

Mathis Wiedeking: Update on actions

Over the last year experimental Oslo, (p,p'), NRF (including HlyS) method PSF data were collected and forwarded to the IAEA for inclusion in the database update.

Three PSF data sets in ^{197}Au , ^{198}Au and ^{195}Pt could not be retrieved and instead the published figures have been forwarded to the IAEA for digitization.

Currently, two ^{51}Ti data sets from the Oslo and beta-Oslo method are missing and we are in the process of obtaining these data sets.

Clarifications on the treatment of model and/or method uncertainties and normalizations were received for the HlyS and (p,p') data.

A quality indicator has been assigned to each Oslo method data set with 1 being the lowest and 5 the highest quality indicator. The quality indicator takes into account the following:

- a) Have all experimental uncertainties, including Γ_γ and D_0 uncertainties, been included?
- b) Are full model uncertainties included?
- c) Are Γ_γ and D_0 external normalization parameters available?
- d) Has the Shape Method been applied to the data?
- e) Has the work been published after 2013 following the Oslo Method software update?

A total of 172 data sets were considered and the quality indicators are distributed as follows:

Quality Indicator 1: 67 data sets
Quality Indicator 2: 28 data sets
Quality Indicator 3: 26 data sets
Quality Indicator 4: 45 data sets
Quality Indicator 5: 3 data sets.

Oslo method measurements were reviewed to find suitable data for potential evaluation where the same nuclides were populated in different reactions. These are:

$(^3\text{He}, ^3\text{He})^{162}\text{Dy}$ and $(^4\text{He}, ^4\text{He})^{162}\text{Dy}$
 $(^3\text{He}, ^3\text{He})^{161}\text{Dy}$ and $(^4\text{He}, ^4\text{He})^{161}\text{Dy}$
 $(\text{d}, \text{d})^{181}\text{Ta}$ at 12.5 MeV and 15 MeV and $(^3\text{He}, ^3\text{He})^{181}\text{Ta}$

A systematic comparison of PSF data from the various methods averaged over 1 MeV bins across the measured photon energy range, as a function of A, Z, N, N-Z, and β_2 , as well as separating the data for even-even, even-odd, odd-odd nuclei was presented. The goal is to identify trends and/or outliers.