



International Conference on
RADIOECOLOGY & ENVIRONMENTAL RADIOACTIVITY
15–20 June 2008, Bergen, Norway

Draft Programme

Oral and Oral Poster presentations

Monday 16 June

ROOM A - IN PLENUM

09.30-10.30 OPENING SESSION

Chairperson's opening remark
WELCOME ADDRESSES
NRPA/IRSN, WHO & IAEA

10.30 to 11.00 : COFFEE

11.00 – 13.00

SESSION “INTRODUCTORY”

- 11.00 – 11.20 **Brit Salbu, Norway**
Challenges in radioecology
- 11.20 – 11.40 **Francois Brechignac, France**
Current challenges to the radiological protection of the environment: arguments for an ecosystem approach
- 11.40 – 12.00 **Britt Marie Drotz Sjöberg, Norway**
The Subjective Risk Factor; On Perception, Communication and Governance
- 12.00 – 12.20 **Paul McDonald, UK**
Environmental modelling of NORM
- 12.20 – 12.40 **Carl-Magnus Larsson, Sweden**
Waste disposal and the recommendations of the ICRP – challenges for radioecology
- 12.40 – 13.00 **Wolfgang Weiss, Germany**
Towards a coherent conceptual framework for emergency preparedness/response and rehabilitation – the application of the new ICRP recommendations

13.00 – 14.30 : LUNCH

14.30 – 16.10 ROOM A

SESSION 1

Emergency Preparedness and Rehabilitation (*parallel Session with TENORM*)

- 14.30 – 14.50 **Finn Ugletveit, Norway**
Developing international cooperation in nuclear and radiological emergency response
- 14.50 – 15.10 **Wolfgang Raskob, Germany**
Objectives and achievements in the first three years of the EURANOS project
- 15.10 – 15.30 **V.K. Popov, Russian Federation**
Elaboration of strategies and criteria of environmental remediation and post-remediation control for radiation legacy facilities
- 15.30 – 15.50 **Alexey Krylov, Russian Federation**
Modelling of consequences of accidental radioactive contamination of gulfs and bays in Murmansk region of Russian Federation
- 15.50 – 16.10 **Eduardo Gallego, Spain**
Long-term management of contaminated freshwater bodies and catchments. Decision making exercise with the MOIRA system

16.10-16.40 : COFFEE

SESSION 1 (continued)

Emergency Preparedness and Rehabilitation (*parallel Session with TENORM*)

- 16.40 – 17.00 **K.G. Andersson, Denmark**
"Dirty bomb" attack in a city area: requirements to estimate consequences of contaminant dispersion
- 17.00 – 17.20 **Charley Yu, USA**
Modeling of the EMRAS Urban Working Group Hypothetical Scenario Using the RESRAD-RDD Methodology
- 17.20 – 17.40 **Thomas Charnock, UK**
Calculating the consequences of recovery, a European Model for Inhabited Areas
- 17.40 – 18.00 **Astrid Liland, Norway**
How long is long-term? Reflections based on 20 years of post-Chernobyl management in Norway

14.30 – 16.10 ROOM B

SESSION 2

TENORM/NORM including Radon (*parallel session with Emergency preparedness and rehabilitation*)

- 14.30 – 14.50 **Fernando P. Carvalho, Portugal**
Accumulation of ^{210}Po and ^{210}Pb in mussels: implications for environmental bio monitoring programmes
- 14.50 – 15.10 **Beatriz Robles, Spain**
The Realistic Dose Concept Applied to Radiological Assessments in NORM Industries
- 15.10 – 15.30 **Anselmo S. Paschoa, Spain**
NORM from the Monazite Cycle and from the Oil and Gas Industry: Problems and tentative solutions
- 15.30 – 15.50 **M. Burkitbayev, Kazakhstan**
The $^{234}\text{u}/^{238}\text{u}$ concentration ratio reflects migration of contaminants from uranium mining areas in Central Asia

15.50 – 16.10 **Engelbrecht, Rudolf, Austria**
Standard Scenarios to Support the Decision-making Process for Clearance of Materials with Elevated Levels of Naturally Occurring Radionuclides

16.10 – 16.40 : COFFEE

16.40 – 19.00 ROOM B

SESSION 2

TENORM/NORM including Radon (parallel session with Emergency Preparedness and Rehabilitation)

16.40 – 17.00 **P.P. Haridasan, India**
Radiological implications of norm in the production of rare-earths compounds

17.00 – 17.20 **Flavio Trotti, Italy**
Doses to the public due to air emissions from a tile factory

17.20 – 17.40 **Klas Gehrcke, Germany**
Background Radon Levels in Germany and How to Take Them into Account in Radiological Evaluations

17.40 – 18.00 **Elena Berezina, Russian Federation**
Spatial and temporal distribution of ²²²Rn concentrations and its fluxes in the lower atmosphere over continental Russia

18.00 – 18.20 **Boguslaw Michalik, Poland**
The European Waste Catalogue – is it a good tool to raise awareness about Technologically Enhanced Naturally Occurring Radioactive Materials?

