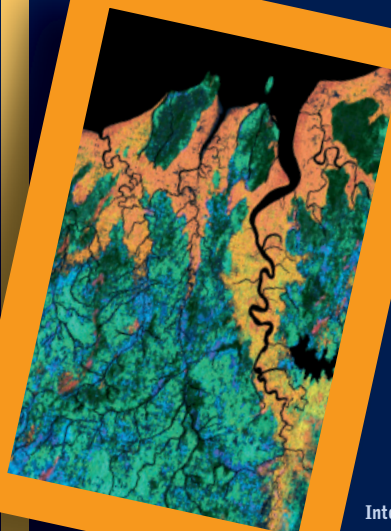


INTERNATIONAL CONFERENCE ON ENVIRONMENTAL RADIOACTIVITY

From Measurements and Assessments to Regulation

23 – 27 April 2007
Vienna, Austria

PROGRAMME



Organized by the

International Atomic
Energy Agency



IAEA

In cooperation with the

United Nations
Scientific Committee on
the Effects of Atomic
Radiation (UNSCEAR)



UNSCEAR

South Pacific Environmental
Radioactivity Association (SPERA)



National Food Investigation
Institute, Hungary (NFI)



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Belgian Nuclear Research Centre
(SCK•CEN)



**International Conference on
Environmental Radioactivity:
From Measurements and
Assessments to Regulation**

**Vienna International Centre (VIC)
Austria**

23 – 27 April 2007

**FINAL
PROGRAMME**

President of the Conference:

H.G. Paretzke, Director
GSF – Institute of Radiation Protection
Neuherberg, Germany

Programme Committee:

A. Bollhöfer	Australia
E.R.R. Rochedo	Brazil
H. Yonehara	Japan
M.E. Clark	USA
P. Martin	IAEA
D. Louvat	IAEA
U. Sansone	IAEA
D. Telleria	IAEA

IAEA Secretariat:

Scientific Secretary: P. Martin
Conference Coordinator: J. Zellinger
Editors: G. Linsley, P. Martin
Secretarial Support: K. Will

Location of the Conference:

International Atomic Energy Agency
Vienna International Centre (VIC)
Building C, 4th floor
IAEA Boardroom (main sessions)
Room C07IV (parallel sessions)
Wagramer Strasse 5
A-1400 Vienna, Austria

Tel.: (+43 1) 2600 21336
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Working Language: English

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

TIMETABLE

Sunday, 22 April 2007

16:00–18:00 Registration Checkpoint 1

Monday, 23 April 2007

08:00 Registration Checkpoint 1

09:30–10:30 Opening Session

10:30–11:00 Coffee/Tea Break

11:00–12:30 Session 1 Regulation – I

12:30–14:00 Lunch Break

14:00–15:30 Session 1 (cont) Regulation – II

15:30–17:30 Coffee/Tea and

Poster session A

Tuesday, 24 April 2007

09:00–10:30 Session 2 Sampling – I

10:30–11:00 Coffee/Tea Break

11:00–12:30 Session 2 (cont) Sampling – II

12:30–14:00 Lunch Break

14:00–15:30 Session 3 Measurement – I

15:30–16:00 Coffee/Tea Break

16:00–17:30 Session 3 (cont) Measurement – II

18:00–19:00 Reception

Wednesday, 25 April 2007

09:00–10:30 Session 3 (cont) Measurement – III

10:30–11:00 Coffee/Tea Break

11:00–12:30 Session 4 Monitoring – I

(parallel) Session 5 Quality – I

12:30–14:00 Lunch Break

14:00–15:30 Session 4 (cont) Monitoring – II

(parallel) Session 5 (cont) Quality – II

15:30–17:30 Coffee/Tea and

Poster session B

Thursday, 26 April 2007

09:00–10:30 Session 4 (cont) Monitoring – III

10:30–11:00 Coffee/Tea Break

11:00–12:30 Session 6 Modelling & Assessment – I

12:30–14:00 Lunch Break

14:00–15:30 Session 6 (cont) Modelling & Assessment – II

15:30–16:00 Coffee/Tea Break

16:00–17:30 Session 6 (cont) Modelling & Assessment – III

Friday, 27 April 2007

09:00–10:00 Session 6 (cont) Modelling & Assessment – IV

10:00–10:30 Coffee/Tea Break

10:30–12:30 Final Session Chairpersons' summaries

President's findings

Closing of the Conference

Display of Posters:

