

CRP participants: work still to be done

(apart from benchmark experiment)

This is a summary for early distribution. More details of planned work will be given in the minutes.

- Denschlag:** Continue reference list; include some references communicated by NDS by comparison with EXFOR.
- Duijvestijn:** To build the fission fragment mass yield calculation into TALYS, (a new superior code replacing ALICE);
take into account de-excitation of fragments by evaporation;
include calculation of charge distribution (isotopic);
include isomers in fission.
- Goverdovski:** Make theoretical predictions of fission yields based on Maslov's results of emissive fission contributions to total fission cross sections;
Perform evaluation of prompt neutron multiplicities (emitted by fragments).
- Katakura:** Conclusion of application of Moriyama-Ohnishi model: parameters of systematics are not universally applicable (no dependence found yet; continue studies to find better parameters and establish universally applicable functional dependence.
- Kibkalo:** The fits of photofission mass distributions with flexible S-1 and S-2 peak positions and widths led to physically incorrect disappearance of the SL component, too broad S-1,2 peaks and wrong conclusions (see Figs. 8 and 9). Proposed investigations:
- repeat calculations with S-2 with heavy mass peak fixed at 134, realistic peak widths and SL component;
- try to describe mass distributions in different reactions;
- introduce angular momentum and excitation energy in entrance channel and study different influence of higher chance fission;
- go from multi-mode fission to multi-dimensional model (A-E-Z).
- Liu:** Reference yields: extend to include ^{252}Cf spontaneous fission yields;
Make predictions (by calculation) using systematics developed so far;
Study correlations introduced in evaluation procedure (adjustments, use of reference yields), also between different yield sets produced in the same evaluation.
- Maslov:** Extend studies of emissive fission: produce predictions for all minor actinides.
- Mills:** Complete experimental data base, put it on web;
Produce new UKFY3 version, using JEF-3 decay data and Wahl's model for estimates; 1st file ready end of November 2001, 2nd file in 2002.
Produce list of required developments for an actual evaluation
- Storrer:** Extend experiments on ^{233}U to higher energies;
study ^{232}Th data from Studsvik;
test Duijvestijn's code against his ^{245}Cm data;
- Wahl:** Research completed; still to be asked whether he could do any more research.
- Zhdanov:** So far model only suitable for analysis of experimental data; will develop modification to enable actual predictions of yields.