Massif Central
96P	N. Hocini A.S. Moulla	Algeria	Detection of Water Leaks in Fom-El-Gherza Dam (Algeria)
97P	D.C. Lauria V. Mortagua	Brazil	The Origin of the Groundwater Contamination in Botuxim Site - Looking for Geochemical Signature
98P	L. Metzger M. Carrillo A. Diaz J. Coronado G. Fano	Peru	Integrated Forecast System Atmospheric – Hydrologic - Hydraulic for the Urubamba River Basin
99P	N. Miljevic D. Golobocanin A. Zujic	Serbia and Montenegro	Magmatic Origin of CO_2 in the Surdulica Geothermal System
100P	A. Țenu F. Davidescu R. Petreș G. Stănescu L. Coarnă	Romania	Long Term Survey of the Karstic System in South Dobrogea (Romania) by Environmental Isotopes
101P	E. Sonninen E. Huitu S. Mäkelä L. Arvola	Finland	An oxygen Isotope Study in a Lake-River System in Southern Finland
146P	D. Stone G. Jacobsen C. Hughes R. Szymczak	Australia	Application of Environmental Isotopes of Hydrogen (^3H), Carbon (^{13}C & ^{14}C) and Oxygen ($^{16}\text{O}/^{18}\text{O}$) in Studies of Groundwater-streamflow Interactions
Radionuclide Studies of Sediments			
102P	E. Güngör M.N. Çağatay N. Güngör Ü. Sancar B.G. Göktepe	Turkey	Determination of Mass Accumulation Rates for Organic Carbon, Carbonate, Metal and Sediment on the Eastern Continental Margin of the Black Sea Sediments during Late Holocene

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103P	T. Honda E. Suzuki	Japan	Distribution of Radionuclides and Trace Elements in Marine Sediments from Coastal Areas of Japan
104P	A.N. Marques Jr. F. Monna E.V. Silva Filho F.F. Fernex F.F. Lamego Simões Filho	Brazil France Brazil France Brazil	Sedimentation Rates and Contaminant Chronology in a Tropical Estuary, Sepetiba Bay, Rio de Janeiro, Brazil
105P	R.M. Margineanu I. Ionita D. Gheorghiu	Romania	Sedimentation Rates in Reservoir and Gullies derived from ¹³⁷ Cs Depth Profile in the Moldavian Tableland - Romania
106P	M. Mami S. Mami N. Hocini	Algeria	An Investigation of the Silting-up Phenomenon of the Skikda's New Port (Algeria)
107P	J. Mazeika R. Radzevicius R. Dusauskiene-Duz	Lithuania	Sedimentation Rates in the Eastern Baltic Sea Based on ²¹⁰ Pb Dating
109P	A. Muñoz Caravaca C. Alonso-Hernández M. Díaz Asencio	Cuba	Residence Time and Sedimentation Regime in Cienfuegos Bay, Cuba, with the Use of ²¹⁰ Pb and ¹³⁷ Cs Isotopes
110P	A. Noureddine M. Menacer R. Boudjenoun A. Hammadi M. Benkrid et al.	Algeria	Baseline of ¹³⁷ Cs and Natural Radioactivity in Surface and Core Sediment along the Algerian Coast
111P	S. Pan D. Guo G. Chen	P. R. China	Siltation in Pui O Salt Marsh of Hong Kong from ¹³⁷ Cs Analysis of Shallow Cores
112P	S. Ribeiro Guevara M. Arribére V. Jereb S. Pérez Catán M. Horvat	Argentina Slovenia Argentina Slovenia	¹⁹⁷ Hg as Radiotracer to study Mercury Methylation and Demethylation Processes in Sediments and Soils
113P	I.H. Saleh A.A. El-Gamal S.M. Nasr M.A. Naim	Egypt	Spatial and Temporal Variations of Uranium and Thorium Series along the Egyptian Mediterranean Coast
114P	A.S. Strezov T.P. Nonova	Bulgaria	Monitoring of Radionuclide and Heavy Metals in Sediments and Macrophytes from Black Sea Ecosystems

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115P	Y. Tateda D.D. Nhan N.Q. Long N.H. Quang N.H. Quy	Japan Viet Nam	Estimation of Sediment Loading in Asian Coastal Area using ²¹⁰ Pb Inventory in Mangrove Sediment
116P	M. Zajączkowski W. Szczuciński R. Bojanowski	Poland	Application of Radionuclides to study Recent Changes in Sediment Accumulation Rates in Adventfjorden, Svalbard
Contaminants in the Environment			
117P	C. Alonso-Hernandez M. Gómez Batista A. Muñoz-Caravaca S. Pérez-Santana M. Díaz-Asencio <i>et al.</i>	Cuba	Total Arsenic in Marine Organisms from Cienfuegos Bay, Cuba
