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Memo CP-E/110 (Revised)

Date: January 12, 2007
To: Distribution
From: OTSUKA Naohiko
Subject: Definition of "Evaporation residue" for LEXFOR
Reference: Memo CP-D/474

Concerning "ER" (evaporation residue) proposed for dictionary 33 (particles) in Memo CP-D/474, Dr. A. Iwamoto (JAEA) kindly explains me its definition. It is summarized as follows:

Evaporation residue A compound nucleus produced in the heavy-ion fusion reaction has two major de-excitation modes, fission and particle evaporation. The final product of the de-excitation process in which the nucleus undergoes the evaporation of one or several light particles without interrupted by fission is defined as "evaporation residue".

I propose addition of this explanation to the LEXFOR entry "Reaction Mechanisms" with the following example:

REACTION coding: Process code FUS in SF3, particle considered code ER in SF7.

Example:

(... (C-12 , FUS) , , DA , ER) Angular distribution of evaporation residue

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