

# LSC 2010 agenda - Oral sessions

## Sunday 5 September, 2010

**17h00 - 19h00** *Welcome reception, registration and setting up of posters.*  
*Location: Cité Universitaire Internationale, Paris*

## Monday 6 September, 2010

**8h00 - 9h00** *Registration and setting up of posters*

### Conference opening

**9h00 - 9h15** *Opening allocution*  
*Dr Catherine Césarsky, Haut Commissaire à l'Énergie Atomique, France*

**9h15 - 9h30** *Conference organization and practical information*

### Session 1: Instrumentation, methods and scintillators

*Chairpersons: J. Aupiais and P. Cassette*

**9h30 - 9h50** *Application of a free parameter model to plastic scintillation samples.*  
*A. Tarancon (Spain). O-83*

**9h50 - 10h10** *Development of an active scintillating target for fission studies.*  
*J. Aupiais (France). O-75*

**10h10 - 10h30** *Qualitative and semi-quantitative analysis method of surface contamination by plastic scintillator and LS counter.*  
*E. Furuta (Japan). O-3*

**10h30 - 11h00** *Coffee break*

**11h00 - 11h20** *Determination of radon using silicone oil scintillator.*  
*Y. Yoshizawa (Japan). O-24*

**11h20 - 11h40** *Gadolinium-loaded liquid scintillator for antineutrino detector.*  
*X. Dai (Canada). O-28*

**11h40 - 12h00** *Plastic scintillation resin for Sr-90 separation and measurement in a single step.*  
*H. Baglan (Spain). O-58*

**12h00 - 12h20** *Poster summary*

**12h30 - 14h00** *Lunch*

### Session 2: Applications in geology, geochronology and datation

*Chairpersons: K. Omoto and J. Eikenberg*

**14h00 - 14h20** *Application of the 3-photomultipliers LS spectrometer for radiocarbon dating.*  
*M. Krapiec (Poland). O-44*

**14h20 - 14h40** *Ra-226, Ra-228 and their activity ratio in Polish Carpathian mineral waters of different chemical composition.*  
*N.D. Chau (Poland). O-63*

## **Session 2: Applications in geology, geochronology and datation (continued)**

**14h40 - 15h00** *The problem of age determination on the occurrence time of huge tsunami by coral boulders.*  
K. Omoto (Japan). **O-74**

**15h00 - 15h20** *Poster session*

**15h20 - 16h00** *Tea break*

## **Session 3: Quality assurance**

*Chairpersons: F. Schoenhofer and S. Chalupnik*

**16h00 - 16h20** *Distillation as a step in tritium analysis.*  
J.K. Logar (Slovenia). **O-40**

**16h20 - 16h40** *LSC quality assurance on gross alpha and beta measurements in water.*  
I. Lopes (Portugal). **O-16**

**16h40 - 17h00** *Improvement of the quality assurance in tritium analysis in water by LSC.*  
A.R. Gomes (Portugal). **O-42**

**18h30 - 20h00** *Cocktail in Palais du Luxembourg*

## **Tuesday 7 September, 2010**

### **Session 4: Radionuclide metrology using LSC**

*Chairpersons: C.K. Kim and K. Kossert*

**9h30 - 9h50** *Comparison of the TDCR and CIEMA/NIST methods for the activity determination of beta-emitting nuclides.*  
O. Nähle (Germany). **O-10**

**9h50 - 10h10** *Variance components in radionuclidic standardization by LSC: counter, cocktail composition and temporal effects.*  
R. Collé (USA). **O-4**

**10h10 - 10h30** *Beta shape-factor function and activity standardization of Pu-241.*  
K. Kossert (Germany). **O-6**

**10h30 - 11h00** *Coffee break*

**11h00 - 11h20** *Standardization of Pu-241: issues and problems.*  
L. Laureano-Perez (USA). **O-5**

**11h20 - 11h40** *Implementation of the TDCR method at the BIPM and its possible use for the extension of the SIR.*  
G. Ratel (BIPM). **O-12**

**11h40 - 12h00** *Determination of the LSC inefficiency (wall effect) for alpha emitters, using the alpha-gamma anticoincidence method.*  
R. Fitzgerald (USA). **O-61**

**12h00 - 12h20** *Poster summary*

**12h30 - 14h00** *Lunch*

## **Session 5: Application in environmental monitoring**

*Chairpersons: S. Moebius and J. F. Garcia*

- 14h00 - 14h20** *Relevant radionuclides for the calculation of the total dose in Austrian drinking water.*  
C. Landstetter (Austria). **O-15**
- 14h20 - 14h40** *Sequential measurement of Po-210 by alpha and Ra-226 by LSC in small sediment samples.*  
L. Liang (IAEA). **O-22**
- 14h40 - 15h00** *Natural radionuclides in underground water in Ukraine.*  
M. Buzinny (Ukraine). **O-81**
- 15h00 - 15h20** *Poster session*
- 15h20 - 16h00** *Tea break*
- 16h00 - 16h20** *Improved rapid determination of <sup>89</sup>Sr and <sup>90</sup>Sr in milk using Cerenkov and scintillation counting.*  
C. K. Kim (IAEA). **O-91**
- 16h20 - 16h40** *Radiocarbon measurement of bio diesel fuel by LS counter Quantulus.*  
H. Sakurai (Japan). **O-46**
- 16h40 - 17h00** *Determination of Cl-36 and I-129 by LSC after separation on an extraction chromatographic resin.*  
S. Happel (France). **O-56**

