EVALUATION OF THE
\(^{115}\text{In}(n,n')^{115m}\text{In}\) REACTION FOR THE ENDF/B-V
DOSIMETRY FILE*

by

Donald L. Smith

Argonne National Laboratory, Argonne, Illinois 60439, U.S.A.

ABSTRACT

An evaluation of the \(^{115}\text{In}(n,n')^{115m}\text{In}\) reaction for the
ENDF/B-V Dosimetry File is presented. This evaluation is
based entirely on reported experimental differential data.
Several data sets were renormalized prior to the evaluation
in order to take into account recent adjustments in corre-
sponding standard cross sections and in other nuclear par-
ameters used for derivation of cross sections. The present
evaluation is compared with the corresponding ENDF/B-IV
evaluation. The value of the spectrum-average cross section
for the standard neutron field resulting from thermal-
neutron fission of \(^{235}\text{U}\) has been computed for this reaction
using cross section values from the present evaluation.
This computed cross section compares favorably with the re-
sult of a recent evaluation of integral data.

* This work performed under the auspices of the U.S. Energy
Research and Development Administration.