

Conclusions

During the CRP a compilation of newly measured k_0 and Q_0 values determined since 2003 has been produced, a number of which were measured within the CRP. These new values have been validated by analysis of previously measured reference materials. Hence these values form a basis for future recommendation and integration into the relevant international data libraries.

The k_0 database, including new measurements, was used to generate improved σ_0 and $P\gamma$ values for inclusion in the EGAF database. Thus the updated EGAF database will provide a self consistent set of k_0 , σ_0 and $P\gamma$ values. These values can be considered for adoption in the next evaluation of k_0 values.

A set of consistent neutron energy dependent cross section files has been produced through adjustment of existing evaluations to the relevant integral constants of k_0 -NAA, i.e. σ_0 , Q_0 , and is available from the IAEA.

Neutron energy dependent cross section measurements have been made and, in combination with measured k_0 and Q_0 values, new evaluated data files have been produced.