

**ICRM Gamma-Ray and Beta-Particle Spectrometry Working Group
Oxford (UK) September 8th, 2005**

The meeting was held on Thursday afternoon. The list of participants is included as an EXCEL file.

Due to the unavailability of Dr Los Arcos who sent his apologies, the meeting could not be prepared as carefully as required. Pierino de Felice and Marie-Christine Lépy together chaired the session as follows:

1. Short presentations

1.1 "Gamma-spectroscopic determination of ²³⁵U in environmental samples using low-energy germanium detectors" *by C.L. Karfopoulos et al.*

1.2 LNHB short information *by M.C. Lépy*
- ETNA software available at : <http://www.nucleide.org/ETNA2005/>
- Organisation of the next European Conference on X-Ray Spectrometry in Paris, (June 2006). <http://www.nucleide.org/EXRS2006/>

1.3 "National campaign for radioactivity surveillance method" *by M. Capogni*

2. WG activity report

Due to the special conditions, there was no activity report of the WG.

3. List of topics of interest

Among the ICRM participants, there are two kinds of users of gamma-ray spectrometry:

- « Basic » metrology focusing on :
 - Determination of photon emission intensities : not so easy
 - Improvement of spectrum processing code and methods
- « Applied » metrology : environment measurements requiring :
 - Fast and easy-to-use tools for :
 - efficiency transfer
 - coincidence summing corrections

In fact, there are common interest topics between the GS WG and the Low Level WG, and links should be established between them. However, the present WG must focus on the gamma spectrometry technique. In the same way, problems of quality insurance and accreditation should not be addressed here: This may be a subject for a dedicated WG.

The following list of possible interest topics was proposed to the participants.

- Efficiency calibration
- Monte Carlo methods

- Coincidence-summing corrections
- Uncertainties / correlations
- New instrumentation (room temperature detectors, DSP electronics...)
- X-ray spectrometry
- Other proposals ?

There was no particular remark on this list.

4. Projects for the next 2 years

There is already an action upon coincidence summing corrections; Two more projects were proposed:

4.1 Comparison of Monte Carlo codes for efficiency calibration (*T. Vidmar*)

The exercise will start with very simple case (cylindrical germanium detector, point source, accurately defined computation conditions ...) to first compare the codes between them, before comparing them with experimental data.

The results of this first action could then provide useful information for further exercises (e.g. efficiency transfer, coincidence summing...)

4.2 GS WG Web site (*M.C. Lépy*)

It is proposed to create a GS WG into the ICRM web site. This should be the place to provide information about gamma-ray spectrometry, and the WG actions. :

- Generalities
- Recommendations for experimental arrangements
- Software
- Data for ICRM exercises
- Discussion forum ?

4.3 Other proposal ? (*action + coordinator*)

There was no more proposals. However, new actions could be initiated within the next two years, according to the participant's requirements or emergence of new specific topic of interest. Proposals should include a project and a coordinator.

5. Conclusion :

A questionnaire will be sent to the WG participants to try to better determine the participant's interest topics and define more accurately the proposed ICRM GSWG projects.