

Provisional Programme

Sunday, September 21, 2008

17:00 – 20:00 **Registration and informal meeting of participants
at the *Hotel Mercure***

Monday, September 22, 2008

09:00 – 10:10 **Registration, Set up of Posters, Coffee**

10:10 – 10:40 **Opening, introduction**

Session: Quality

Chairpersons: U. Sansone, D. Arnold

10:40 – 11:00 **Ultra-low level plutonium isotopes in the NIST SRM
4355A (peruvian soil-1)** O-057

K. G. W. Inn, J. LaRosa, S. Nour, J. Filliben, G. Brooks, S.
LaMont, R. Steiner, P. Grant, R. Williams, B. Patton, D. Bostick,
G. Eiden, S. Petersen, D. Beals, P. Cable-Dunlap, J. Cadieux, G.
Hall, S. Goldber, S. Vogt*

11:00 – 11:20 **Development, improvement and accreditation of NPL
radioactivity measurement comparison exercises** O-035

S. M. Jerome, A. V. Harms, C. R. D. Gilligan*

11:20 – 11:40 **Trace analysis of aerosol bound particulates and noble
gases at the BfS in Germany** O-095

J. Bieringer, C. Schlosser, T. Kumberg, H. Sartorius, S. Schmid*

11:40 – 12:00 **A UK comparison for measurements of low levels of
gamma-emitters in waste drums** O-082

*J. C. J. Dean**

12:00 – 12:20 **The national primary standard of the unit of Radon-222
volume activity** O-010

*N. I. Kravchenko, V. V. Skliarov**

12:20 – 12:45 **Poster Presentation and Discussion**

**Development of rice proficiency test material (PTM) for
Cs-137 and K-40 analysis** P-093

S.-H. Lee, S.-A. Lee, T.-S. Park, J.-M. Lee, G.-B. Lee, M.-K. Lee,
P.-J. Oh*

**Preparation of vegetable ashes as laboratory reference
material for radionuclide determination** P-060

M. Llauradó, J. Tent, A. Sahuquillo, E. Carrasco, M. L. Romero,
R. Salas*

Analysis of causes for discrepant results in proficiency tests P-036
*D. Glavič-Cindro, M. Korun**

Low-level radioactivity proficiency testing program in Taiwan P-025
J.-J. Wang, J.-L. Wu, I.-J. Chen*

Quality control in an accredited environmental radiology laboratory P-027
M. Llauradó, J. Tent, D. Zapata, E. Oliva*

12:45 – 14:00 **Lunch**

Session: Applications – part 1

Chairpersons: S. Jerome, C. Hurtgen

14:00 – 14:20 **Pu-239, Pu-240 and Am-241 determination in hot particles by low-level γ -spectrometry** O-039
M. C. Jimenez-Ramos, S. Hurtado, R. García-Tenorio, A. Espinosa, A. Aragón, M. P. Antón, L. León-Vintró, P. I. Mitchell*

14:20 – 14:40 **In-vitro analysis of the dissolution kinetics and systemic availability of plutonium ingested in the form of “hot particles” from the Semipalatinsk NTS** O-028
M. Conway, L. León Vintró, P. I. Mitchell, R. García-Tenorio, M. C. Jimenez-Ramos, M. Burkitbayev, N. D. Priest*

14:40 – 15:00 **Highly sensitive radon emanation measurements** O-075
*H. Simgen, G. Zuzel**

15:00 – 15:15 **Poster Presentation and Discussion**

The calibration and evaluation of the drum counting system P-026
M.-C. Yuan, C.-H. Yeh, J.-J. Wang, J.-L. Wu, I.-J. Chen, C.-F. Wang*

Dose rate estimation method for homogenous waste containers case study: Spent ion exchange resins P-031
M. Dulama, C. Dulama, M. Pavelescu*

Preliminary safety concept for disposal of the very low-level radioactive waste in Romania P-011
O. Niculae, V. Andrei, G. Ionita, O. G. Dului*

Epithermal neutrons activation analysis investigation of Clarion-Clipperton abyssal plane clay and polymetallic micronunodules P-015
*C. I. Cristache, O. A. Culicov, M. V. Frontasyeva, S. Szobotka, M. Toma, O. G. Dului**

Clearance measurements of metal scraps for nuclear facilities at INER in Taiwan P-024