18.20 – 18.40 **R.M. Tripathi, India**
Assessment of radiation dose around uranium mining complex, Jaduguda, India

18.40 – 19.00 **Shaban Harb, Egypt**
Pb-210 measurements in environmental samples

Tuesday 17-June

09.00 – 11.00 ROOM A

SESSION 1. (Continued) Emergency Preparedness and Rehabilitation

- 09.00 – 09.20 **George J. Ham, UK**
The determination of polonium-210 in urine following the Litvinenko incident
- 09.20 – 09.40 **Franca Carini, Italy**
Can we meet people requirements on food safety after contamination?
- 09.40 – 10.00 **Anne Nisbet, UK**
Decision aiding handbooks for managing contaminated food production systems and inhabited areas in Europe

10.00 – 11.00 ORAL POSTER PRESENTATIONS (10 in total)

Emergency Preparedness and Rehabilitation SESSION 1 (Continued)

Gerada J. Guillén, Spain

Analysis of the potential disadvantages of chemical countermeasures against the transfer of radiocæesium to plants

J.Christian Kaiser, Germany

Correction of model predictions for the radioactive contamination of the environment with data assimilation

Vladimir P. Kiselev, Russian Federation

Enhancement of the radiation monitoring and emergency response system in the Murmansk region

Juhani Lahtinen, Finland

KETALE – a centralised data system for the management of dispersion and dose calculation results

Irina Malátová, Czech Republic

Radioecological Assessments in Iodine Working Group of the Program „IAEA EMRAS“: Analysis of Input Data and Results in Scenario Prague

Paul McGinnity, Ireland

Prompt Simulation of the Transfer of Radioactivity in the Irish Food Chain following a Nuclear Accident

Petr Pecha, Czeck Republic

Assimilation techniques in consequence assessment of accidental radioactivity releases – the way for increase of reliability of predictions

Stelian D. Slavnicu, Romania

Decision support systems and emergency response exercises – lessons and issues

Trevor J.Stocki, Canada

Monte Carlo Simulations of Semi-infinite Clouds of Radioactive Noble Gases

Erik Wirth, Germany

One Environmental Monitoring Strategy for Emergency Situations is Enough

11.00 to 11.30 : COFFEE

11.30 – 13.00 ROOM A

SESSION 3. Radioecology

ORAL POSTER PRESENTATIONS (15 in total)

(parallel session with TENORM/NORM including radon)

Rudolf M. Alexakhin, Russian Federation

Radiation accidents: contribution to radioecological science and ecological lessons

Mykhailo Bondarkov, Ukraine

Half-lives of self-purification for various isotopes in soils of the Chernobyl Exclusion Zone

Clare Bradshaw, Sweden

Distribution and Transfer of Elements in a Coastal Baltic Ecosystem – A Stoichiometric Approach

JoLynn Carroll, Norway

A Return to the Nuclear Waste Dumping Sites in the Bays of Novaya Zemlya

Valérie Devallois, France

Mobility of trace metals in freshwater sediments: a modelling coupling solid-liquid exchanges, biogeochemical reactions and interstitial diffusion

Roberta Guerra, Italy

Short-term sediment dynamics in a littoral area of the North Adriatic Sea (Italy): evidence from ^{234}Th and ^7Be

George J. Ham, UK

Determination of the transfer of tritium to crops fertilised with contaminated sewage sludge

Olivier Masson, France

Recent trends and explanation for airborne ^{137}Cs activity levels increases in France

Arnaud Martin-Garin, France

Selenium (IV) migration in soils: How Abiotic and Biotic soil parameters affect liquid-solid-gaseous distribution in time

Jussi Paatero, Finland

Airborne Lead-210 at Mt. Zeppelin GAW Station, Svalbard 2001-2005

Jørgen Saltbones, Norway

Stratospheric intrusion of radioactive debris after atmospheric nuclear bomb tests at Novaya Zemla

Martin Steiner, Germany

Deer Truffles – The Dominant Source of Radiocaesium Contamination of Wild Boar

Eiliv Steinnes, Norway

Geographical trends in ^{137}Cs fallout from the Chernobyl accident and leaching from natural surface soil in Norway

Frits Van Dorp, Switzerland

Plant uptake of Carbon-14 released from underground disposal of radioactive waste

Tatiana Zotina, Russian Federation

*Accumulation and distribution of ^{241}Am in the biomass of freshwater plant *Elodea canadensis**

13.00 – 14.30 : LUNCH

14.30 – 16.30 ROOM A

SESSION 4. Risk assessment
ORAL POSTER PRESENTATIONS (22 in total)
(parallel session with Arctic Radioecology)

Karine Beaugelin-Seller, France

A common ecological risk assessment on freshwaters for chemical and radiological ecotoxicity: the uranium case

Benoit Besson, France

Radioecological Sensitivity of Permanent Grassland Areas

Robert Broed, Sweden

Analysis of effect of groundwater discharge pattern assumptions and multiple canister failures to potential doses from a spent fuel repository

Amanda Burridge, UK

Proteomic Analysis of Plant Response to Ionising Radiation in the Context of Plant Stress Response

Dan Galeriu, Romania

Accidental release of tritiated water- toward a better radiological assessment

Thomas Hjerpe, Finland

Employing well scenarios as region-specific safety indicators

Ashraf E.M.Khater, Egypt

Radiological Assessment of Narghile Smoking

Anders Löfgren, Sweden

Estimates of naturally occurring pools of Th, U and I in terrestrial catchments of the boreal region in the southeast of Sweden