Session A: Monday a.m. – Tuesday p.m.,
23–24 April 2007

Session B: Wednesday a.m. – Friday a.m.,
25–27 April 2007

SUNDAY, 22 APRIL 2007

16:00–18:00 **Registration and distribution of
Conference material**

MONDAY, 23 APRIL 2007

08:00 **Registration and distribution of
Conference material**

09:30–10:30 **OPENING SESSION**

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

H.G. Paretzke, Germany
President of the Conference

10:30–11:00 Coffee/Tea Break

11:00–12:30 **SESSION 1:
Regulation – I**

Chair: **A. Sugier, France**
Rapporteur: **D. Louvat, IAEA**

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
001 (invited)	M. Balonov	Russian Federation	Exposures from environmental radioactivity: International Safety Standards
003	A.A. Sarkisov I.I. Linge S.V. Kazakov S.V. Panchenko E.A. Savelieva I.L. Abalkina	Russian Federation	Environmental radioactivity studies and regulatory issues
004	B. Kanyár G. Volent K. Tóth	Hungary	Elevated radioactive discharges below emergency levels
006	M. Iles	Australia	Developing an integrated framework for deriving closure criteria for radiologically contaminated soils at Ranger uranium mine

12:30–14:00 Lunch Break

14:00–15:30

**SESSION 1 (cont):
Regulation – II**

Chair:

A. Sugier, France

Rapporteur:

D. Louvat, IAEA

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
002 (invited)	E.R.R. Rochedo D.C. Lauria	Brazil	International vs. national regulations – Cares and trends
007	F. Bochicchio	Italy	The radon issue: considerations on regulation approaches and exposure evaluations on the basis of recent data on the lung cancer risk
008	M. García-Talavera M. Martinez J.L. Matarranz R. Salas I. Serrano, <i>et al.</i>	Spain	Setting radon specific release criteria and demonstrating compliance for land affected by NORM
009	A.I. Kryshev I.I. Kryshev K.D. Badalian T.G. Sazykina	Russian Federation	Assessment of permissible levels of radionuclide concentrations in soil for different types of land-use

15:30–17:30

**POSTER SESSION A
Regulation – Sampling –
Measurement – Quality**

TUESDAY, 24 APRIL 2007**09:00–10:30** **SESSION 2:
Sampling – I****Chairperson:** **M. Belli, Italy**
Rapporteur: **A. Bollhöfer, Australia**

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
010 (invited)	E.M. Scott	UK	Choice and criteria for selection of sampling strategies in environmental radioactivity monitoring
012	M. Cooper W. Plastino	CTBTO Italy	Environmental radioactivity monitoring for the Comprehensive Nuclear-Test-Ban Treaty Organization – On Site Inspection Division: Sampling methodologies and field data
013	R. Rusconi M.T. Cazzaniga M. Forte G. Sgorbati P. Badalamenti, <i>et al.</i>	Italy	High sensitivity monitoring of artificial radionuclides in the atmosphere. Sampling methodologies, uncertainty assessment and results
014	P. de Zorzi S. Barbizzi M. Belli A. Fajgelj Z. Jeran, <i>et al.</i>	Italy IAEA Slovenia	A soil sampling reference site: the challenge in defining reference material for sampling
015	E.R.R. Rochedo	Brazil	Standardizing measurement, sampling and reporting for public exposure assessments
10:30–11:00	Coffee/Tea Break		

11:00–12:30 **SESSION 2 (cont):
Sampling – II**

Chairperson: **M. Belli, Italy**
Rapporteur: **A. Bollhöfer, Australia**

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
011 (invited)	M. van der Perk P. de Zorzi S. Barbizzi M. Belli A. Fajgelj, <i>et al.</i>	Netherlands Italy IAEA	The effect of short-range spatial variability on soil sampling uncertainty
016	S. Barbizzi A. Pati	Italy	Sampling in freshwater environments: the role of different techniques and spatial variability on final data
017	J.A. Sanchez-Cabeza M. Eriksson J. Gastaud S.H. Lee I. Levy-Palomo, et al.	IAEA	Marine anthropogenic radiotracers in the Southern Hemisphere: new sampling and analytical strategies
019	C. Tsabaris	Greece	Monitoring natural and artificial radioactivity in Aegean Sea using floating measuring systems
12:30–14:00	Lunch Break		

14:00–15:30

**SESSION 3:
Measurement – I**

Chair:

M. Betti, European Commission

Rapporteur:

H. Yonehara, Japan

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
020 (invited)	M. Schwaiger R. Engelbrecht	Austria	State of the Art of standard methods used for environmental radioactivity monitoring
021	C.M. Marianno J. Essex	United States	The ability of the United States' Federal Radiological Monitoring and Assessment Center to collect and disseminate environmental measurements during radiological emergencies
022	D.I. Godfrey-Smith S.M. Khanna	Canada	Optically Stimulated Luminescence: A unique opportunity for low dose forensic dosimetry of advanced materials
023	R. Lindsay R.T. Newman W.J. Speelman	South Africa	A study of airborne radon levels in Paarl houses (South Africa) and associated source terms, using electret ion-chambers and gamma-ray spectrometry
024	C. Nuccetelli	Italy	In situ gamma spectroscopy in environmental research and monitoring
15:30–16:00	Coffee/Tea Break		

16:00–17:30

**SESSION 3 (cont):
Measurement – II**

Chair:

M. Betti, European Commission

Rapporteur:

H. Yonehara, Japan

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
025	A. Bollhöfer K. Pfitzner P. Martin B. Ryan D.R. Jones M. Fawcett	Australia IAEA Australia	High spatial resolution airborne gamma survey of the abandoned Sleisbeck uranium mine, Australia
027	N. Rabesiranana M. Rasolonirina F. Terina A. F. Solonjara R. Andriambololona	Madagascar	Top soil radioactivity assessment in a high natural radiation background area: the case of Vinankarena, Antsirabe – Madagascar
028	S.A. Talha R. Lindsay R.T. Newman R.J. De Meijer I.N. Hlatshwayo A.K. Mohanty	Sudan South Africa Netherlands South Africa	Gamma-ray spectrometry of radon in water and the role of radon to representatively sample aquifers
029	A. Vargas D. Arnold X. Ortega C. Parages	Spain	Influence of natural radioactive aerosols on artificial radioactivity detection in the aerosol monitor at the Spanish surveillance networks
030	N.H. Hermanspahn J.G. Decaillon K.M. Matthews	New Zealand	A fast screening method for assessing contamination in soils and other solid materials

18:00–19:00

Reception hosted by the IAEA

WEDNESDAY, 25 APRIL 2007

09:00–10:30 **Session 3 (cont):
Measurement – III**

Chair: **M. Betti, European Commission**
Rapporteur: **H. Yonehara, Japan**

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
031	S. Sdraulig R. Tinker S. Solomon R. O'Brien R. Franich P. Johnston	Australia	In-vitro lung dissolution studies of uranium bearing material
032	B. Varga S. Tarján	Hungary	Determination of Pu-241 in the environmental samples
033	B. Boulet C. Vivien N. Cariou C. Aubert C. Cossonnet R. Gurriaran	France	Use of a new chemical tracer to measure Sr-90 activity in the environment
034	M.A. Amr N.F. Zahran A.I. Helal	Egypt	Measurement of Ra-226 in sand filters of underground water treatment stations by ICP-MS
035	J. Carrazana Gonzalez I.M. Fernandez E.C. Ferrera G.R. Castro	Cuba	Determination of radionuclides in environmental samples at CPHR: traceability and uncertainty calculation
10:30–11:00	Coffee/Tea Break		

11:00–12:30

**SESSION 4:
Monitoring – I
(in parallel with session 5)**

Chair:

M. Crick, UNSCEAR

Rapporteur:

E.R.R. Rochedo, Brazil

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
036	F. Hardeman H. Vandenhove	Belgium	Criteria of importance for the definition of an adequate radiological surveillance programme
037	P. Kenny L. Dyer E.L. Hoffmann L. Rudenas J. Ferris	Australia	Challenges in airborne effluent compliance monitoring for OPAL, ANSTO's replacement research reactor (obtaining meaningful airborne emission data in the presence of interfering sources)
038	D.C. Lauria N.S.F. Martins M.L.H. Vasconcellos R. Zenaro S.S. Peres	Brazil	Joint Sampling Program – checking data of environmental monitoring control
039	M.J. Madruga	Portugal	Environmental radioactivity monitoring in Portugal
041	F.J. Maringer H. Kaineder S. Sperker	Austria	Standards and experience in radon measurement and regulation of radon mitigation in Austria
043	A.A.A. Osman I. Salih I.A. Shaddad S.El Din M.B. Siddeeg, <i>et al.</i>	Sudan	Investigation of natural radioactivity levels in water around Kadugli

11:00–12:30

**SESSION 5:
Quality – I
(in parallel with session 4)**

**Chair:
Rapporteur:**

**M. Scott, UK
S. Tarjan, Hungary**

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
056	P. de Zorzi S. Barbizzi M. Belli R. Mufato G. Sartori G. Stocchero	Italy	Soil sampling strategies: evaluation of different approaches
057	A.R. Bhatt	USA	U.S. DOE Laboratory Accreditation Program Bioassay
058	M. Zähringer	Germany	Contributions to the development and quality control of gamma-ray spectrum analysis for atmospheric radioactivity measurements from the global radionuclide monitoring network for the Comprehensive Nuclear-Test-Ban Treaty
085	W. Zhang K. Ungar I. Hoffman	Canada	Uncertainties of gamma-peak identification and analysis in particulate air-filter environment radionuclide measurement
059	A. Fajgelj R. Al Merey M. Belli M.J. Bragança A.F. Clain, <i>et al.</i>	IAEA Syria Italy Brazil	Metrological upgrade of the IAEA reference materials of terrestrial origin
060	T. Altzitzoglou A. Bohnstedt	EC	Characterisation of the IAEA-152 milk powder intercomparison material for radioactivity with assigned values traceable to the SI units
12:30–14:00	Lunch Break		

14:00–15:30

**SESSION 4 (cont):
Monitoring – II
(in parallel with session 5)**

Chair:

M. Crick, UNSCEAR

Rapporteur:

