ICRM GSWG

ICRM : Gamma Spectrometry Working Group

Report of the intermediate meeting that was held on June 12-14, 2018

The intermediate meeting of the ICRM "Gamma Spectrometry" working group brought together about 40 participants for 3 days (12-14 June).

The meeting was divided into two parts:

- June 12-13 : Course on "advanced" gamma-ray spectrometry.

- June 14 : Working group meeting to discuss on on-going actions

Thanks to the speakers, the presentations are kindly made available on the ICRM/GSWG website : http://www.lnhb.fr/icrm_gs_wg/

1. Training course: this training was organized for members of the working group, and in particular for new users, to enable them to master this technique as well as possible. Presentations were given according to the following agenda:

Tuesday June 12		**Speaker**
9:00-9:30	Registration	
9:30-9:45	Welcome	MCL
9:45-10:45	Introduction (basics GS)	MCL
10:45-11:15	*Coffee break*	
11:15-12:15	Uncertainties	PK7
12:15-13:00	Self-attenuation - Introduction	MCL
13:00 - 14:15	*Lunch*	
14:15 - 15:00	Self-attenuation and efficiency transfer	OS
15:00 - 16:00	Low level instrumentation	MH
16:00 - 16:30	*Coffee break*	
16:30 - 17:30	Monte Carlo - Principle and physical models	OS
17:30-18:00	Round table or exercises	MH/ All
Wednesday June 13		
9:00-9:45	Fitting (part 1)	PK7
9:45:10:30	Fitting (part 2)	MCL
10:30-11:45	Specific cases	MH
11:45-12:15	*Coffee break*	
11:45-13:00	Coincidence summing	OS
13:00 - 14:15	*Lunch*	
14:15 - 14:45	Digital electronics	PK7/MCL
14:45 - 15:45	Monte Carlo applied to gamma-ray spectrometry	OS
15:45- 16:15	*Coffee break*	
16:15- 17:00	Monte Carlo applied to Uncertainties calculation	PK7
17:00 - 18:00	Round table	All
19:00	Dinner	
Speakers:		
OS	Pr Octavian Sima (Bucharest University)	
MH	Dr Mikael Hult (JRC-Geel)	
PK7	Dr Philippe Cassette (CEA-LNHB)	
MCL	Dr Marie-Christine Lépy (CEA-LNHB)	

2. The meeting of the working group was mainly dedicated to the two on-going actions of the GSWG:

- Exercise on self-consistency of the methods applied for the evaluation of coincidence-summing corrections in the case of volume sources, leaded by Octavian Sima
- Action to facilitate the use of Monte Carlo simulation software, leaded by Marie-Christine Lépy.

The agenda allowed the participants to present their software or approaches to these action and to discuss the results:

8:30 - 9:00	*Registration (ID required)*
09:00	Welcome
9:15-10:30	Monte Carlo action : presentation of the codes by group spokeperson
9:20-9:35	GEANT : Cheick Thiam
9:35-9:50	MCNP: Konstantinos Karfopoulos
9:50-10:05	GESPECOR: Aurelian Luca
10:05-10:20	EGS: Raphael Galea
10:20-10:30	PENELOPE: Marie-Christine Lépy
10:30 - 11:00	*Coffee break*
11:00 - 11:45	Monte Carlo action : synthesis and follow-up actions (Marie-Christine Lépy)
11:45-13:00	Coincidence action (Octavian Sima): presentation of the codes by participants
	PENNUC: Nuria Navarro
	TRUECOINC and MCNP : Konstantinos Karfopoulos
	MCNPX and MCNP+CP : Anne De Vismes
	GESPECOR: Aurelian Luca
	EFFRAN : Tim Vidmar
	lABSOCS/ISOCS: Zbigniew Tyminski
	GESPECOR and MCNPX/MCNP-CP: Laurent Ferreux
	PENELOPE/PENNUC and ETNA: Marie-Christine Lépy
	GESPECOR (3 approaches): Octavian Sima
13:00-14:15	*Lunch*
14:15- 15:15	Coincidence action: synthesis and follow-up actions (Octavian Sima)
15:15-15:30	Leticia Pibida : Summary of IEC standards TC 45 W9
15:30-15:45	Aurelian Luca: Recent gamma-ray spectrometry measurements at IFIN-HH/Radionuclide Metrology Laboratory
15:45-16:00	Anne De Vismes: Overview on the different uses of Monte Carlo simulation codes in a laboratory of environment radioactivity metrology
16:00 - 16:30	*Coffee break*
16:30-16:45	Mikael Hult: Collaboration project between JRC-Geel and SCK to measure deadlayer thicknesses
16:45-17:00	Yi-Kang Lee: TRIPOLI – several benchmarks to test the different versions of the code
17:00-17:45	General discussion - Web site - Forum - Future actions - Conclusion

Both actions will be reported in articles to be presented at the next ICRM conference (ICRM 2019 in Salamanca).