Catherine Mercat-Rommens, France

Towards a shared method for classifying contaminated territories

Olga Momot, Russian Federation

Health risk assessment method for drinking water containing tritium oxide

Pavel Okatenko, Russian Federation

Assessment of Carcinogenic Risk at the Prolonged Occupational Exposure

S.A. Paskevych, Ukraine

Impact Assessment of Radiological Consequences of Technogenic Activities in Chernobyl Exclusion Zone

Sanjay Premi, India

Natural Background Radiation Dictates Extensive Somatic Structural Polymorphism in the Human Y chromosome

Ivica Prlic, Republic of Croatia

ERICA assessment methodology and tool in nuclear medicine –determining the risk to environment from medical radioisotopes

Adrian G. Punt, UK

Radionuclide partitioning during sewage treatment – a laboratory investigation

Aino Rantavaara, Finland

Radiological impact of using forest biomass for energy and recycling the ash

Natalia Semioshkina, Germany

Thermoluminescence Dosimetry of ⁹⁰Sr in Teeth of the Population Living in the Techa River Area, Southern Urals, Russia

Louis Vandebroek, Belgium

Relevance of Radiocaesium Interception Potential (RIP) on a worldwide scale to assess soil sensitivity to Cs-137 contamination

Sarah Watts, UK

Dynamic modelling for the assessment of radiation impacts on biota, and related extensions of the ERICA assessment methodology

Maryla Wasiolek, USA

Modeling the Inhalation Enhancement Factor in Prospective Radiological Risk Assessment

Iliya V. Yarmoshenko, Russian Federation

Years of life lost assessment for rural population exposed at northern part of East Ural Radioactive Trace

Charley Yu, USA

RESRAD-OFFSITE—A New Member of the RESRAD Family of Codes

09.00 – 11.00 ROOM B

SESSION 2. TENORM/NORM including radon

ORAL POSTER PRESENTATIONS (PART 1) (20 in total)

Jean-Marc Bonzom, France

Role of benthic macro-invertebrate bioturbation on uranium biogeochemistry in freshwater sediments

Thomas Bünger, Germany

Occurrence of Natural Radioactivity in Public Water Supplies in Germany

^{238}U , ^{234}U , ^{235}U , ^{228}Ra , ^{226}Ra , ^{222}Rn , ^{210}Pb , ^{210}Po and Gross- α -Activity Concentration

Charlotte Cazala, France

NORM industrial plants with potential radiological impact on workers and local population: first lessons from the review of available risk assessment studies in France

Nuria Casacuberta, Spain

Fluxes of the U-238-Series Isotopes in the Industrial Production of Dicalcium Phosphate and the Radiological Impact due to the Incorporation to Poultry Diets

Giovanni Colombo, Italy

Evaluation of radiological risk during the activity of removal of sludge with TENORM from crude oil storage tanks and its transport to the treatment/disposal plant

Fernando P. Carvalho, Portugal

Agriculture and soil-to-plant radionuclide transfer in the surroundings of an old uranium mine

Joselene de Oliveira, Brazil

Th-234 vertical profiles at the São Paulo bight as a prospective tracer to estimate export fluxes and particle dynamics

Joselene de Oliveira, Brazil

Survey of natural radioactivity levels at São Paulo coastal area, Brazil

Simona De Zolt, Italy

Radiological Impact to the Public of the Incineration of Oil Sludge of an Italian Oil Company

Marta García-Talavera, Spain

Radiological environmental impact of the phosphate industry in Spain: a regulatory perspective

Rafael García-Tenorio, Spain

Natural radioactivity in aerosols collected in a Norm Industry: radiological implications

Andrey A. Gedeonov, Russian Federation

Uranium-234, uranium-235 and uranium-238 in soil near Siberian Chemical Enterprises (Tomsk-7, Seversk)

Viktor Goliáš, Czech Republic

Short-term radioactive disequilibrium in thermal mineral waters in Karlovy Vary (Carlsbad) spa, Czech Republic

Asaad H. Ismail, Iraq

Analysis of Radon Concentrations in Drinking Water in Erbil Governorate (Iraqi Kurdistan) and its Health Effects

Guogang Jia, Italy

The activity concentrations of ^{238}U , ^{234}U , ^{235}U , ^{232}Th , ^{230}Th , ^{228}Th , ^{226}Ra , ^{228}Ra , ^{224}Ra and ^{210}Po in drinking water and health aspect of the public in Italy due to the water intakes of these naturally occurring radionuclide

Christian Katzlberger, Austria

Determination of natural radionuclides in Austrian ground- and drinking water

Galina Lazorenko, Ukraine

²¹⁰Po accumulation by components of the Black Sea ecosystem

Bjørn Lind, Norway

Natural radioactivity in waste from former non-uranium mining areas in Norway

Immanda Louw, South Africa

Determination of Polonium-210 in various foodstuffs after microwave digestion

Juan Carlos Mora, Spain

Behaviour of natural radionuclides in coal combustion

11.00 to 11.30 : COFFEE AND POSTER VIEWING

11.30 – 13.00 ROOM B

SESSION 2. TENORM/NORM including radon ORAL POSTER PRESENTATIONS (PART 2) (16 in total)