E.R.R. Rochedo, Brazil

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
044	B Porntepkasemsan K. Srisuksawad	Thailand	Assessment of Ra-226 age-dependent dose from water intake
045	C. Nuccetelli S. Risica	Italy	The thorium series in the environment: measurement, dose assessment and regulation
046	B. Michalik	Poland	TENORM impact into the environment: the complete environmental risk assessment on the example of areas contaminated due to mining activity
047	R. Sidhu A.H. Haugen	Norway	Radiological mapping of the area around an old niobium mine and treatment plant contaminated with thorium and uranium
048	D. Iskandar Bunawas Syarbaini	Indonesia	Determination of the fraction of radon and thoron emanation on the NORM-contaminated residues
050	R.M. Tripathi V.N. Jha A.H. Khan V.D. Puranik	India	Assessment of environmental radioactivity at uranium mining, processing and tailings management facility at Juduguda, India

14:00–15:30

**SESSION 5 (cont):
Quality – II
(in parallel with session 4)**

Chair:

M. Scott, UK

Rapporteur:

S. Tarjan, Hungary

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
061	J. Feichtinger K. Horrak	Austria	First results and lessons learned of the international measurement campaign ISIS07
062	F. Durec M. Betti A. Durecova	Slovakia Germany Slovakia	Intercomparison exercise at the Dudvah's river banks
063	M.K. Pham J.A. Sanchez-Cabeza P.P. Povinec K. Andor D. Arnold, <i>et al.</i>	IAEA Hungary Germany	Certified reference material for radionuclides in sediment sample IAEA-385 (Irish Sea sediment)
064	A. Shakhashiro <i>et al.</i>	IAEA	New IAEA-372 certified reference material for Cs-137 and K-40
065	A. Shakhashiro A. Trinkl U. Sansone T. Benesch	IAEA	The IAEA "ALMERA Network" Proficiency Test on the determination of gamma emitting radionuclides: A test of results comparability

15:30–17:30

**POSTER SESSION B:
Monitoring – Modelling and Assessment**

THURSDAY, 26 APRIL 2007

09:00–10:30 **SESSION 4 (cont):
Monitoring – III**

Chair: **M. Crick, UNSCEAR**
Rapporteur: **E.R.R. Rochedo, Brazil**

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
051	D. de Azevedo Py Jr W. de Souza Pereira R.R. de Carvalho	Brazil	Radiological environmental control of the Brazilian Uranium Mine
052	P.R. Danesi J. Moreno M. Makarewicz D. Louvat	IAEA	Radionuclide concentrations and estimated doses at the former French nuclear weapons test sites in Algeria
053	K. Hirose Y. Igarashi M. Aoyama	Japan	50 years records of atmospheric deposition of long-lived anthropogenic radionuclides in Japan
054	M.C. Jiménez-Ramos I. Vioque S. Hurtado R. Garcia-Tenorio M. Garcia León	Spain	Levels, distribution and bioavailability of transuranic elements released in the Palomares accident (Spain)
055	J. Takada	Japan	Dose prediction in Japan for nuclear test explosions in North Korea
173	P.P. Povinec A. Šivo J. Šimon K. Holý M. Richtáriková	Slovakia	Impact of Slovak nuclear power plants on radiocarbon concentration in the atmosphere - 40 years of investigations
10:30–11:00	Coffee/Tea Break		

11:00–12:30

**SESSION 6:
Modelling and Assessment – I**

Chairperson: A. Gonzalez, Argentina
Rapporteur: Y. Thiry, Belgium

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
066	Ph. Calmon S. Fesenko G. Voigt	France IAEA	Major improvements in the revision of TRS-364
067	T. Yankovich J. Koarashi P.A. Davis	Canada Japan Canada	Testing environmental tritium and C-14 models in the EMRAS program
068	P. Krajewski M Ammann M. Bartusková C. Duffa V. Filistovic, <i>et al.</i>	Poland Finland Czech Republic France Lithuania	Validation of dosimetry models and assessment of the countermeasures effectiveness using data from Chernobyl I-131 releases
069	L. Monte P. Boyer J.E. Brittain N. Goutal R. Heling, <i>et al.</i>	Italy France Norway France Netherlands	Radioecological modelling in aquatic systems: the way forward
070	K.M. Thiessen B. Batandjjeva K.G. Andersson A. Arkhipov T.W. Charnock, <i>et al.</i>	USA Austria Denmark Ukraine UK	Improvement of modelling capabilities for assessing urban contamination: The EMRAS Urban Remediation Working Group
12:30–14:00	Lunch Break		

14:00–15:30

**SESSION 6 (cont):
Modelling and Assessment – II**

Chairperson:
Rapporteur:

A. Gonzalez, Argentina
Y. Thiry, Belgium

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
071	N.A. Beresford M. Balonov K. Beaugelin-Seiller J. Brown D. Copplestone, <i>et al.</i>	UK Austria France Norway UK	An international comparison of models and approaches for the estimation of radiological exposure to non-human biota
238	R.S. O'Brien P.W. Waggitt V. Koukoulidou D Pérez Sánchez J. Horyna, <i>et al.</i>	Australia IAEA Greece Belgium Spain	Modelling the behaviour of NORM in the environment: The EMRAS NORM Working Group
072	G. Kirchner M. Steiner	Germany	Uncertainties in radioecological assessment models – their nature and approaches to reduce them
073	F. D'Alberty F. D'Amati	EC	The role of the environmental modelling in the definition of a discharge formula for a nuclear site: the JRC Ispra case
074	H. Vandenhove M. Van Hees	Belgium	Predicting uranium and radium availability and plant uptake from soil properties
15:30–16:00	Coffee/Tea Break		

