

Consultancy Meeting on

International Radiation Characterization Benchmark Experiment Project (IRCBEP)

6-9 August 2018, IAEA Headquarters, Vienna, Austria

Room M 0E 69 AGENDA 02/08

08:30 – 09:30 Registration (IAEA Registration desk, Gate 1)

Monday August 6, Room M0E69

09:30 Welcoming address – Arjan Koning, SH-NDS
Introduction, Scope of the CM - J.-Ch. Sublet, UH-NDSU
Election of chairman and rapporteur
Adoption of agenda, administrative matters

- 10:00 "Nuclear data validation efforts with FISPACT-II" UKAEA, Mark Gilbert
- 10:45 Coffee Break

11:00 "On the International Radiation Characterization Benchmarks Experiment Project (IRCBEP): User's point of view" UPM, Oscar Cabellos

11:45 "Role of event reconstruction algorithm and new radiation sources" JAEA, Ogawa Tatsuhiko

- 12:30 Lunch
- 14:00 "ICSBEP Benchmarks ... more than just keff" LANL, Skip Kahler
- 14:45 "V&V for Radiation Characterization Codes at Oak Ridge National Laboratory Past experience and benchmark needs" ORNL, Ian Gauld
- 15:30 Coffee Break
- 15:45 "ICSEP benchmarking...reaction rates" PSI, Dimitri Rochman
- 17:00 End of Day One

Tuesday August 7, Room M0E69

- 09:30 "Verification & Validation exercises in support of radiation characterisation" IAEA Jean-Christophe Sublet
- 10:15 Discussion: Best practices, simulation tools
- 10:30 *Coffee Break*

- 10:45 "NJOY2016 (and NJOY2012) Status", LANL, Skip Kahler
- 12:30 Lunch
- 14:00 "Spectral indices", IAEA, Jean-Christophe Sublet
- 14:30 Discussion: Spectral indices
- 15:30 Coffee Break.
- 15:45 Discussion: Integro-differential approach
- 17:00 End of Day two
- 19:00 Evening Meal, "REMBETIKO IM DONAUINSEL" Neue Donau, 1220 Wien

Wednesday August 8, Room M0E69

- 09:30 Discussion: Decay heat experiments
- 10:30 Coffee Break
- 10:45 IAEA IHLab Isotope Hydrology Laboratory visit
- 12:30 Lunch
- 14:00 Discussion: Available experiments
- 15:30 Coffee Break
- 15:45 Discussion: Available experiments
- 17:00 Close of meeting

Thursday August 9, Room M0E69

- 09:30 Discussion: new tools
- 10:30 Coffee Break
- 10:45 Discussion: Workplan
- 12:30 Lunch
- 14:00 Final remarks and review
- 15:00 Close of meeting

The purpose of the International Radiation Characterization Benchmark Experiment Project IRCBEP is to transfer into technology the experimental integral radiation information that can be used as part of the Validation and Verification processes of nuclear model and code systems, and to provide various schema to perform the V&V. The IAEA will task, organize institutions to construct several of these databases based on their own extensive V&V activities mainly associated with inventory and source term codes.

Key elements of the project are:

1. Identify and compile a comprehensive set of experimental integral radiation characterization benchmark information: spectral indices, reaction rates, decay heat, resonance integral, particle counts and fluxes, etc...

2. Evaluate the data, quantify, compute rank their overall uncertainties then compile the data into computer format for dissemination

3. Perform simulations of each experiment with the suitable code system and selected nuclear libraries and produce a database/repository of the necessary input files to repeat those simulations for other nuclear data libraries.