Marcelo Francis Maduar, Brazil

External dose assessment and radon monitoring in an experimental house built with phosphogypsum-based materials

Barbara Mazzilli, Brazil

Radiological impact of the application of phosphogypsum in agriculture

Constantin Papastefanou, Greece

Radioactivity of Coals and Fly Ashes

Serena Righi, Italy

Natural radioactivity in Italian ceramic tiles

Henrik Rye, Norway

Modeling the fate of ²²⁶Ra present in produced water discharged to the North Sea (Norwegian sector)

Lejla Saracevic, Bosnia and Herzegovina

The natural radioactivity in vicinity of the brown coal mine Tusnica – Livno, BiH

Jelena Mrdakovic Popic, Norway

Environmental impact assessment of radionuclide and metal contamination in the thorium (Th) rich Fen area, Norway

Lindis Skipperud, Norway

TENORM- and metal-contamination of selected uranium mining and tailing sites in Kazakhstan and Kyrgyzstan

Christian Tamponnet, France

Behaviour of lead-210 in continental environment: comparison with stable isotopes of lead

Christos Tsabaris, Greece

Continuous radon monitoring in the marine environment using gamma-ray spectrometry

Jochen Tschiersch, Germany

Thoron exhalation from building material and related indoor concentrations

Kairi Tānavsuu, Estonia

Indoor radon: problems and surveys in Estonia

Hildegarde Vandenhove, Belgium

Method of diffusive gradients in thin films (DGT) compared with other soil testing methods to predict phytoavailability of uranium and selected heavy metals in a multipollution context

Hildegarde Vandenhove, Belgium

Testing the potential of enhanced phytoextraction to clean up norm contaminated soils

Kaisa Vaaramaa, Finland

²¹⁰Po and ²¹⁰Pb in Soil and in Vegetation in Finland

Maria Angelica Wasserman, Brazil

Radiological environmental impact of the phosphate industry in Spain: a regulatory perspective

13.00 – 14.30 : LUNCH

14.30 – 16.10 ROOM A

SESSION 5. Arctic Radioecology
(parallel session with Radiation in Society)

- 14.30 – 14.50 **Sven-Poul Nielsen, Denmark**
Recent trends of environmental radioactivity in Greenland and the Faroe Islands
- 14.50 – 15.10 **Justin Brown, Norway**
Vertical Distribution of Anthropogenic Radionuclides in Cores from Contaminated Floodplains of the Yenisey River
- 15.10 – 15.30 **Fredrik Lidman, Sweden**
Landscape Control on the Spatial and Temporal Variation of Uranium and Thorium Activities in a Boreal Catchment
- 15.30 – 15.50 **Valery Ramzaev, Russian Federation**
Radioecological studies at the Kraton-3 underground nuclear explosion site in 1978–2007: a review

15.50 – 16.10

ORAL POSTER PRESENTATIONS (3 in total)

S. Bogatov, Russian Federation

Radiation consequences of hypothetical accidents associated with transportation of spent nuclear fuel of nuclear submarines aboard floating technical base

Ali Hosseini, Norway

Environmental impact assessment for ionising radiation within the Arctic

Mikhail Iosjpe, Norway

Improvement of the dose assessment tools on the basis of dispersion of the ⁹⁹Tc in the Nordic Seas and the Arctic Ocean

18:00 Sailing Cruise with «Statsraad Lehmkuhl»

Wednesday 18th June

09.00 – 10.40 ROOM A - IN PLENUM

SESSION 3,4 and 5 INTRODUCTION - PLENARY

Combined Session (Radiation in Society; Risk Assessment, Radioactive waste)

- 09.00 – 09.20 **Stuart Walker, USA**
Restoration Principle and Criteria: Superfund program policy for Cleanup at Radiation Contaminated Sites
- 09.20 – 09.40 **Ted Lazo, OECD/NEA**
Science and Values in Radiological Protection: Challenges and Opportunities
- 09.40 – 10.00 **Jacqueline Garnier-Laplace, France**
A Screening Level Ecological Risk Assessment and ranking method for liquid radioactive and chemical mixtures released by nuclear facilities under normal operating conditions
- 10.00 – 10.20 **Steve Mihok, Canada**
*Chronic exposure to Gamma radiation in wild meadow voles (*Microtus Pennsylvanicus*) - what do haematological indices tell us?*
- 10.20 – 10.40 **Phil Metclaf, IAEA**
International Safety Standards and Supporting Projects Related to Demonstrating the Safety of Radioactive Waste Disposal Facilities
- 10.40 – 11.00 **Fidel Grandia, Spain**
Modelling the radionuclide transfer from bedrock to surface systems at Forsmark site (Sweden)

11.00 to 11.30 : COFFEE AND POSTER VIEWING

11.30 – 13.00 ROOM A

SESSION 4. Risk assessment (parallel session with Speciation)

