

Coordinator's report of the ICRM Beta-Particle Spectrometry Working Group

Scope

This new ICRM Working Group has been created in 2014. Every potential contributor was contacted to give their needs and expectations. The following non-exhaustive topics were suggested:

- Theory: β^\pm and electron capture transitions; atomic effects; theoretical shape factors and influence of the nuclear current; the most common assumptions and how to go beyond;
- Experiments: instrumentations used for beta spectrometry; techniques that need beta information; confidence on experimental shape factors;
- Simulations: confidence on the simulation of the physical processes (energy range, radioactive decays, atomic rearrangements, etc.); comparison of the results of different codes (Geant4, Penelope, etc.).

MetroMRT workshop

In the context of the European MetroMRT project (<http://projects.npl.co.uk/metromrt/>), a workshop dedicated to some of these aspects took place at Paris on the 21 and 22 of May 2014. Very interesting oral presentations have been given in ionizing radiation metrology, dosimetry and quantitative imaging. An agenda of the workshop can be found here: <http://www.nucleide.org/MetroMRT-2014/>.

Forthcoming

A website dedicated to this Working Group is under construction. Any contribution is welcome if someone wishes to share with others a part of their work regarding beta and electron spectroscopy (theory, experiments or simulations). Feel free to contact the coordinator. The website will be probably available after the next ICRM conference in June 2015 in Vienna.

Every discussion on these topics will be welcome during this conference. It is noteworthy that the three oral presentations accepted by the Scientific Committee of the ICRM 2015 Conference last November in the Alpha and Beta Spectrometry Session will be on beta decays and electron spectrometry. The needs from other Working Group should also be discussed to guide future actions.

On behalf of the Beta-Particle Spectrometry Working Group,

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