

Report of Subgroup-4 to the Tenth Meeting of the  
NEANSC WORKING PARTY ON INTERNATIONAL EVALUATION CO-OPERATION

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Evaluation of Capture Cross Section and Inelastic Scattering Cross Section for  $^{238}\text{U}$

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The purpose of the Subgroup-4 is that recommendation of the most reliable evaluated data of the capture cross section and inelastic scattering cross section for  $^{238}\text{U}$ . At the beginning, we planned to select a file from available evaluation files in the world. In case of the capture cross section, it was done on agreement in the subgroup-4 and the recommended one was presented at the conference held in Julich 1991 [1]. In case of the inelastic scattering cross section, it is difficult to decide a reasonable evaluated file because of the following reasons.

Available experiments for the  $^{238}\text{U}$  (n,n') cross sections are so scattered and insufficient to evaluate them from measurements that evaluators must estimate them by theoretical model calculation. The evaluated values strongly depend on the used models and parameters, which have not been established so certainly as they are mutually agreeable. At this time, it may be difficult to obtain the data the members of the subgroup agree with, although we have waited to acquire a recommendable valuation with an expectation. Therefore, useful experiments and acceptable models with reliable parameters are desired in near future.

The co-ordinator proposes that the subgroup-4 is closed at this time because

1. the final report for the capture cross section was presented.
2. the recommendation for the inelastic scattering cross section is not expected in a few years, and
3. it is better to start a new subgroup for the inelastic scattering cross section to watch useful evaluations for a long-term, if it is necessary.

#### Reference

[1] Kanda Y., Kikuchi Y., Nakajima Y., et al., Proc. Int. Conf. Nucl. Data for Sci. and Technology, Julich, Germany, May 13-19, 1991, p.851.