Contribution ID: 14 Type: not specified

Integral benchmark activities for radiation transport under the auspices of the NEA Nuclear Science Committee

Monday, 10 October 2022 16:00 (30 minutes)

The international SINBAD, ICSBEP, IRPhE, and SFCOMPO projects under the auspices of the Nuclear Science Committee (NSC) of the OECD Nuclear Energy Agency (NEA) provide integral benchmarks to improve nuclear data evaluations and serve as cornerstones in the verification and validation (V&V) process of radiation transport simulations. Experts from OECD NEA member countries, and beyond, continuously challenge state-of-the-art simulation methods on radiation transport in international benchmarks organised by the NSC Working Parties on Nuclear Criticality Safety (WPNCS) and on Scientific Issues and Uncertainty Analysis of Reactor Systems (WPRS). WPRS is currently conducting 17 different benchmark phases on light water (LWR), molten salt (MSR), sodium-cooled fast (SFR), lead-cooled fast (LFR), and high temperature gas-cooled (HTGR) reactor systems, and co-sponsors the biannual SATIF workshops with focus on accelerators and irradiation facilities. This presentation gives an update on the status of NSC activities with regard to integral benchmarks for radiation transport and shows how they benefit from new services provided by the OECD NEA Data Bank (DB). It serves as a basis to discuss future cooperation with the CoNDERC project.

Primary authors: BUSS, Oliver (OECD Nuclear Energy Agency (NEA)); FLEMING, Michael (OECD Nuclear Energy Agency); HILL, Ian (OECD/NEA); IVANOVA, Tatiana (OECD Nuclear Energy Agency); MARTIN, Julie-Fiona (OECD Nuclear Energy Agency)

Presenter: BUSS, Oliver (OECD Nuclear Energy Agency (NEA))