T.-L. Tsai, J.-J. Wang, I.-J. Chen, J.-L. Wu, T.-W. Wang*

Performance assessment for saligny low-level radioactive waste disposal facility P-102

M.C. Bucur, M. Olteanu, C. Cristache, M. Pavelescu*

15:15 – 15:55 **Coffee and Posters**

Session: Applications – part 2

Chairpersons: S. Jerome, C. Hurtgen

15:55 – 16:15 **Radionuclide metrology in environmental research of the Danube river: Sampling techniques, radiometric methods and radioecological assessment** O-076

F. J. Maringer, V. Gruber, M. Hrachowitz, A. Baumgartner, S. Weilner, C. Seidel*

16:15 – 16:35 **INAA, Radiometric and R-mode factor analysis applied to the distribution of major and trace elements in some volcanic and metamorphic rocks from Romania** O-013

*C. I. Cristache, O. A. Culicov, M. V. Frontasyeva, C. Ricman. M. Toma, O. D. Dului**

16:35 – 16:50 **Discussion**

16:50 **Adjourn**

Busses to “Burgplatz” and guided city tour

Tuesday, September 23, 2008

Session: Radiometrics – Gamma-ray spectrometry – part 1

Chairpersons: M.C. Lepy, M. Korun

09:00 – 09:20 **The minimum detectable activity – A false friend of the low-level gamma-ray spectrometrist?** O-071

*A. Luca**

09:20 – 09:40 **Difficulties in obtaining an HPGe detector for low-level measurements** O-007

E. M. Barnes, R. A. Tinker, S. Long*

- 09:40 – 10:00 **Testing the equivalence of various algorithms for calculation of coincidence summing corrections** O-038
G. Kanisch, T. Vidmar, O. Sima*
- 10:00 – 10:20 **Cascade summing correction improvements in Genie2000** O-070
*H. Zhu, R. Venkataraman, F. Bronson**
- 10:20 – 10:40 **Poster Presentation and Discussion**
- Analysis of HPGe spectra by full spectrum matching** P-001
T. Vidmar, A. Likar, B. Vodenik*
- The direct measurement of Ba-133 activity by the sum-peak method** P-048
D. Novković, L. Nađđerđ, M. Đurašević, I. Vukanec, A. Kandić, Z. Milošević*
- Monte Carlo simulations of the response of a plastic scintillator and a HPGe spectrometer in coincidence** P-017
D. R. Joković, A. Dragić, V. Udovičić, R. Banajanac, J. Puzović, I. Aničin*
- Simple cost-effective anti-cosmic device** P-040
A. de Vismes, X. Cagnat, S. Roger, R. Gurriaran*
- Low background shielding of HPGe detector** P-054
L. Trnková, P. Rulík*
- 10:40 – 11:20 **Coffee and Posters**
- Session: Radon - part 1**
Chairpersons: F.J. Maringer, P. De Felice
- 11:20 – 11:40 **Radon and its decay products in outdoor air** O-004
I. Burian, P. Otáhal*
- 11:40 – 12:00 **Analysis of outdoor Radon progeny concentration measured at the Spanish radioactive aerosol automatic monitoring network** O-008
D. Arnold, A. Vargas, X. Ortega*
- 12:00 – 12:20 **The German thoron progeny chamber – Concept and application** O-009
A. Röttger, A. Honig, D. Arnold*
- 12:20 – 12:45 **Poster Presentation and Discussion**
- Seasonal variation of radon (Rn-222) and thoron (Rn-220) in the dwellings along the southern coastal Orissa, eastern India** P-003
*N. Sulekha Rao, D. Sengupta**

A study on radon and thoron progeny in dwellings of Gudalore in Nilgiri biosphere in India P-012

R. Sivakumar, S. Selvasekarapandian, V. Meenakshisundaram*

Radon-in-water standard P-055

*M. Havelka**

A radon facility at Naples university: Features and first tests P-080

G. Venoso, M. Pugliese, V. Roca, C. Sabbarese*

12:45 – 14:00 **Lunch**

Session: Radiometrics

Chairpersons: C. Hurtgen, M. Köhler

14:00 – 14:20 **Large-area low-level gross-alpha ZnS scintillation counting** O-022

*H. von Philipsborn**

14:20 – 14:40 **Alpha/beta discrimination by pulse shape analysis in plastic scintillation** O-091