16:00–17:30

**SESSION 6 (cont):
Modelling and Assessment – III**

Chairperson:

A. Gonzalez, Argentina

Rapporteur:

Y. Thiry, Belgium

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Poster</i>
075	S. Fesenko A. Chupov P. Jacob I. Bogdevich V. Kashparov, <i>et al.</i>	IAEA Germany Belarus Ukraine	Countermeasure strategies in the long term after the Chernobyl accident
077	A.T.K. Ikonen L. Aro V. Leppänen	Finland	Forecasts of future terrain and vegetation types at Olkiluoto and implications to spatial and temporal aspects of biosphere modelling
078	H. Velasco J.J. Ayub U. Sansone	Argentina IAEA	Radionuclide transfer factor from soil to plant in tropical and subtropical environments: statistical analysis for different plant/soil combinations
079	T. Hosseini A. Ghasemi M. Asefi M.V. Moghaddam Sedaghati-zadeh M. Karimi	Iran, Islamic Rep. of	Estimation of annual effective dose from ingestion of planted rice samples in Iran
080	J. Twining J. Ferris	Australia	Application of ERICA outputs and AQUARISK to evaluate radioecological risk of effluents from a nuclear site

FRIDAY, 27 APRIL 2007

09:00–10:00 **SESSION 6:
Modelling and Assessment – IV**

Chairperson: **A. Gonzalez, Argentina**
Rapporteur: **Y. Thiry, Belgium**

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
081	A. Punt M. Wood D. Rose J. Tittley D. Copplestone	UK	Monitoring radioiodine discharges to sewer (from source to sea)
082	G. Wollel	Ethiopia	Evaluation of the assessment and regulatory utilization of environmental radioactivity, detection and measurement of levels of uranium and its daughters at various locations in Ethiopia
084	A. Rantavaara	Finland	Assessment of dietary intake from environmental radionuclides

10:00–10:30 Coffee/Tea Break

10:30–12:30 **FINAL SESSION**

T. Taniguchi, IAEA
Deputy Director General
Head of Department of
Nuclear Safety and Security

H.G. Paretzke, Germany
President of the Conference

Chairpersons' summaries
President's findings
Closing of the Conference

POSTER SESSION A

15:30–17:30 Monday, 23 April 2007

TOPICS: Regulation
Sampling
Measurement
Quality
Monitoring

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
Regulation			
088P	M.M. El-Baroudy	Egypt	Environmental protection legislations against radioactive pollution in Egypt
090P	T. Hjerpe A.T.K. Ikonen	Finland	Methodology for utilising multi-dimensional uncertainty analysis in knowledge quality assessment
091P	G.J. Hunt K.S. Leonard C. Gitzinger A. Janssens A. Godeanu-Metz E. Henrich	UK Luxembourg	Article-35 of the Euratom Treaty: Overview of national radioactive discharge and environmental monitoring requirements in the European Union
093P	V. Koukoulidou C. Potiriadis K. Kehagia V. Kamenopoulou	Greece	Work activities with increased natural radiation exposure: Regulatory framework in phosphate industry
094P	D.C. Lauria E.R.R. Rochedo	Brazil	Lack of data of 228Ra in environmental samples - Are we giving it enough priority?
097P	E.R.R. Rochedo L.M.H. Vasconcellos	Brazil	Environmental regulatory control of uranium mining in a high background area in Brazil
099P	H. Yonehara K. Iwaoka H. Tabe Y. Kobayashi S. Tokonami	Japan	Current status of industrial use of NORMs and policy on the regulation in Japan
242P	N. Dumitrescu D. Stiopol J. Vamesu	Romania	Legal Romanian framework on closing and decommissioning uranium mining and milling facilities and environmental rehabilitation. Case study: Decommissioning of uranium mines and environmental rehabilitation in Banat area of Romania
Sampling			
101P	S. Rosamilia S. Gaudino	Italy	Sampling design to identify past airborne contamination of depleted uranium
102P	B. Zlobenko K. Zhebrowska Yu. Fedorenko	Ukraine	Sampling strategies for investigating urbanized territories after a Radiological Dispersal Event