- 11.30 – 11.50 **Nick Beresford, UK**
Protection of the environment from ionising radiation in a regulatory context (PROTECT): assessment approaches - practicality, relevance and merits
- 11.50 – 12.10 **Pål Andersson, Sweden**
Protection of the environment from ionising radiation in a regulatory context (PROTECT): proposed numerical benchmark values
- 12.10 – 12.30 **Gerald Kirchner, Germany**
Environmental Protection Against Ionising Radiation – A Proposal to Refine the Conceptual Basis of the ERICA Approach
- 12.30 – 12.50 **Michael Wood, UK**
Assessing radiation impact at a protected coastal sand dune site
- 12.50 – 13.10 **Ian Teasdale, UK**
Radiological Risk Assessment as applied to the Remediation of Contaminated Land at Sellafield, UK

13.10 – 14.30 : LUNCH

14.30 – 16.10 ROOM A

SESSION 4. Risk assessment (*parallel session with Radiation in Society*)

- 14.30 – 14.50 **Christophe Mourlon, France**
Symbiose: an integrated platform for environmental radiological risk assessment
- 14.50 – 15.10 **Ari Tapani K. Ikonen, Finland**
Handling of climate and future human actions as scenario uncertainty within terrain and ecosystems as a part of biosphere assessment for the Olkiluoto site
- 15.10 – 15.30 **Colin Seymour, Canada**
Radiation-Induced Stress Effects Following Low Dose Exposure
- 15.30 – 15.50 **Sohan Chouhan, Canada**
Environmental Radionuclides Concentrations Below Which Non Human Biota Experience No Effects
- 15.50 – 16.10 **Frédéric Alonzo, France**
Predicting population responses of a freshwater invertebrate after chronic exposure to radionuclides inducing different toxic effects on organisms

16.10-16.40 : COFFEE

16.40 – 18.00 ROOM A

SESSION 3: Radioecology (*parallel session with Radiation in Society*)

- 16.40 – 17.00 **Ulrich Stöhlker, Germany**
Inter-calibration of gamma dose rate detectors on the European scale
- 17.00 – 17.20 **Helmut Fischer, Germany**
Medical radioisotopes in the environment - following the pathway from patient to river sediment
- 17.20 – 17.40 **Jasper Hattink, Belgium**
*Accumulation of ¹³⁷Cs in the European sea bass *Dicentrarchus labrax* (L.) in a salinity gradient: importance of uptake via its gills, diet and ingested water*
- 17.40 – 18.00 **Ulrik Kautsky, Sweden**
Simulation of uptake of radionuclides in biota instead of using bio-concentration factors applied for marine ecosystems of the Baltic Sea
- 18.00 – 18.20 **Hildegard Vandenhove, Belgium**
*Effect of low-dose chronic gamma exposure on growth and oxidative stress related responses in *Arabidopsis Thaliana**
- 18.20 – 18.40 **Rodolphe Gilbin, France**
Ecotoxicological impact of radioactive and chemical substances in mixtures: an experimental and modelling approach on aquatic plankton

19.00 – 19.20 IUR Presentation

19.20 → IUR General Assembly

11.30 – 13.00 ROOM B

SESSION 6. Speciation (Radioecology) (*parallel session with Risk Assessment*)

- 11.30 – 11.50 **Xiaolin Hou, Denmark**
Speciation of ^{129}I and ^{127}I in Seawater
- 11.50 – 12.10 **Evgeny Polyakov, Russian Federation**
Radionuclides behavior in natural water estimate based upon determination physicochemical state of their stable chemical analogs
- 12.10 – 12.30 **Marko Štrok, Slovenia**
Fractionation of Natural Radionuclides in Soils from the Vicinity of a Former Uranium Mine
- 12.30 – 12.50 **Rose T. Norman, UK**
In situ distributions of rhenium, iodine and selenium in soil profiles under varying redox conditions
- 12.50 – 13.10 **Ole Christian Lind, Norway**
The use of synchrotron radiation based micro x-ray diffraction to characterise radioactive particles

13.10 – 14.30 LUNCH

14.30 – 16.10 ROOM B

SESSION 7. Radiation in Society (*parallel session with Risk Assessment*)

- 14.30 – 14.50 **Jean-Christophe Gariel, France**
A future for radioecology in Europe (FUTURAE) : an EU project to evaluate the potential for establishing deeper and sustainable collaboration
- 14.50 – 15.10 **Tarja Ikäheimonen, Finland**
Half a Century of Radioecological Research and Surveillance at STUK
- 15.10– 15.30 **George Hunter, UK**
The Regulation of Radioactivity in the Environment of Scotland
- 15.30 – 15:50 **Tatiana Melnitskaya, Russian Federation**
Psychological Consequences of Radiation Risk Experienced by Women Living in Bryansk Region Contaminated by Radionuclides

16.00 -16.40 : COFFEE

16.40 – 19.00 ROOM B

SESSION 7. Radiation in Society (*parallel session with Radioecology*)

- 16.40 –17.00 **Lavans Skuterud, Norway**
Managing radiocaesium contamination in Norwegian reindeer twenty-two years after the Chernobyl accident – the need for a new regulation
- 17.00– 17.20 **Clare Bayley, UK**
Designing Participatory Processes for Stakeholder Engagement in Deliberation on Nuclear Related Issues