118P	M. Balkis E. Senol	Turkey	Trace Metal Distributions in Water Column and Surface Sediments of İzmit Bay, Turkey after Marmara (İzmit) Earthquake
119P	M. Barrera R.A. Ligeró M. Casas-Ruiz	Spain	Use of a ¹³⁷ Cs Vertical Migration Model to Study the Temporal Evolution of Heavy Metals in Coastal Sediments of the Bay of Cadiz (Spain)
121P	E. Can U. Yilmaz	Turkey	Some Environmental Aspects of the Çakalburnu Lagoon in İzmir Bay, Turkey
122P	L. Chouba N. Langar-Zamouri M.S. Romdhane A. El Abed	Tunisia	Accumulation of Heavy Metals in Shellfish Flesh of Marine Environment along the Coast of Tunisia
123P	D.N. Dang D.T. Loan J. Bartocci I. Tolosa S.J. de Mora	Viet Nam IAEA	Occurrence of Butyltin Compounds in Sediment and Bivalve from Three Harbour Areas (Ho Chi Minh, Da Nang and Hai Phong) in Viet Nam
124P	Y. Fujikawa T. Hamasaki G. Prasai R. Imada E. Ikeda, <i>et al.</i>	Japan	Basic Experimental Research for the Reconstruction of Water Purification System Using Soil - Sorption of Refractory DOM and Phosphate Ion to Soil Beads Under Static and Dynamic Water Flow Conditions
125P	H. Heijnis A. McMinn G. Hallegraef K. Srisuksawad	Australia Thailand	Nuclear Detectives - Reconstructing Histories of Toxic Dinoflagellates & Blue Green Algae in Coastal Lakes and Estuaries

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127P	J.N. Kamau A.N. Gachanja C.J. Ngila M.J. Kazungu M. Zhai	Kenya Botswana Kenya Botswana	Effect of Physicochemical Variation on Heavy Metals Fluxes at the Sediment-Water Interface, Lake Naivasha, Kenya
128P	N.H.M. Kamel	Egypt	Investigation of Important Parameters used for Application of the Chemical Reaction Model for Environmental Soils in Egypt
129P	N. Mzoughi M. Brava T. Stoichev M. Dachraoui G. Lespes, <i>et al.</i>	Tunisia France Tunisia France	Speciation of Mercury and Tin in Marine Sediments and Biological Matrix
130P	J.R. Oh D. Li	Republic of Korea	Fate of Alkylphenols, Chlorophenols and Bisphenol A in the Lake Shihwa, Korea
131P	V. Orescanin D. Barisic L. Mikelic I. Lovrencic M. Rubcic, <i>et al.</i>	Croatia	Impact of Past Industrial Activity on the Content of Heavy Metals in the Soil/Grass System in Šibenik (Croatia)
132P	S. Ouffoue Koffi A. Ahibo Coffy G. Morel D.E. Sess Y.T. N'guessan	Ivory Coast Denmark Ivory Coast	Study of the Pollution of Tropical Lagoon (Côte d'Ivoire Lagoon) System by Measuring Organochlorine Compounds in Oysters
133P	H.E.L. Palmieri H.A. Nalini Jr. M.Â. de B.C. Menezes J.B.S. Barbosa J. dos S.J. Pereira, <i>et al.</i>	Brazil	Arsenic Accumulation by Ferns from the Iron Quadrangle, Minas Gerais, Brazil
135P	S. Ribeiro Guevara M. Arribére D. Bubach P. Vigliano A. Rizzo, <i>et al.</i>	Argentina	Mercury in Aquatic Environments of Nahuel Huapi National Park, Patagonia, Argentina
136P	J.P. Snell C.R. Quétel	Belgium	A New ²⁰² Hg Isotopically Enriched Methylmercury Spike Material with SI-traceable Reference Values for Isotope Dilution Measurements in Biological and Environmental Samples

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137P	M. Sugahara Y. Fujikawa R. Imada H. Ozaki G. Prasai, <i>et al.</i>	Japan	Basic Experimental Research for the Reconstruction of Water Purification System Using Soil - Sorption Isotherm of Fulvic Acid and Phosphate Ion for Selected Materials under Different pH
138P	U. Sunlu	Turkey	A Survey of Metal Pollution in Mussels <i>Mytilus galloprovincialis</i> (L.1758) from Northern Coast of Turkish Aegean Sea
139P	E. Uluturhan F. Kucuksezgin	Turkey	Distribution and Relationship of Mercury, Lead and Cadmium in Selected Tissues of <i>Pagellus erythrinus</i> from the Aegean Sea
141P	V.L. Zubachenko S.O. Omelchenko G.V. Simchuk	Ukraine	Heavy Metals Contents in Some Fish Species of the Black Sea