235P	R. M. Kamenova-Totzeva R. B. Karaivanova V. M. Badulin	Bulgaria	Design of probe sampling in the monitored area around the Repository Site of Novi Han, Bulgaria
Measurement			
026P	J. Fantidis G. Nicolaou N.F. Tsagas	Greece	Localisation and distribution of radioactivity in soil: Solid angle issue
103P	A.F. Clain A.M. Gondin da Fonseca, M.J.C.S. Bragança L. Tahuata E.M.O. Bernardes	Brazil	Comparison between two methods for spiked soil preparation
104P	M. L. Cozzella R. Y. Sibello Hernandez C. Alonso-Hernandez M. Diaz Asencio	Italy Cuba	Determination of plutonium in marine sediments in Cuba Island
106P	D. de Azevedo Py Jr W. de Souza Pereira	Brazil	Sensitivity of radiometric methods
107P	M. Fayez-Hassan M. Abd El Wahab A. Nada	Egypt	Investigation of talcum baby powder by X-ray fluorescence and fast neutron activation techniques
108P	I.M. Fernandez G.R. Castro J. Carrazana Gonzalez E.C. Ferrera N.M. Ricardo	Cuba	Assurance of an adequate handling of test items in the environmental surveillance laboratory
109P	I.M. Fernandez G.R. Castro J. Carrazana Gonzalez E.C. Ferrera N.M. Ricardo	Cuba	Implementation of the ISO/IEC 17025:2005 in the environmental radiological surveillance laboratory at CPHR, Cuba
110P	C. Gascó M. Heras M. Sánchez M. Pozuelo E. Fernández, <i>et al.</i>	Spain	Analytical problems in plutonium, americium, uranium and polonium determination in air filters
112P	C.K. Kim G. Kis-Benedek U. Sansone P. Martin R. Schorn	IAEA	Sequential determination of natural radionuclides for characterization of a phosphogypsum candidate IAEA reference material

113P	C.K. Kim C.S. Kim P. Martin U. Sansone	IAEA	Development of automatic on-line sequential injection system for separation and preconcentration of radionuclides in the environmental samples
114P	A. Komosa J. Orzel S. Michalik	Poland	Study on plutonium distribution between sequentially extracted phases of arable soils
117P	E. Manickam S. Sdraulig R. Tinker	Australia	Method design and validation for the determination of uranium in human urine using high resolution alpha spectrometry
119P	N. Milusheva	Bulgaria	Comparative evaluation of procedures available for determination of Sr-90 in soil
121P	T. Rozhko N. Kudryasheva A. Kuznetsov G. Vydryakova L. Bondareva A. Bolsunovsky	Russia	Effect of low-level α -radiation on bioluminescent assay systems
125P	C. Varlam I. Popescu I. Faurescu D. Dobrinescu	Romania	Establishing routine procedure for environmental tritium concentration at ICIT
239P	L. Lazare C. Bleistein C. Crestey	France	On the use of Ion chromatography applied to radiochemistry - Measurement of Sr-90 and other isotopes within primary coolant of PWR
Quality			
198P	D. Karamanis K. Ioannides K. Stamoulis	Greece	Enhanced natural radioactivity and trace metals in the discharge waters of the major coal-fired power plant in Greece
200P	R. Trevisi S. Tonnarini F. Leonardi	Italy	ISPESL radon measurement laboratory: Experiences and suggestions for future strategies
201P	B. Vilimaite-Silobritiene	Lithuania	Development and optimisation of national radiological monitoring system in Lithuania
233P	M.P. do Rio P.R. Ferreira	Brazil	Quality management systems in regulatory inspection activities
241P	J. Meresova A. Belanova M. Vrskova	Slovakia	The radiological monitoring of water and quality control in radiochemistry laboratory
Monitoring			
040P	T. Andjelic P. Vukotic R. Zekic R. Zizic N. Svrkota, <i>et al.</i>	Montenegro	Radioactivity monitoring program as the base for determination of the maximum permissible activity concentrations in foodstuff

049P	D.A. Klessa A.F. Bollhöfer I. Marshman A.R. Milnes	Australia	Radiation monitoring and dose assessment at Ranger Uranium Mine, Australia, over 25 years: A summary of findings
128P	P. Akhter K. Khan A. Jabbar S.D. Orfi S.S. Ahmad	Pakistan	Monitoring of radioactive air pollutants in the environment of PINSTECH, Islamabad
129P	J. Al-Jundi N. Al-Ahmad	Jordan	Measurements of activity concentrations of natural occurring radionuclides in Jordan phosphogypsum and fertilizers
135P	A.A. Canella W.M. Ferreira M.A.B.C. Menezes	Brazil	Phosphates in agriculture: Increasing the radioactivity in the environment
136P	F.P. Carvalho J.M. Oliveira	Portugal	Uranium series radionuclides in surface and ground waters in uranium mining areas
137P	F.P. Carvalho J.M. Falcao M.M. Leite M. Alarcao E. Cordeiro J. Ribeiro	Portugal	Uranium mines and their residues (MINURAR): Exposure to enhanced levels of radioactivity and toxic metals in a Portuguese population
138P	M. Cindro B. V. Nemec	Slovenia	Comprehensive monitoring of radioactivity in the environment in Slovenia
139P	P. Dale M. Davidson C. Gow	UK	Investigation into NORM contamination on a public beach
141P	D. de Azevedo Py Jr H.A.P. Filho W. de Souza Pereira	Brazil	Growth of Pb-210 activity in water
142P	D. de Azevedo Py Jr W. de Souza Pereira R.F. do Carmo	Brazil	Measurements of Rn-222 exhalation flux at the Brazilian Uranium Mine
143P	F. Dias M.H.T. Taddei	Brazil	Rn-222 determination in drinking water samples in a region with elevated natural radioactivity in Brazil: Comparison between liquid scintillation counting and gamma spectrometry
146P	P.Y. Gan M. Kostor	Malaysia	Use of environmental monitoring data to review compliance to licensing requirements
147P	C.Gascó M.Heras M.Sánchez M.Pozuelo E.Fernández, <i>et al.</i>	Spain	Natural and anthropogenic radionuclides in an urban environment (Madrid)