- 17.20 – 17.40 **Céline Bataille, France**
*Rehabilitation of living conditions in the Post-Chernobyl context:
implementation of an inclusive radiation monitoring system in the Bragin
district in Belarus*
- 17.40 – 18.00 **Satoshi Yoshida, Japan**
*Researches in National Institute of Radiological Sciences (NIRS) for
Radiation Protection of Non-human Biota and Ecosystems in Japanese
Environment*
- 18.00 – 18.20 **Irina Abalkina, Russian Federation**
*Legal and practical approaches to address nuclear legacy issues (by the
example of the «Mayak» facility)*

DRAFT

Thursday 19th June

9.00 – 11.00 ROOM A

SESSION 9. Environmental Protection

ORAL POSTER PRESENTATIONS (16 in total)

Environmental Protection (*parallel session with Radioecology*)

Alexander Bolsunovsky, Russian Federation

*The effect of radionuclide and heavy metal contamination of the Yenisei river on Cytogenetics of aquatic plant *Elodea Canadensis**

Lydia Bondareva, Russian Federation

Bioavailability of ⁹⁹Tc to a Macrophyte of the Yenisei River

Jaye E. Cable, USA

Measurements of Dispersivity and Retardation Factors in Marine Sediments using tritiated calcium chloride solution and Radium-226

Cécile Boyer, France

Variation of conversion rate from tissue free water tritium to organically-bound tritium in lettuces continuously exposed to atmospheric HT and HTO

T.I. Evseeva, Russian Federation

*Appraisal of general conceptual model of the effects of long-term exposures of ionizing radiation on biota in case of genetic variability in *Vicia cracca* L. population inhabited territory been polluted with radionuclides of ²³⁸U and ²³²Th decay series*

Rafael García-Tenorio, Spain

Radionuclide fluxes at a titanium dioxide plant

Philippe Gleizon, UK

Modelling the long term dispersion of radioactive liquid effluent and dose from marine pathways using a grid model

Dmitri Gudkov, Ukraine

Change of radionuclide bioavailability in conditions of swamping territories within the Chernobyl accident Exclusion Zone

Dmitri Gudkov, Ukraine

Cytogenetical and haematological effects of long-term irradiation on freshwater gastropod snails in the Chernobyl accident Exclusion Zone

Eduard J.Hanslik, Czech Republic

Balances of suspended matter and radionuclides in inflow and outflow waters of Orlik Reservoir, Vltava River (Czech Republic)

V.A. Hrabovskyy, Ukraine

Monitoring of Radionuclide Contamination of Plants in the Western Part of Volyn Polissya (Ukraine) During 1994–2007

Turid Hertel-Aas, Norway

*Effect of chronic gamma irradiation on reproduction in the earthworm *Eisenia fetida* (Oligochaeta)*

Carmen Jiménez Ramos, Spain

Characterization of terrestrial hot particles from the Palomares accident using destructive and non-destructive analytical techniques

David G. Jones,

Assessment of naturally occurring radionuclides around England and Wales: application of the G-BASE dataset

Linda Karlsson, Spain

Use of ¹³⁷Cs as a tracer of low-altitude transport of re-suspended aerosols from the African continent

Sergei V. Kazakov, Russian Federation

Biospheric approach as a compromise between hygienic and ecological approaches to radiological protection of the environment

11.00 to 11.30 : COFFEE AND POSTER VIEWING

11.30 – 13.00 ROOM A

SESSION 9. Environmental Protection (*parallel session with Rad waste OPs*)

- 11.30 – 11.50 **Stanislav A.Geras'kin, Russian Federation**
Effects of radioactive contamination on plants: implications for radiological protection of the environment
- 11.50 – 12.10 **Elena Grigorkina, Russian Federation**
Radioadaptation of small mammals in the East Urals radioactive trace zone (Kyshtym accident): 50 years on
- 12.10 – 12.30 **Neil Willey, UK**
Genomic and Proteomic Analyses of Plant Response to Radiation in the Environment - An Abiotic Stress Context
- 12.30 – 12.50 **Carmel Mothersill, Canada**
Bystander effects induced by “multiple stressor” exposure to sublethal radiation and heavy metals in Atlantic Salmon

13.00 – 14.30 : LUNCH

14.30 – 16.10 ROOM A

SESSION 9. Environmental Protection (*parallel session with Rad waste*)

- 14.30 – 14.50 **Kathryn Higley, USA**
Invariant scaling relationships and their possible application in predicting radionuclide uptake in plants
- 14.50 – 15.10 **Maria Angelica Wasserman, Brazil**
Overview of 13 Years of Research on Radionuclide Behavior in Brazilian Soils

15.10 – 16.10 ORAL POSTER PRESENTATIONS (9 in total)

Ross Kleinschmidt, Australia

Environmental tritium contamination from a gaseous tritium light device maintenance facility

Hee Reyoung Kim, Korea

The Radioactivity Analysis of ^{14}C and ^3H in Graphite from the Dismantled Korea Research Reactor and Its Dose Estimation

Eckehard Klemt, Germany

Transport of artificial radionuclides in the river Yenisei and its representation in sediments

Eckehard Klemt, Germany

Rapid low-cost determination of ^{90}Sr in sediments of the Yenisei River

Elena Korobova, Russian Federation

Natural and technogenic elements in soils and water of the lower Yenisey flood plain and terraces: regional and local landscape geochemical distribution patterns controlled by natural processes

