

Analyses of Benchmark Experiments at FNS with Recent Nuclear Data Libraries

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For a few years several nuclear data libraries, JENDL-3.3, FENDL-2.1, JEFF-3.1 and ENDF/B-VII, have been newly released. It is essential to verify these libraries through analyses of integral benchmark experiments. Many integral benchmark experiments for nuclear data verification have been carried out at JAEA FNS. Thus these experiments were analyzed with JENDL-3.3, FENDL-2.1, JEFF-3.1 and ENDF/B-VII and the results were compared each other.

The Monte Carlo code MCNP-4C was used for this analysis. The ACE files supplied from JAEA Nuclear Data Center and IAEA Nuclear Data Services were adopted for JENDL-3.3 and FENDL-2.1, respectively. Since ACE files for JEFF-3.1 and ENDF/B-VII are not released officially, they were produced with the NJOY99 code.

In this symposium some results will be presented.