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IAEA	The Radiological Situation of the Atolls of Mururoa and Fangataufa. Vol. 5. Transport of Radioactive Material in the Marine Environment	1998	IAEA-TECDOC-1330	Modelling of the Radiological Impact of Radioactive Waste Dumping in the Arctic Seas	2003
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IAEA-TECDOC-1075	Radioactivity in the Arctic Seas	1999	IAEA-Tech. Report Series no. 422	Sediment Distribution Coefficients and Concentration Factors for Biota in the Marine Environment	2004
IAEA-TECDOC-1094	Marine Pollution	1999			
IAEA-CSP-2/C	Isotope Techniques in Water Resources Development and Management. CD-ROM Proceedings of a Symposium held in Vienna, 10-14 May 1999	1999			
IAEA-TECDOC 1146	Global Marine Radioactivity Database (GLOMARD)	2000			

**IAEA-MEL PUBLICATIONS (2002-2003) RELATED TO THE
SUBJECT OF THE CONFERENCE**

2003

- BHUSHAN, R., DUTTA, K. MULSOW, S., POVINEC, P.P., SOMAYAJULU, B.L.K. Distribution of natural and man-made radionuclides during the reoccupation of GEOSECS stations 413 and 416 in the Arabian Sea: temporal changes. Deep-Sea Research II (2003) 2777- 2784.
- BOISSON, F., COTRET, O., TEYSSIE, J.-L., EL-BARADEI, M., FOWLER, S.W. Relative importance of dissolved and food pathways for lead contamination in shrimp. Mar. Poll. Bull. 46 (2003) 1549-1557.
- BOISSON, F., GOUDARD, F., DURAND, J.P., BARBOT, C., PIERI, J., AMIARD, J.C., FOWLER, S.W. Comparative radiotracer study of cadmium uptake, storage, detoxification and depuration in the oyster *Crassostrea gigas*: potential adaptive mechanisms. Mar. Ecol. Prog. Ser. 254 (2003) 177-186.
- BURNS, K., GRONING, M. de MORA, S.J., POVINEC, P., RADECKI, Z., VILLENEUVE, J.-P., LA ROSA, J., CAMPBELL, M., WYSE, E., PHAM, M.K., FAJGELJ, A. Report on IAEA's activities on reference material production, organisation of laboratory intercomparison studies, and other quality assurance related programmes for the year 2002. ISO/REMCO N 703 (2003).
- CARVALHO, F.P., MONTENEGRO-GUILLEN, S., VILLENEUVE, J.-P., CATTINI, C., TOLOSA, I., BARTOCCI, J., LACAYO-ROMERO, M., CRUA-GRANJA, A. Toxaphene residues from cotton fields in soils and in the coastal environment of Nicaragua. Chemosphere 53 (2003) 627-636.
- DANIS, B., COTRET, O., TEYSSIE, J.L., FOWLER, S.W., BUSTAMANTE, P., WARNAU, M. Delineation of PCB uptake pathways in a benthic sea star using a radiolabelled congener. Mar. Ecol. Prog. Ser. 253 (2003) 155-163.
- de MORA, S.J., FOWLER, S.W., CASSI, R., TOLOSA, I. Assessment of organotin contamination in marine sediments and biota from the Gulf and adjacent region. Mar. Poll. Bull. 46 (2003) 401-409.
- de REGGE, P., POVINEC, P.P. Sample preparation for radionuclide analysis and nuclear analytical techniques in sediments and soils in the IAEA laboratories. IAEA-TECDOC-1360, 2003, 95-121.
- FERRIER-PAGES, C., BOISSON, F., ALLEMAND, D., TAMBUTTE, E. Kinetics of strontium uptake in the scleractinian coral *Stylophora pistillata*. Geophys. Res. Abs. 5, 14374 (2003).
- HIROSE, K., AOYAMA, M., POVINEC, P.P. Concentration of particulate plutonium in surface and deep-water samples collected during the IAEA'97 expedition. Deep-Sea Research II (2003) 2639-2647.
- ITO, T., POVINEC, P.P., TOGAWA, O., HIROSE, K. Temporal and spatial variations of anthropogenic radionuclides in the Japan Sea waters. Deep-Sea Research II (2003) 2701-2711.
- KARL, D., BATES, N.R., EMERSON, S., HARRISON, P.J., JEANDEI, C., LLINAS, O., LIU, K.-K., MARTY, J.-C., MICHAELS, A.F., MIQUEL, J.-C., NEUER, S., NOJIRI, Y., WONG, C.S. Temporal studies of biogeochemical processes determined from ocean time-series observations during the JGOFS era. In: Fasham, M.J.R., Ocean Biogeochemistry, The role of ocean carbon cycle in global change, Springer Verlag (2003) 239-267.