## **Wednesday 8 September, 2010**

### **Session 5: Application in environmental monitoring (continued)**

*Chairpersons: G. Wallner and F. Schoenhofer*

- 9h00 - 9h20** *Plastic scintillation and dryness evaporation: a new procedure for alpha-beta activity determination in water samples.*  
J.F. Garcia (Spain). **O-57**
- 9h20 - 9h40** *Comparative radiocarbon analysis for artificial mixes of petroleum and biobased products.*  
A. Cherkinsky (USA). **O-59**
- 9h40 - 10h00** *Application of LSC method for measurement of radon and thoron progeny in air.*  
S. Chalupnik (Poland). **O-69**
- 10h00 - 10h20** *Methods for determination of natural radioactivity in drinking water samples.*  
I. Chmielewska (Poland). **O-70**
- 10h20 - 11h00** *Coffee break*
- 11h00 - 12h20** *Commercial presentations*
- 12h30 - 14h00** *Lunch*
- 14h00 - 18h00** *Excursion to Versailles castle*

## Thursday 9 September, 2010

### Session 5: Application in environmental monitoring (continued)

Chairpersons: S. Happel and S. Chalupnik

- 9h00 - 9h20** *Quench determination of biocomponent in diesel by LSC.*  
R. Kristof (Slovenia). **O-87**
- 9h20 - 9h40** *Gross alpha and beta activity measurements by LSC: the problem of interpretation.*  
S. Chalupnik (Poland). **O-71**
- 9h40 - 10h00** *Bio-base product determination by ASTM method 6866-08 using LSC and benzene synthesis: progress and performance in an expanding market.*  
R. Culp (USA). **O-89**
- 10h00 - 10h20** *Fast determination of Po-210 in urine by LSC as a mean to estimate deliberate poisoning.*  
G. Wallner (Austria). **O-13**
- 10h20 - 11h00** *Coffee break*

### Session 6: Applications based on alpha/beta spectrometry

Chairpersons: J. F. Garcia and G. Wallner

- 11h00 - 11h20** *Nasal swab analysis by LSC.*  
X. Dai (Canada). **O-27**
- 11h20 - 11h40** *Gross alpha and beta measurements by LSC in waters: advantages, problems and limitations.*  
M. Forte (Italy). **O-54**
- 11h40 - 12h00** *Gross alpha and gross beta measurements: critical remarks and better alternative.*  
F. Schoenhofer (Austria). **O-94**
- 12h00 - 12h20** *Poster summary*
- 12h30 - 14h00** *Lunch*

### Session 6: Applications based on alpha/beta spectrometry (continued)

Chairpersons: J. F. Garcia and G. Wallner

- 14h00 - 14h20** *Evaluation of errors due to interference in the simultaneous measurement of gross alpha and gross beta activities in water.*  
D. Zapata-Garcia (Spain). **O-62**
- 14h20 - 14h40** *Application of the delay before burst feature and low-level counting mode in Np-239 and Np-237 measurements, performed in a BGO supplied LS counter.*  
J. Diodati (Argentina). **O-73**
- 14h40 - 15h00** *Simultaneous evaluation of alpha and beta contamination of road-transported waste containers, by smear analyzed by LSC.*  
G. Dougniaux (France). **O-82**
- 15h00 - 15h20** *Poster session*
- 15h20 - 16h00** *Tea break*

## **Session 7: Data evaluation and spectrum analysis**

*Chairpersons: P. Cassette and K. Kossert*

**16h00 - 16h20** *Calculation of beta spectra.*  
X. Mougeot (France). **O-2**

**16h20 - 16h40** *Determination of U-235 and U-238 in uranium samples by LSC using partial least squares modelling.*  
M.K. Mahani (Iran). **O-25**

**19h00 - 23h00** *Conference dinner: cruise on the river Seine*

## **Friday 10 September, 2010**

### **Session 8: Calibration and standardization**

*Chairpersons: K. Kossert and R. Collé*

**9h30 - 9h50** *Activity determination of Th-228 by means of LSC.*  
K. Kossert (Germany) **O-8**

**9h50 - 10h10** *Uncertainty on tritium activity measurements carried out with a SL-300 LS counter using simplified or conventional processing of measurement results.*  
T.I. Shilnikova (Russia). **O-77**

**10h10 - 10h30** *Standardization of Cu-64 using two LS methods.*  
E. Bakhshandear (UK). **O-55**

**10h30 - 11h10** *Coffee break*

**11h10 - 11h30** *Systematic study of the different quenching phenomena in organic scintillators.*  
A. Tarancon (Spain). **O-65**

**11h30 - 11h50** *Cerenkov counting and LSC of Cl-36.*  
K. Kossert (Germany). **O-7**

**11h50 - 12h10** *The TDCR method in a nutshell.*  
P. Cassette (France). **O-60**

**12h10 - 12h30** *Poster summary*

**12h30 - 14h00** *Lunch*

### **Session 9: Decommissioning and remediation studies**

*Chairpersons: J. Eikenberg and S. Moebius*

**14h00 - 14h20** *Use of Cerenkov counting for the determination of Sr-90 in a radwaste treatment facility.*  
A. Vesely (Austria). **O-1**

**14h20 - 14h40** *Determination of H-3 and C-14 in the frame of decommissioning projects at the Paul Scherrer Institute.*  
J. Eikenberg (Switzerland). **O-85**

**14h40 - 15h00** *Closing session: conclusions and perspectives*