POSTER SESSION B

15:30–17:30 Wednesday, 25 April 2007

TOPICS: **Monitoring (cont)**
 Modelling and Assessment

<i>No. of Paper IAEA-CN-145/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
Monitoring (cont)			
150P	V. Gruber H Kaineder S. Sperker F.J. Maringer	Austria	Exposure and regulation of natural radionuclides in drinking water in Austria
153P	K. Holý M. Bulko A. Polášková O. Holá M. Müllerová R. Bóhm	Slovakia	Fifteen years of continual monitoring of Rn-222 activity concentration in the Bratislava atmosphere
154P	T. Hosseini A.A. Fathivand H. Barati M. Karimi	Iran	Measurement of natural and artificial radionuclides concentrations in imported foodstuffs in Iran
155P	A.K. Ishak Z. Ahmad N. Mohamed M.W. Yii	Malaysia	Development of Marine Radioactivity Database in Malaysia
157P	K. Kant S.B. Upadhyay	India	Environmental monitoring and dose assessment due to radon/thoron and their progenies in LPG bottling plant
158P	D. Karamanis K. Ioannides K. Stamoulis	Greece	Natural radionuclides in river waters of Greece
159P	N. Kávási T. Vigh J. Somlai G. Szeiler S. Tokonami, <i>et al.</i>	Hungary Japan	Radiological qualification of manganese mud
161P	E. Kostiainen	Finland	Radiation doses from Cs-137 in forest products in Finland
163P	R. Mustonen T.K. Ikäheimonen	Finland	Radiological factors to be taken into account in environmental impact assessment of quarrying and dressing of uranium
164P	S.P. Nielsen	Denmark	Monitoring and assessment of radioactivity in the Baltic Sea coordinated by HELCOM

167P	J. Paatero B. Veleva J. Hatakka M. Buyukay	Finland Bulgaria Finland	Airborne total beta activity in Finland and Bulgaria 1961-2000
168P	G. Pantelić Lj. Javorina V. Vuletić I. Tanasković M. Eremić-Savković	Serbia	Assessment of Cs-137 effective dose due to food consumption in Serbia
170P	Z. Pietrzak-Flis E. Chrzanowski	Poland	Iodine-129 in thyroids of deers in southeastern and northeastern Poland
172P	W. Plastino	Italy	Radon groundwater monitoring as possible indicator of tectonically induced deformation processes
174P	M. Raneli S. Rizzo E. Tomarchio	Italy	Measurement of Be-7 and Pb-210 air activity concentrations and comparison with meteorological variables in surface air at Palermo, Italy
175P	M.L. Romero M. Herranz M. Barrera K. Olondo F. Valiño, <i>et al.</i>	Spain	Distribution and cumulative deposition of Cs-137 in soils from northern Spain
177P	B. Ryan A.F. Bollhöfer P. Martin	Australia IAEA	Uranium in groundwater at a rehabilitated uranium mine in Western Arnhem Land, Australia
178P	M.H. Saad O.M. Mukhtar	Sudan	Evaluation of natural radioactivity in different region in Sudan
181P	O. Saidou	Cameroon	Environmental natural radioactivity measurements by alpha and gamma spectrometry and public dose calculations: application to an uraneous region of North Cameroon
182P	I. Seftelis G. Nicolaou N.F. Tsagas	Greece	Detection of possible clandestine activities through the monitoring of air radioactivity
183P	J. Somlai K. Somlai P. Szabó N. Kávási T. Kovács, et al.	Hungary	Radiation dose originating from radon of workers in the tourist cave of Tapolca (Hungary)
184P	K.C. Stamoulis K.G. Ioannides D.T. Karamanis	Greece	Measurements of H-3 content in river samples and rain samples in North-Western Greece
186P	M. Suplinska Z. Pietrzak-Flis	Poland	Iodine-129 and iodine-127 in bottom sediments of the Baltic Sea
187P	I. Sýkora J. Merešová M. Ješkovský K. Holý	Slovakia	Variation of Bratislava atmosphere aerosols radioactivity