H. Bagán, A. Tarancón, J. F. García, G. Rauret*

14:40 – 15:00 **Measurement of C-14 activity by liquid scintillation counting** O-047

I. Krajcar Bronić, N. Horvatinčić, J. Barešić, B. Obelić*

15:00 – 15:15 **Poster Presentation and Discussion**

Color quench correction for low-level Cerenkov counting P-037

*S. Tsroya, O. Pelled, R. Marco, Z. B. Alfassi, U. German**

Experience acquired on environmental sample combustion for organically bound tritium measurement P-041

C. Cossonnet, A. M. Neiva Marques, R. Gurriaran*

Applying direct liquid scintillation counting to low level tritium measurement P-066

C. Varlam, I. Stefanescu, O. Dului, I. Faurescu, I. Popescu*

Study of self-absorption for the determination of gross alpha and beta activities in soil samples P-052

A. Martín Sánchez, M. G. Sáenz García, M. Jurado Vargas

Natural radioactivity determination of silicate rocks using various methods of measurements P-083

F. Jaquenod, G. Triscone*

15:15 – 15:55 **Coffee and Posters**

Session: Radiometrics – Gamma-ray spectrometry – part 2

Chairpersons: M. Korun, M.C. Lepy

- 15:55 – 16:15 **On Monte Carlo simulation of HPGe gamma-spectrometry systems** O-021
O. Sima, D. Arnold*
- 16:15 – 16:35 **Optimisation of the MC-model of a p-type Ge-spectrometer for the purpose of efficiency determination** O-077
D. Budjáš, H. Simgen*
- 16:35 – 16:55 **MCNP HPGe detector benchmark with previously validated Cyltran model** O-074
I. D. Hau, W. R. Russ, F. Bronson*
- 16:55 – 17:10 **Discussion**
- 17:10 **Adjourn**

Wednesday, September 24, 2008

Session: Radiometrics: ULL gamma-ray spectrometry – part 1

Chairpersons: M. Hult, M. Laubenstein

- 09:00 – 09:20 **Improvements of low-level gamma-ray spectrometry systems at UDO** O-098
S. Neumaier, M. Wojcik, H. Dombrowski, D. Arnold*
- 09:20 – 09:40 **An ultra low-background HPGe-detector system in a sandwich configuration** O-049
J. S. E. Wieslander, M. Hult, G. Marissens, J. Gasparro, W. Preusse, M. Misiaszek*
- 09:40 – 10:00 **Kurf: The Kimballton underground research facility** O-050
R. M. Lindstrom, R. B. Vogelaar, R. Henning, P. Finnerty, H. O. Back, D. Rountree, A. E. Champagne, M. Kidd, W. Tornow*
- 10:00 – 10:20 **A new low-level γ -ray spectrometry system at the underground laboratory Felsenkeller** O-067
M. Köhler, D. Degering, P. Quirin*
- 10:20 – 10:40 **Poster Presentation and Discussion**
- Determination of gaseous radionuclide forms** P-023
*J. Tec*l, I. Svetlik*

- External dose rate in Unirea salt mine, Slanic-Prahova, Romania** P-065
R. M. Margineanu, A. M. Apostu, O. G. Dului, S. Bercea, C. I. Cristache*
- Influence of Pb-210 on the continuous background of gamma-ray spectrometers** P-002
M. Korun, B. Vodenik*
- Low-level air radioactivity measurements in Prague, Czech Republic** P-062
H. Mala, P. Rulik*
- Ar-37 as a means of identifying clandestine subsurface nuclear explosions** P-053
R. A. Riedmann, R. Purtschert, H. H. Loosli*
- 10:40 – 11:20 **Coffee and Posters**
- Session: Radon – part 2**
Chairpersons: A. Röttger, F.J. Maringer
- 11:20 – 11:40 **On-line measurement of unattached and total radon and thoron progeny** O-033
O. Meisenberg, J. Tschiersch*
- 11:40 – 12:00 **Radon emanation factors measurements: A comparison between active and passive techniques** O-034
I. López-Coto, J. L. Mas, E. G. San Miguel, J. P. Bolivar, D. Sengupta*
- 12:00 – 12:20 **How to assess the sensitivity and related uncertainty of a new solid state passive thoron measuring device** O-094
M. Calamosca, S. Penzo*
- 12:20 – 12:45 **Poster Presentation and Discussion**
- Comprehensive software for the assessment of Rn-220 and Rn-222 decay products based on air sampling measurements** P-058
*O. Sima**
- Active size distribution for long-lived radon decay products in aerosols collected in Barcelona (Spain)** P-059
A. Camacho, I. Valles, A. Vargas, M. Gonzalez-Perosanz, X. Ortega*
- An alternative methodology of analysis of LR115 nuclear track detectors for radon measurements** P-096
C. Sabbarese, G. Cantiello, C. Dell'Aversana, A. D'Onofrio, M. Pugliese, V. Roca, F. Terrasi, G. Venoso*