Herbert Lettner, Austria

Ecological half-lives of ^{137}Cs in milk in alpine agriculture

Herbert Lettner, Austria

Radionuclide Accumulation In Cryoconites (Glacier Sediments) On Alpine Glaciers

Fabienne Luisier, Switzerland

The role of colloids in the long-term migration of fallout radioisotopes (^{90}Sr , Pu , Am , ^{137}Cs) in natural alpine soils (Val Piora, Ticino, Switzerland)

Maria José Madruga, Portugal

Radiological Survey in Tejo River (Portugal)

16.10-16.40 : COFFEE

16.40 – 18.40 ROOM A

ORAL POSTER PRESENTATIONS (21 in total)

SESSION 9. Environmental Protection (parallel session with Rad waste)

Cédric Marion, France

Monitoring of radionuclides in sediments of a channel-like structure near the Rhône River mouth during the five past years

Gerald Matisoff, USA

Downward Migration of Chernobyl-derived Radionuclides in Soils in Poland and Sweden

Rolf Michel, Germany

Radioecology of Iodine-129: From Sea to Land

Jerzy W. Mietelski, Poland

Plutonium, americium ^{137}Cs and ^{90}Sr in selected invertebrates from Byelorussia

Sergey V. Mikheykin, Russian Federation

Experience of Mos SIA "Radon" in site decontamination in Moscow.

Inna Molchanova, Russian Federation

N.V. Timofeev-Resovsky's Ideas in Present Studies of Radioactive Contamination Zones of the Urals

Anna G. Nalbandyan, Republic of Armenia

Studying relations between radionuclide contents and water quality and quantity indices for rivers Kura-Araks basin, Armenia

Maya G. Nifontova, Russian Federation

Accumulation of Radionuclides in Peat Deposits of Bog Ecosystems in the Urals

Torbjörn Nylén, Sweden

Temporal variations of ^{137}Cs in Scots Pine

George Papatheodorou, Greece

^{137}Cs and natural radionuclides in the sediments of a shallow coastal lagoon, (Messolonghi Lagoon), W. Greece

Mateos M. Paz Antón, Spain

Influence of the addition of an inorganic fertilizer in the bioavailability of aged weapon-grade plutonium in Palomares soil

Raul Perianez, Spain

Models for radioactivity dispersion assessments in Andalusian coastal waters: Gulf of Cadiz and Alborán Sea

Raul Perianez, Spain

Modelling radioactivity dispersion in the Alborán sea, Western Mediterranean

Brit Salbu, Norway

Responses to free radical induction in vegetation - Arabidopsis as reference model

Anatoly Simakov, Russian Federation

Tasks of the day of supervision bodies with respect to radiation protection assurance

Vladimir Sizonnenko, Ukraine

A case study for a numerical box model with lagging argument in order to simulate transportation of pollution in Dnieper reservoirs and Loire River

Vladimir N. Soyfer, Russian Federation

New paradigm of research on the condition of spent nuclear fuel in accident and dumping sites

Masoud Vahabi-Moghaddam, Iran

Distribution of ^{137}Cs in the South-west Caspian Soil

Nathalie Vanhoudt, Belgium

*Induction of oxidative stress related responses in *Arabidopsis thaliana* following uranium exposure*

Jordi Vives i Batlle, UK

Allometric relationships for radioecological parameters in marine biota

Andrian A.Yavnyuk, Ukraine

*Fluctuating asymmetry of zebra mussel (*Dreissena polymorpha* Pall) and floating pondweed (*Potamogeton natans* L) in water bodies within the Chernobyl accident Exclusion Zone*

09.00 – 11.00 ROOM B

SESSION 3. Radioecology (parallel session with Env Prot.)

09.00 – 09.20

Brenda J. Howard, UK

Transfer of radionuclides to agricultural animals – revision of TRS 364

09.20 – 09.40

Sergei Fesenko, IAEA

Revision of IAEA documents on radionuclide transfer in different ecosystems

09.40 – 10.00

Anca Melintescu, Romania

Modelling the transfer of ^3H and ^{14}C into the environment - lessons learnt from IAEA's EMRAS project

10.00 – 10.20

Bliss Tracy, Canada

The Use of Canadian Monitoring Networks to Study the Movement of Airborne Radionuclides on a Global Scale

10.20 – 10.40

Frederique Eyrolle, France

Consequences of paroxysmic meteo climatic events on the translocation of contaminants within the geosphere: The EXTREME project

10.40 – 11.00

11.00 to 11.30 : COFFEE AND POSTER VIEWING

11.30 – 13.00 ROOM B

ORAL POSTER PRESENTATIONS (16 in total)

SESSION 8. Radioactive waste (parallel session with Env Prot.)