189P	L.Toró S. Mátyási L. Mátyási	Romania	Dating the contamination by equilibrium measurements for the 228Ra daughters
191P	C. Tsabaris W. Plastino G. Eleftheriou M. Laubenstein V. Kapsimalis	Greece Italy Greece Italy Greece	Behavior of radiocesium in sediments and radiometric dating at Thermaikosgulf - North Aegean Sea
192P	K. Vaaramaa L. Aro D. Solatie J. Lehto	Finland	Concentrations of Po-210 and Cs-137 in soil and in wild berries in Finland
193P	I. Vallés A. Camacho I. Serrano X. Ortega S. Blázquez S. Pérez	Spain	Environmental radioactivity in Catalonia (Spain) for the period 2001-2005
194P	A. Várhegyi Z. Gorjánác J. Somlai M. Csóvári S. Tokonami, <i>et al.</i>	Hungary Japan	Uranium remediation in Mecsek: Radiation dose and dosimetrical monitoring of workers and public
197P	J. Ylipieti D. Solatie	Finland	Radiocesium in wild berries and natural herbs in northern Finland
237P	N.K. Shandala M.K. Sneve G.M. Smith N.Ya Novikova I.M. Barraclough, <i>et al.</i>	Russia Norway UK Russia UK	Environmental radioactivity at sites of temporary storage in North-West Russia prior to the beginning major spent fuel removal work

Modelling & Assessment

076P	R. Avila R. Broed H. Ilvesniemi T. Kareinen A. Ikonen L. Aro	Sweden Finland	Model of the long term transfer and accumulation of radionuclides in forests
203P	J.J. Ayub M. Rizzotto J. Toso H. Velasco	Argentina	Cs-137 deposition and vertical migration in soils from Argentina
205P	M.L. Dinis A. Fiúza	Portugal	Models for the transfer of radionuclides in the food chain
206P	M. Franklin H.M. Fernandes	Brazil IAEA	The use of environmental modeling as a tool to subsidize the close-out of uranium mine: the Brazilian experience

207P	R. Gil Castillo J.L. Peralta Vital D. Leyva Bombuse J.C. Benitez	Cuba	Environmental modelling approach for site screening. A study case
208P	A. Giovanetti M.L. Cozzella G. Vanga S. Fesenko	Italy IAEA	Uranium bioaccumulation by the earthworm <i>Eisenia fetida</i>
210P	A.I. Kryshev T.G. Sazykina K.D. Badalian	Russia	Modelling the dose-effect relationships for fish population affected by chronic irradiation
211P	I.I. Kryshev A.I. Kryshev A.V. Nosov A.L. Krylov	Russia	Modelling the radionuclides transfer in the river system Techa - Iset - Tobol - Irtysh - Ob
213P	G.B. Lee S.Y. Bang Y.G. Chung H.S. Cho S.W. Lee	Korea	Determination on food consumption rates for radiological dose assessment of residents around nuclear power plant in Korea
214P	G.B. Lee S.Y. Bang S.W. Lee S.Y. Nam J.H. Yoon Y.G. Chung	Korea	Application of three dimensional ocean circulation model for radiological assessment of nuclear power plant in Korea
218P	L. Mabit E. Fulajitar	IAEA	The use of Cs-137 to assess soil erosion and sedimentation processes: Advantages and limitations
219P	T. Matsubara T. Homma K. Tomita	Japan	Validation of an accident consequence assessment code using fielding data
223P	S. Pan Y. Wang J. Gao R. Zhang Y. Ding	China	Assessment of sedimentation rates from Pb-210 and Cs-137 measurements in the subaqueous delta of the Yangtze River estuary
224P	A. Qwasmeh H.W. Fischer	Germany	Analysis of the vertical migration of Cs-137 in Jordanian soils using the Diffusion Convection Model
225P	R. Saxén	Finland	Cs-137 in freshwater fish - environmental transfer and dose assessment
227P	K Smith C Robinson A T K Ikonen	UK	Development and application of non-human biota assessment methodologies to determine potential environmental effects from a proposed nuclear waste repository

228P	H. Vandenhove L. Sweeck D. Mallants A. Aitkulov O. Sadyrov, <i>et al.</i>	Belgium Kyrgyzstan	Assessment of the radiation exposure in the uranium mining and milling area of Mailuu Suu, Kyrgyzstan
229P	C. Willrodt L. Hornung G. Kirchner	Germany	Uncertainties in realistic exposure assessments
230P	E. Zeiler S. Fesenko H. Sommerer R. Unterweger	IAEA	IAEA Compilation of radioecological models
231P	A.C. Baciu	Romania	Estimations of the external gamma dose rate in nuclear accident events, considering the influence of the receptor height in the proximity area of the source
243P	S.E. Pálsson B.J. Howard	Iceland UK	Use of precipitation data for assessing radionuclide deposition

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1415	Soil Sampling for Environmental Contaminants	2004

OTHER PUBLICATIONS OF RELEVANCE

Guidelines for Drinking-water Quality. Third Edition, Volume 1: Recommendations, WHO, Geneva (2004).

ICRU Report 75 "Sampling for radionuclides in the environment". Journal of the ICRU, Volume 6, No. 1 (2006) ICRU 2005

IUPAC 2005 recommendations "Terminology in soil sampling", Pure and Applied Chemistry, Vol. 77, No. 5 (2006).

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5–9 November, Sydney, Australia

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