Performance tests for instruments measuring radon activity concentration P-101
V. Schmidt, H. Buchröder, T. R. Beck*

12:45 – 14:00 **Lunch**

Session: Radiochemical Techniques

Chairpersons: H. Wershofen, K. Inn

14:00 – 14:20 **Separation of Sr-90 from radioactive waste matrices – Microwave versus fusion decomposition** O-020
M. Jäggi, J. Eikenberg, H. Sahli, S. Röllin*

14:20 – 14:40 **Sequential determination of Po-210 and uranium radioisotopes in drinking water by alpha spectrometry** O-064
L. Benedik, M. Vasile, Y. Spasova, U. Wätjen*

14:40 – 15:00 **Separation techniques for low-level determination of actinides in soil samples** O-084
J. Eikenberg, M. Jäggi, H. Beer, M. Rüthi*

15:00 – 15:15 **Poster Presentation and Discussion**

A rapid method for determining Sr-89 and Sr-90 by Cerenkov counting P-014
K. Günther, S. Lange, M. Veit*

Validation of rapid method of radiostrontium in fresh milk P-069
C. K. Kim, A. Alhamwi, A. Toerveyeni, G. Kis-Benedek, U. Sansone*

Rapid and simple technique for Pb-210 determination in sediments P-078
*Y. Sapozhnikov**

Rapid method for determination of the activity concentrations of Sr-89 and Sr-90 P-097
K. Vogl, A. Heckel*

Separation of strontium from complex samples and determination of ^{89,90}Sr P-103
Željko Grahek, Martina Rožmarić Mačefat, Marijana Nodilo

Isolation of iron from liquid samples and ⁵⁵Fe determination P-104
Martina Rožmarić Mačefat, Željko Grahek

15:15 – 15:55 **Coffee and Posters**

Session: Applications – part 3*Chairpersons: M. Laubenstein, S. Jerome*

- 15:55 – 16:15 **Analysis of Polonium-210 in food products and bioassay samples by isotope-dilution alpha spectrometry** O-016
Z. Lin, Z. Wu*
- 16:15 – 16:35 **Natural occurring radionuclides in drinking water: Standards, measurement techniques and practical implementation** O-085
V. Gruber, F. J. Maringer, C. Landstetter*
- 16:35 – 16:50 **Discussion**
- 16:50 **Adjourn**
- 18:45 **Busses to Conference Dinner**
- 19:00 – 23:00 **Reception City Hall and Conference Dinner**
- 23:00 **Busses to Hotels**

Thursday, September 25, 2008**Session: Radiometrics: ULL gamma-ray spectrometry – part 2, and Applications – part 4***Chairpersons: M. Köhler, M. Hult*

- 09:00 – 09:20 **Statistical analysis of low-level material screening measurements via gamma-spectroscopy for MC background estimation in the $0\nu\beta\beta$ -experiment GERDA** O-073
M. Heisel, F. Kaether, H. Simgen*
- 09:20 – 09:40 **Ultra-low background treaty verification** O-081
H. S. Miley, C. E. Aalseth, T. W. Bowyer, J. E. Fast, J. C. Hayes, E. W. Hoppe, T. W. Hossbach, M. E. Keillor, J. D. Kephart, J. I. McIntyre, A. Seifert*
- 09:40 – 10:00 **Cosmogenic radionuclides in metals as indicator for sea level exposure** O-061
*M. Laubenstein, G. Heusser**
- 10:00 – 10:20 **Gamma-ray spectrometry of ultra low-levels of radioactivity within the material screening program for the GERDA experiment** O-100
D. Budjas, A. Gangapshev, J. Gasparro, W. Hampel, M. Heisel, G. Heusser, M. Hult, A. Klimenko, V. Kuzminov, M. Laubenstein, W. Maneschg, H. Simgen, A. Smolnikov, C. Tomei, S. Vasiliev*