- LEE, S.-H., GASTAUD, J., POVINEC, P.P., HONG, G.-H., KIM, S.-H., CHUNG, C.-S., LEE, K.-W., PETERSSON, H.B.L. Distribution of plutonium and americium in the marginal seas of the Northwest Pacific Ocean. Deep-Sea Research II (2003) 2727-2750.
- LEE, S.-H., LA ROSA, J.J., LEVY-PALOMO, I., OREGIONI, B., PHAM, M.K., POVINEC, P.P., WYSE, E. Recent inputs and budgets of ⁹⁰Sr, ¹³⁷Cs, ^{239,240}Pu and ²⁴¹Am in the northwest Mediterranean Sea. Deep-Sea Research II (2003) 2817-2834.
- MOON, D.-S., HONG, G.-H., KIM, Y.I., BASKARAN, M., CHUNG, C.S., KIM, S.H., LEE, H.-J., LEE, S.-H., POVINEC, P.P. Accumulation of artificial and natural radionuclides in the bottom sediments of the Northwest Pacific Ocean. Deep-Sea Research II (2003) 2649- 2673.
- MULSOW, S., POVINEC, P.P., SOMAYAJULU, B.L.K., OREGIONI, B., LIONG WEE KWONG, L., GASTAUD, J., TOP, Z., MORGENSTERN, U. Temporal (³H) and spatial variations of ⁹⁰Sr, ^{239,240}Pu and ²⁴¹Am in the Arabian Sea: GEOSECS stations revisited. Deep-Sea Research II (2003) 2761-2775.
- NAKANO, M., POVINEC, P. P. Modelling the distribution of plutonium in the Pacific Ocean. J. Environ. Radioactivity 69 (2003) 85-106.

- NAKANO, M., POVINEC, P.P. Oceanic general circulation model for the assessment of the distribution of ^{137}Cs in the world ocean.. Deep-Sea Research II (2003) 2803-2816.
- OREGIONI, B, GASTAUD, J., PHAM, M.K., POVINEC, P.P. Anthropogenic radionuclides in the Caspian Sea. J. Water Resources 30 (2003) 86-91.
- PHAM, M.K., POVINEC, P.P. Matériaux de référence de l'AIEA pour les radionucléides dans le milieu marin. Bulletin of BNM, 2003-2, 127 (2003) 210-214.
- PHAM, M.K., POVINEC, P.P., LEE, S.-H., OREGIONI, B. Transport atmosphérique de particules de l'Afrique du Nord à Monaco. Bulletin of BNM, 2003-2, 123 (2003) 143-149.
- POVINEC, P.P., BAILLY DU BOIS, P., KERSHAW, P.J., NIES, H., SCOTTO, P. Temporal and spatial trends in the distribution of ^{137}Cs in surface waters of Northern European seas – a record of 40 years of investigations. Deep-Sea Research II (2003) 2785-2801.
- POVINEC, P.P., DELFANTI, R., GASTAUD, J., LA ROSA, J.J., MORGENSTERN, U., OREGIONI, B., PHAM, M.K., SALVI, S., TOP, Z. Anthropogenic radionuclides in Indian ocean surface waters – the Indian Ocean transect 1998. Deep-Sea Research II (2003) 2751-2760.
- POVINEC, P.P., FROELICH, K., GASTAUD, J., OREGIONI, B., PAGAVA, S.V., PHAM, M.K. RUSSETSKI, V. Distribution of ^{90}Sr , ^{137}Cs and $^{239,240}\text{Pu}$ in Caspian Sea water and biota. Deep-Sea Research II (2003) 2835-2846.
- POVINEC, P.P., LIVINGSTON, H.D., SHIMA, S., AOYAMA, M., GASTAUD, J., GORONCY, I., HIROSE, K., HUYNH-NGOC, L., IKEUCHI, Y., ITO, T., LIONG WEE KWONG, L., LEE, S.-H., MORIYA, H., MULSOW, S., OREGIONI, B., PETERSSON, H.B.L., TOGAWA, O., WYSE, E. IAEA'97 expedition to the NW Pacific Ocean – results of oceanographic and radionuclide investigations of the water column. Deep-Sea Research II (2003) 2607-2637.
- REYNAUD, S., FERRIER-PAGES, C., BOISSON, F., ALLEMAND, D., FAIRBANKS, R. Incorporation of labeled strontium into the skeleton of the Zooxanthellate coral *Acropora* sp. Geophys. Res. Abs. 5, 14378 (2003).
