

OTHER PARTICIPANTS

Institute of Experimental Physics – University of Debrecen (Sándor SUDÁR): TRUECOINC

“Truecoinc”, a software utility for calculation of the true coincidence correction(IAEA Tecdoc 1275 (2002) 37-48).

The full-energy peak efficiency was determined by using the mixed source spectra at the three distances.

The Total/FEP efficiency ratio was calculated from single sources spectra.

TRUECOINC Web site

<http://kisfiz.phys.klte.hu/kisfiz/sudar/truecoinc.htm>

- **"TrueCoinc" a Windows program for calculation of coincidence correction in the gamma spectroscopy**
- The "TrueCoinc" program calculates the coincidence correction factors with minimal user effort.
- Use existing databases of the isotopes:
 - The CD-ROM version of the Tables of Isotopes (full).
 - Downloading the ENSDF file of the selected isotope from the Nuclear Data Centers (full, updated)
 - The TrueCoinc program property format (1100 isotope, $T_{1/2} > 1s$, editable, based on the Tables of Isotopes)
 - [Monographie BIPM-5](http://www.nucleide.org/DDEP_WG/DDEPdata.htm) available from the LNHB website at http://www.nucleide.org/DDEP_WG/DDEPdata.htm (Downloading the .ens files) (new)
- The total and full energy efficiencies can be give different forms:
 - Different exponential and power functions
 - Numerical table (new)
- The "TrueCoinc" calculate summing in and summing out correction factors for gamma lines X-rays and create list of "alias" line produced by coincidence in the cascade in one step:
 - A single isotope with defined decay mode and half life.
 - All decay of one isotope (e.g. ^{152}Eu EC and B-).
 - All decay of one isotope with daughters (e.g. ^{226}Ra).
 - For all isotopes in a mixed source (new).
- The output:
 - Screen
 - Printer
 - Text file (for import by other programs)
 - Clipboard, to copy into other application (i.e. spreadsheets)
- The program is supported with Help and a User Guide

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- National Technical University of Athens (K.L. Karfopolos and M.J. Anagnostakis)
Program TRUECOINC
Geometry 10 cm:
 FEP Efficiency obtained using experimental data
 Total-to-peak ratio : Monte Carlo (PENELOPE)
Geometries 5 and 2 cm:
 FEP : Efficiency transfer using PENELOPE
 Total-to-peak ratio : Monte Carlo (PENELOPE)
- Istituto Superiore per la Protezione e la Ricerca Ambientale (R. Ocone)
Genie2000 Rev 3.1 Casade Summing correction algorithm using the LABSOCS routine based on MCNP simulation
- KRISS (K.B. Lee and J.B. Han): ETNA
- Vietnam (Tran Thien Thanh, Chau Van Tao): ETNA