10:20 – 10:40 **Poster Presentation and Discussion**

- Natural gamma-ray spectrometry as a source of information on radiation dose and radon hazard** P-089
M. Verdoya, P. Chiozzi, P. De Felice, V. Pasquale, M. Bochiolo, I. Genovesi*
- Long term monitoring of Cs-137 in foodstuffs in the Czech Republic** P-092
J. Kameník, J. Škrkal, P. Rulík
- Establishment of a method for the rapid measurement of gross alpha and gross beta activities in sea water** P-029
*D. Zapata-García, M. Llauradó**
- Dosimetry in a low level environment** P-042
L. J. Bignell, L. Mo, M. Smith, D. Alexiev, S. R. Hashemi-Nezhad*
- The use of lichens to assess uranium air pollution in south of Serbia** P-086
Z. Jeran, S. Milošević, D. Mazej, M. Štrok

10:40 – 11:20 **Coffee and Posters****Session: Applications - part 5**

Chairpersons: M. Laubenstein, U. Sansone

- 11:20 – 11:40 **Improved decay data on the metastable state of Tantalum-180** O-043
M. Hult, J. S. E. Wieslander, G. Marissens, J. Gasparro, U. Wätjen, M. Misiaszek*
- 11:40 – 12:00 **Analysis of the Rn-222 concentration in argon and a purification technique for gaseous and liquid argon** O-079
H. Simgen, G. Zuzel*
- 12:00 – 12:20 **Inventory of natural radionuclides in tin mining materials from Nigeria** O-019
K. Leopold, U. C. Gerstmann, A. Guissani, V. Höllriegl, U. Oeh, I. Veronese, A. M. Arogunjo*
- 12:20 – 12:45 **Poster Presentation and Discussion**
- Performance of the Dutch radioactivity monitoring network for food and feed** P-087
G. C. Krijger, J. M. Weseman, J. Hattink
- Rapid radioanalytical methods for assisting rehabilitation of NORM contaminated sites** P-032
C. Dulama, R. Dobrin, Al. Toma, M. Dulama*

- Radioactive content in charcoal** P-045
M. P. Rubio Montero, C. J. Durán Valle, M. Jurado Vargas, A. Botet Jiménez*
- Adaptive sampling methodology applied for radiological characterization of a phosphogypsum pile** P-030
R. Dobrin, C. Dulama, Al. Toma*
- Measurement of natural radionuclides in phosphogypsum using an anti-cosmic gamma-ray spectrometer** P-068
L. Ferreux, G. Moutard, T. Branger*
- Activity measurements of technically enhanced naturally occurring radionuclides (TENORM) in phosphogypsum** P-072
A. Luca, R. Margineanu, M. Sahagia, A. C. Razdolescu*

12:45 – 14:00 **Lunch**

Session: Non-radiometric measurements

Chairpersons: K. Inn, H. Wershofen

- 14:00 – 14:20 **ICP-MS analysis of soil and sediment samples** O-044
S. Röllin, H. Sahli, R. Holzer, M. Astner*
- 14:20 – 14:40 **Analysis of plutonium isotopes in sea water samples by HR ICPMS; Identifying the plutonium source** O-063
S. H. Lee, P. P. Povinec, J. Gastaud, E. Wyse*
- 14:40 – 15:00 **Comparison of two ultra-trace measurement techniques, inductively coupled mass spectrometry and ultra low-level gamma-ray spectroscopy in the framework of ultra low background material selection** O-088
S. Nisi, M. Laubenstein, A. Di Vacri, M. L. Di Vacri, A. Stramenga*

15:00 – 15:15 **Discussion**

15:15 – 15:55 **Coffee and Posters**

Session: Applications – part 6

Chairpersons: P. De Felice, S. Jerome

- 15:55 – 16:15 **Environmental radioactivity – some recent studies from the Indian subcontinent** O-006
D. Sengupta, N. Sulekha Rao*

16:15 – 16:30 **Discussion**

16:30 – 16:50 **Closing Ceremony**

Friday, September 26, 2008

09:00 – 10:45 **Lab-visits; part 1**

10:45 – 11:15 **Coffee (and possibility to pull down the posters)**

11:15 – 12:45 **Lab-visits; part 2**

12:45 – 14:00 **Lunch**