- TAMBUTTE, E., BOISSON, F., FOWLER, S., ALLEMAND, D., FERRIER-PAGES, C. Incorporation of strontium in the skeleton of reef building coral, *Stylophora pistillata* – Relationship with calcium. In: Proceedings of the 8th International Symposium on biomineralization: Formation, Diversity, Evolution and Application, 25-28 September 2001, Kurokawa, Niigata, Japan.
- TATEDA, Y., CARVALHO, F.P., FOWLER, S.W., MIQUEL, J.-C. Fractionation of ^{210}Po and ^{210}Pb in coastal waters of the NW Mediterranean continental margin. Cont. Shelf Res. 23 (2003) 295-316.
- TOLOSA, I., de MORA, S.J. Isolation of neutral and acidic lipid biomarker classes for compound specific carbon isotope analysis using solvent extraction and normal-phase high-performance liquid chromatography. Book of abstracts of 3rd Scientific Meeting of the Spanish Society of Chromatography and Related Techniques, Almeria, Spain, (2003) pp. 137.
- TOLOSA, I., LeBLOND, N., COPIN-MONTEGUT, C., MARTY, J.-C., de MORA, S.J., PRIEUR, L. Distribution of sterol and fatty alcohol biomarkers in particulate matter from the frontal structure of the Alboran Sea (S.W. Mediterranean Sea). Mar. Chem. 82 (2003) 161-183.
- TOLOSA, I., LeBLOND, N., VESCOVALI, I., COPIN-MONTEGUT, C., MARTY, J.-C., de MORA, S., PRIEUR, L. Biogeochemistry of lipid biomarkers and pigments in particulate matter from the frontal structure of the Alboran Sea (SW Mediterranean Sea). Geophys. Res. Abs. 5, 01945 (2003).
- UGUR, A., MIQUEL, J.-C., FOWLER, S.W., APPLEBY, P. Radiometric dating of sediment cores from a hydrothermal vent zone off Milos Island in the Aegean Sea. Sci. of the Total Environ. 307 (2003) 203-214.
- WYSE, E.J., AZEMARD, S., de MORA, S.J. World-wide intercomparison exercise for the determination of trace elements and methylmercury in fish homogenate IAEA-407. Report IAEA/AL/144 (IAEA/MEL/72) (2003) 93 pages, IAEA, Vienna.

2002

- BAYONA, J., MONJONELL, A., MIQUEL, J.-C., FOWLER, S., ALBAIGES, J. biogeochemical characterization of particulate organic matter from a coastal hydrothermal vent zone in the Aegean Sea. Organic Geochemistry 33 (2002) pp. 1609-1620.
- BOISSON, F. COTRET, O., FOWLER, S.W. Transfer and distribution of lead in the asteroid *Asterias rubens* following ingestion of contaminated food: a radiotracer study. Marine Pollution Bulletin 44 (2002) 1003-1009.

- BUSTAMANTE, P., COTRET, O., DANIS, B., TEYSSIE, J.-L., FOWLER, S.W., MIRAMAND P., WARNAU, M. Cadmium bioaccumulation at different stages of the life cycle of cephalopods: a radiotracer (^{109}Cd) investigation. In: Environmental changes and Radioactive tracers (J.M. Fernandez & R. Fichez, eds.), IRD Editions, Paris (2002) pp. 65-69.
- BUSTAMANTE, P., TEYSSIE, J.-L., FOWLER, S.W., COTRET, O., DANIS, B., MIRAMAND P., WARNAU, M. Biokinetics of zinc and cadmium accumulation and depuration at different stages in the life cycle of the cuttlefish *Sepia officinalis*. *Mar. Ecol. Prog. Ser.* 137 (2002) 167-177.
- CARVAHLO, F.P., VILLENEUVE, J.-P., CATTINI, C., TOLOSA, I., MONTENEGRO-GUILLEN, S., LACAYO, M. CRUZ, A. Ecological risk assessment of pesticide residues in coastal lagoons of Nicaragua. *J. Environ. Monit.* 4 (2002) 778-787.
- CARVALHO, F.P., GONZALEZ-FARIAS, F., VILLENEUVE, J.-P., CATTINI, C., HERNANDEZ-GARZA, M., MEE, L.D., FOWLER, S.W. Distribution, Fate and Effects of Pesticide Residues in Tropical Coastal Lagoons of Northwestern Mexico. *Environmental Technology* 23 (2002) 1257-1270.
- CASSI, R., TOLOSA, I., BARTOCCI, J., de MORA, S.J. Organotin speciation analyses in marine biota using sodium tetraethylborate ethylation and gas chromatography with flame photometric detection. *Appl. Organometal. Chem.* 16 (2002) 355-359
- DANIS, B., COTRET, O., TEYSSIE, J.-L., BUSTAMANTE, P., FOWLER, S.W., WARNAU, M. C-14 radiolabelling: a sensitive tool for studying PCB bioaccumulation in echinoderms. In: Environmental changes and Radioactive tracers (J.M. Fernandez & R. Fichez, eds.), IRD Editions, Paris (2002) pp. 59-63.