Pavel V.Amosov, Russian Federation

Study of scenario "Mistake in determination of adsorbing properties of radionuclides on the materials of engineering barriers and host rock"

Martin-Garin Arnaud, France

Selenium (IV) migration in soils: How Abiotic and Biotic soil parameters affect liquid-solid-gaseous distribution in time

Tim Atkinson, UK

Dounreay particles : dispersion, persistence and likely longevity of sand-sized radioactive particles on the sea bed

Kent Werner, Sweden

Modelling solute transport from rock to surface ecosystems in the safety assessment of a repository for spent nuclear fuel

Robert Broed, Sweden

Software and numerical discretisation module development for radioecological dose consequence modelling

A.V. Chesnokov, Russian Federation

Remediation of the High-Level Radwaste Repositories at Russian Research Center “Kurchatov Institute”

Irina Chudnyavtseva, Russian Federation

The assessment of uranium ore mining and milling on the dry-steppe landscapes of the East Transbaikalian area, SE Siberia

David Coplestone, UK

Study of historic nuclear reactor discharge data and associated arisings of solid radioactive waste

Nava Garisto, Canada

The Potential Impact of a Deep Geologic Repository for Used Nuclear Fuel on Non-Human Biota

Oliver Gould, UK

Bacterial Control of In Situ Speciation and Sorption of Technetium/Rhenium in Oxidic and Anoxic Soils

Reija Haapanen, Finland

Pools and Fluxes of Key Elements in a Forest Stand in Olkiluoto with a Sensitivity Analysis and an Evaluation of the Knowledge Base

Robert Hedvall, Sweden

Decommissioning of Four Small Nuclear Waste Storage Buildings and an Evaporation Plant

Nobuyoshi Ishii, Japan

Migration behavior of [1,2-¹⁴C] sodium acetate in a flooded soil

Oleg A. Kochetkov, Russian Federation

Disposal of very low level waste from nuclear power plants

Oleg A. Kochetkov, Russian Federation

Consequences of the incident at Novovoronezh NPP in 1985

Richard Klos, UK

Modelling processes governing radionuclide accumulation in evolving landscapes in Fennoscandia - an assessment model perspective

13.00 – 14.30 : LUNCH

14.30 – 16.10 ROOM B

SESSION 8. Radioactive waste (parallel session with Env Prot.)

14.30 – 14.50

Yves Thiry, Belgium

Impact of afforestation on long term ¹³⁷Cs and ⁹⁰Sr recycling from a waste burial in the Chernobyl Red Forest

14.50 – 15.10

Anders Wörman, Sweden

Implication of physical and chemical retention on radioactive landarea in the biosphere

15.10 – 15.30

Matthias Brennwald, Switzerland

Radiological risk assessment and biosphere modelling for radioactive waste disposal in Switzerland

15.30 – 15.50

Shulan Xu, Sweden

Prediction of concentration and model validation — key issues in assessment of long term safety for radioactive waste disposal

15.50 – 16.10

Andrew Tyler, UK

Reconstructing the abundance of Dounreay particles on beaches of Caithness in Northern Scotland

16.10 - 16.40 : COFFEE

16.40 – 18.05 ROOM B

SESSION 8. Radioactive waste (parallel session with Env Prot.)

16.40 – 17.00

Karen Smith, UK

Assessment of Impact to Non-Human Biota from a Generic Waste Repository in the UK

**SESSION 8. Radioactive waste
ORAL POSTER PRESENTATIONS (8 in total)**

Elisabeth Leclerc, France

Role and uncertainty of foliar transfer in radiological impact assessments: state of the art and future actions

Lars Marklund, Sweden

Characterisation of discharge areas of radionuclides originating from nuclear waste repositories

Paul McDonald, UK

Scoping assessment of groundwater doses to biota at the Sellafield site, UK

Shinichi Ogiyama, Japan

Root-uptake of C-14-acetic acid by root vegetables

Marian Scott, UK

Dounreay particles-understanding patterns of offshore, foreshore and onshore finds

Natalia Shandala, Russian Federation

Regulatory supervision of the environment and public health during remediation of shore infrastructure of nuclear fleet

Björn Söderback, Sweden

Pools and Fluxes of organic matter in a boreal landscape: implications for a safety assessment of a repository for nuclear waste

Lea Wiesel, UK

The impact of arbuscular mycorrhizal fungi on radiocaesium uptake by plants

Irene Zinger, Sweden

Overview of the Safety Assessment Framework Tool

Friday 20 th June

09.00 – 12.10

SESSION 9. Environmental Protection (continued)

ROOM A – IN PLENUM

- 09.00 – 09.20 **Jan Pentreath, UK**
Radioecology and Radiological Protection
- 09.20 – 09.40 **S. Fuma, Japan**
Effects of Acute Gamma-irradiation on the Aquatic Microbial Microcosm in Comparison with Chemicals
- 09.40 – 10.00 **David Copplestone, UK**
Protection of the environment from ionising radiation in a regulatory context (PROTECT): review of current regulatory approaches to both chemicals and radioactive substances
- 10.00 – 10.20 **Augustin Janssens, European Commission**
EU Policy orientations with regard to environmental protection under Chapter 3 of the Euratom Treaty

10.20 – 10.50 COFFEE

- 10.50 – 11:10 **Scott Flanders**
- 11.10 – 11.30 **Simon Carroll**
Radiological protection of the environment from an NGO perspective
- 11.30 – 12.10 YIA WINNERS**

12.15 - 12.30 PLENARY – CLOSE OF CONFERENCE

Co-chairs: Per Strand, Norwegian Radiation Protection Authority (NRPA), International Union of Radioecology (IUR) & Jean-Claude Barescut (IRSN)