- DURAND, J.P., GOUDARD, F., BARBOT, C., PIERI, J., FOWLER, S.W., COTRET, O. Ferritin and hemocyanin: ^{210}Po molecular traps in marine fish, oyster and lobster. *Mar. Ecol. Prog. Ser.* 233 (2002) 199-205.
- EGOROV, V.N., POLIKARPOV, G.G., OSVATH, I., STOKOZOV, N.A., GULIN, S.B., MIRZOYEVA, N. Yu. The radioecological response of the Black Sea to contamination with the long-lived radionuclides ^{90}Sr and ^{137}Cs from the Chernobyl nuclear accident. *Mar. Ecol. Journal*, 1,1 (in Russian) (2002) 5-15.
- FERRIER-PAGES, C., BOISSON, F., ALLEMAND, D., TAMBUTTE, E. Kinetics of strontium uptake in the scleractinian coral *Stylophora pistillata*. *Mar. Ecol. Prog. Ser.* 245 (2002) 93-100.
- FILLMAN, G., READMAN, J.W., TOLOSA, I., BARTOCCI, J., VILLENEUVE, J.-P., CATTINI, C. MEE, L.D. Persistent organochlorine residues in sediments from the Black Sea. *Marine Pollution Bulletin* 44 (2002) 122-133.
- FOWLER, S.W. Agrochemicals. *The Gulf Ecosystem: Health and Sustainability* (2002) pp. 193-204.
- FOWLER, S.W. A Mediterranean Mussel Watch for radionuclides: what is the best information that can be gained? *CIESM Workshop Series* 15 (2002) pp. 67-70.
- FOWLER, S.W. Laboratory radiotracer techniques in radioecological studies: Comments on basic procedures. In: Seminar on Detectors and Measurements Techniques (E. Holm, ed.), NKS-53, Chapter 11, Nordisk kernesikkerhedsforskning (NKS), Roskilde, Denmark (2002) pp. 88-99.
- FOWLER, S.W. Non-oil industry. *The Gulf Ecosystem: Health and Sustainability* (2002) pp. 157-172.
- FOWLER, S.W. Role of plankton in controlling fluxes and residence times of metals and radionuclides in the sea. In: Metal and Radionuclide Bioaccumulation in Marine Organisms. *CIESM Workshop Monographs* 19, CIESM, Monaco (2002) pp. 63-39.
- GOKTEPE, B.G., FOWLER, S.W., ERKOL, A.Y., YILMAZ, Y.Z., CELEBI, N., KARAKELLE, B., OZTURK, N. Model Project for the Pollution Investigation of a Lake. The use of Nuclear Techniques for Environmental Risk Assessment, In: International Workshop, Effect of Ionizing Radiation on Ecological Situation of Countries from Caucasian Region and Caspian Sea Basin, Baku, Azerbaijan, 23-25 Oct. (2002).
- GOKTEPE, B.G., KOKSAL, G., OSVATH, I., GUNGOR, N., GUNGOR, E., KOSE, A., KUCUKCEZZAR, R., VARINLIOALU, A., FOWLER, S.W., ERKOL, A.Y., KARAKELLE, B. Radioactivity Monitoring of the Turkish Black Sea coast as a part of the IAEA Model Project "Marine Environmental Assessment of the Black Sea Region, Nuclear Techniques for the Environmental Management of Water Resources in Turkey", In: II Eurasian Conference on Nuclear Science and its Application, Almaty, Republic of Kazakhstan, ISBN-9185-2-X, 16-19 September (2002) pp.11-13.
- GULIN, S.B., POLIKARPOV, G.G., OSVATH, I., MARTIN, J.-M. Geochromological reconstruction of multi-annual ^{137}Cs input from mountainous and lowland watersheds to the Black Sea and comparison of buffer capacities of the catchment basins. Reports of the National Academy of Sciences of Ukraine, 6, (in Russian) (2002) pp. 195-199.

- HONG, G.H., KIM, Y.I., LEE, S.-H., COOPER, L.W., CHOE, S.M., TKALIN, A.V., LEE, T., KIM, S.H.CHUNG, C.S., HIROSE, K. $^{239+240}\text{Pu}$ and ^{137}Cs concentrations for zooplankton and nekton in the Northwest Pacific and Antarctic Oceans (1993-1996). *Marine Pollution Bulletin* 44 (2002) pp. 660-665.
- IAEA-MEL. Marine Radioactivity. UN Atlas of the Oceans. www.oceansatlas.org (2002).
- ITO, T., LIVINGSTON, H.D., POVINEC, P.P. Water profile time series of ^{90}Sr , ^{137}Cs and $^{239,240}\text{Pu}$ in the NW Pacific Ocean. In: Proc. Int. Conf. on Study of Environmental Change using Isotope Techniques, Vienna, 23-27 April 2001. IAEA, Vienna (2002) pp. 500-501.
- KERSHAW, P.J., LIVINGSTON, H.D., POVINEC, P., HELDAL, H-E. Contrasting behaviour of artificial radionuclides in the Pacific and other ocean basins: radionuclides as tracers of environmental change? *Environmental Changes and Radioactive Tracers* (2002) pp. 436-447.
- KONTAR, E.A., BURNETT, W.C., POVINEC, P.P. Submarine groundwater discharge and its influence on hydrological trends in the Mediterranean Sea. In: Tracking long-term hydrological change in the Mediterranean Sea. CIESM Workshop, Monaco 22-24 April 2002. CIESM Workshop Series 16. (2002) pp. 109-113.
- LA ROSA, J., GASTAUD, J., LEE, S.-H., LEVY, I., WYSE, E. Recent Developments in Analysis of Transuranics (Np, Pu, Am) in Seawater. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002), CD-ROM.
- LA ROSA, J., OREGIONI, B., LIONG WEE KWONG, L., LEE, S.-H., GASTAUD, J., LEVY, I., POVINEC, P., Approaches to ^{90}Sr determination in marine environmental materials. *Radioprotection – Colloques*, volume 37, C1 (2002) pp.921-925.
- LAISSAOUI, A., MULSOW, S., BENMANSOUR, M., LA ROSA, J.J., IBNMAJAH, M. A sensitive method based on HDEHP extraction and LSS for the determination of ^{90}Sr in solid samples. *J. Radionanal. & Nucl. Chem.* 253, 2 (2002) 335-337.
- LEE, S.-H., PHAM, M.K., POVINEC, P.P. Temporal variations of radionuclides in the precipitation over Monaco. In: Proc. Int. Conf. on Study of Environmental Change using Isotope Techniques, Vienna, 23-27 April 2001. IAEA, Vienna (2002) pp. 498-499.
- LEE, S.H., PHAM, M-K., POVINEC, P. Radionuclide variations in the air over Monaco. *J. Radionanal. & Nucl. Chem.* 254, 3 (2002) 445-453.
- LEE, S-H., LA ROSA, J., GASTAUD, J., POVINEC, P., WYSE, E. The development of sequential separation methods for analysis of actinides in sediment and biological materials using anion exchange resins and extraction chromatography. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept. 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002), CD-ROM.
- LIVINGSTON, H.D., POVINEC, P.P. A Millennium Perspective on the Contribution of Global Fallout Radionuclides to Ocean Science. *Health Physics* 82, 5 (2002) 656-668.
- MIGON, C., SANDRONI, V., MARTY, J.-C., GASSER, B., MIQUEL, J.-C. Transfer of atmospheric matter through the euphotic layer in the northwestern Mediterranean: seasonal pattern and driving forces. *Deep-sea Research II* 49 (2002) pp. 2125-2141.
- MULSOW, S., POVINEC, P.P. Mixing models (advection/diffusion/non-local exchange) and ^{210}Pb sediment profiles from a wide range of marine sediments. In: *Environmental Changes and Radioactive Tracers* (2002) pp. 175-186.
- MULSOW, S., POVINEC, P.P., SOMAYAJULU, B.L.K. Arabian Sea GEOSECS stations revisited: Tracer-depth profiles reveal temporal variations? In: Proc. Int. Conf. on Study of Environmental Change using Isotope Techniques, Vienna, 23-27 April 2001. IAEA, Vienna (2002) pp. 496-497.
- NAKANO, M., POVINEC, P.P. Ocean General Circulation Model for Studying the Dispersion of Radionuclides in the Global Ocean. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002) pp. 451-454.
- NIELSEN, S.P., Hou, X., KEITH-ROACH, M., MITCHELL, P., POVINEC, P., SANCHEZ, A., GERCHIKOV, M. Marina II Project: Collation and analysis of information on environmental measurements of radionuclides and critical group exposures. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002) pp. 552-556.
- OREGIONI, B., GASTAUD, J., PHAM, M.K., POVINEC, P.P. Caspian Sea water balance and dynamics studies using anthropogenic radionuclides: implications for environmental changes. In: Proc. Int. Conf. on Study of Environmental Change using Isotope Techniques, Vienna, 23-27 April 2001. IAEA, Vienna (2002) pp. 494-495.

- OSVATH, I., POVINEC, P., LIVINGSTON, H.D., RYAN, T.P., MULSOW, S., COMANDUCCI, J. -F. *In situ* monitoring of radioactivity in seawater of the NW Irish Sea. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002), CD-ROM.
- PHAM, M-K., POVINEC, P.P., LA ROSA, J., GASTAUD, J., OREGIONI, B. Recent Intercomparison Exercises for the Analysis of Radionuclides in the Marine Environment. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002) pp.477-480.
- POVINEC, P.P., AARKROG, A., BUESSELER, K.O., DELFANTI, R., HIROSE, K., HONG, G-H., ITO, T., LIVINGSTON, H.D., NIES, H., NOSHKIN, V.E., SHIMA, S., TOGAWA, O. Worldwide Marine Radioactivity Studies (WOMARS). In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002) pp. 569-572.
- POVINEC, P.P., BADIE, C., BAEZA, A., BARCI-FUNEL, G., BERGAN, T.D., BOJANOWSKI, R., BURNETT, W., EIKENBERG, J., FIFIELD, L.K., SERRADELL, V., GASTAUD, J., GORONCY, I., HERRMANN, J., HOTCHKIS, M.A.C., IKAHEIMONEN, T.K., JAKOBSON, E., KALIMBADJAN, J., LA ROSA, J.J., LEE, S-H., LIONG WEE KWONG, L., LUENG, W.M., NIELSEN, S.P., NOUREDDINE, A., PHAM, M.K., ROHOU, J-N., SANCHEZ-CABEZA, A., SUOMELA, J., SUPLINSKA, M., WYSE, E. Certified reference material for radionuclides in seawater IAEA-381 (Irish Sea Water). *J. Radioanal. & Nucl. Chem.* 251, 3 (2002) pp. 369-374.
- POVINEC, P.P., COMANDUCCI, J-F., LEVY, I. IAEA-MEL's Underground Laboratory for the Analysis of Radionuclides in the Environment at Very Low Levels. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002).
- POVINEC, P.P., GASTAUD, J., SIVO, A. Corals – Isotopic archives of marine environmental change. In: Proc. Int. Conf. on Study of Environmental Change using Isotope Techniques, Vienna, 23-27 April 2001. IAEA, Vienna (2002) pp. 502-503.
- POVINEC, P.P., LA ROSA, J.J., LEE, S-H., WYSE, E. New developments in radiometrics and mass spectrometry methods for radionuclide analysis of environmental samples. In: Proc. Int. Conf. on Study of Environmental Change using Isotope Techniques, Vienna, 23-27 April 2001. IAEA, Vienna (2002) pp. 492-493.
- POVINEC, P.P., OREGIONI, B., GASTAUD, J. Environmental Change Studies in the Caspian Sea and the North-East Atlantic Ocean. In: Proc. Int. Conf. on Study of Environmental Change using Isotope Techniques, Vienna, 23-27 April 2001. IAEA, Vienna (2002) pp. 140-143.
- READMAN, J.W., FILLMANN, G., TOLOSA, I., BARTOCCI, J., VILLENEUVE, J.-P., CATTINI, C. MEE, L.D. Petroleum and PAH contamination of the Black Sea. *Marine Pollution Bulletin* 44 (2002) 48-62.
- SADIQ, M., SAEED, T., FOWLER, S.W. Seafood Contamination. *The Gulf Ecosystem: Health and Sustainability* (2002) pp. 327-351.
- STEMMANN, L., GORSKY, G., MARTY, J.-C., PICHERAL, M., MIQUEL, J.-C. Four-year study of large-particle vertical distribution (0-1000m) in the NW Mediterranean in relation to hydrology, phytoplankton, and vertical flux. *Deep-sea Research II* 49 (2002) pp. 2143-2162.
- VILLENEUVE, J.-P., de MORA, S.J., CATTINI, C. Global Intercomparison for the Determination of Chlorinated Pesticides, PCBs and Petroleum Hydrocarbons in Sediment Sample IAEA-417. *Environmental Technology* 23 (2002) 1203-1217.
- WARNAU, M. Bioaccumulation of heavy metals and radionuclides in the *Posidonia oceanica* meadow, an endemic Mediterranean ecosystem. In: Metal and radionuclide bioaccumulation in marine organisms. *CIESM Workshop Monographs* 19, CIESM, Monaco (2002) pp. 59-61.
- WARNAU, M., ROULEAU, C., COTRET, O., FOWLER, S.W., TEYSSIE, J.-L. Use of radioisotopic techniques to investigate trophic transfer of metals and radionuclides in tropical fish. In: Proc. Int. Conf. on Radioactivity in the Environment, 1-5 Sept 2002, Monaco (Eds P. Borretzen, T. Jolle, P. Strand). NRPA, Norway (2002) pp. 441.

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