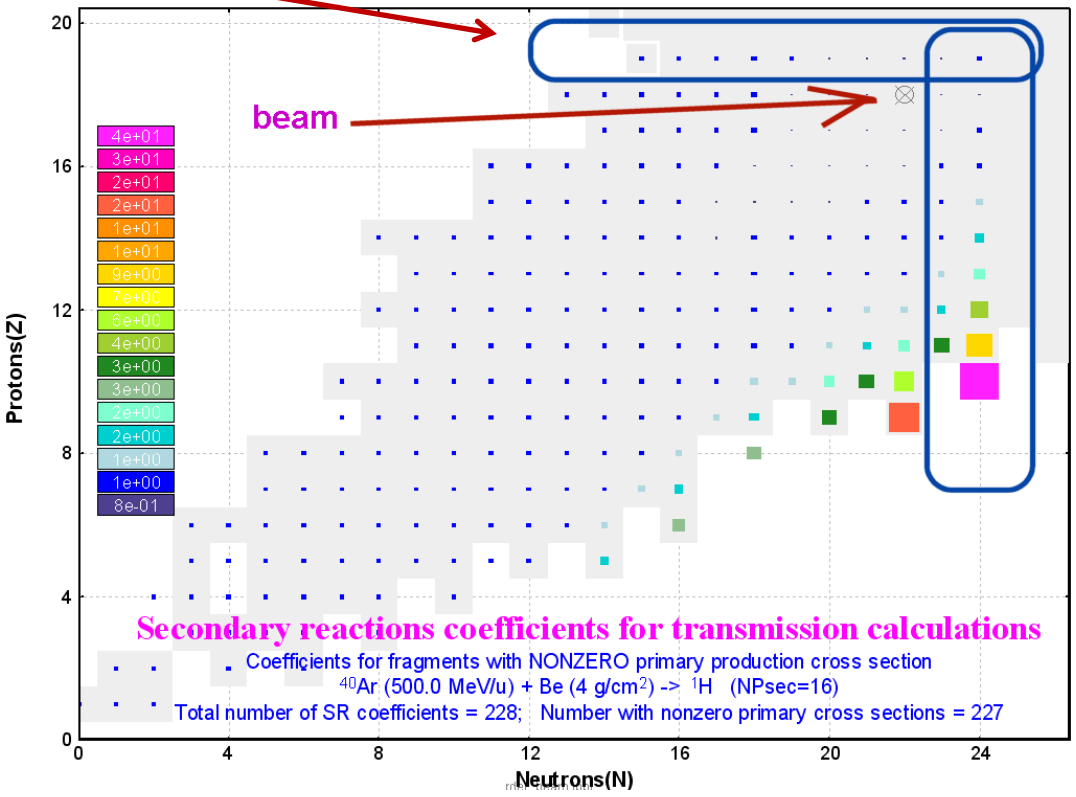
List of some modifications (1)

- Modifications in LISE for Excel : corrections for GLOBAL calculations
- New MARS, LISE and A1900 (expanded) fragment separator configurations
- Correction for the case: Wedge thickness =0, angle!=0
- Secondary reaction area has been increased for fragmentation

The code operates under MS Windows environment and provides a highly user-friendly interface.
It can be freely downloaded from the following internet addresses:
http://www.nscl.msu.edu/lise



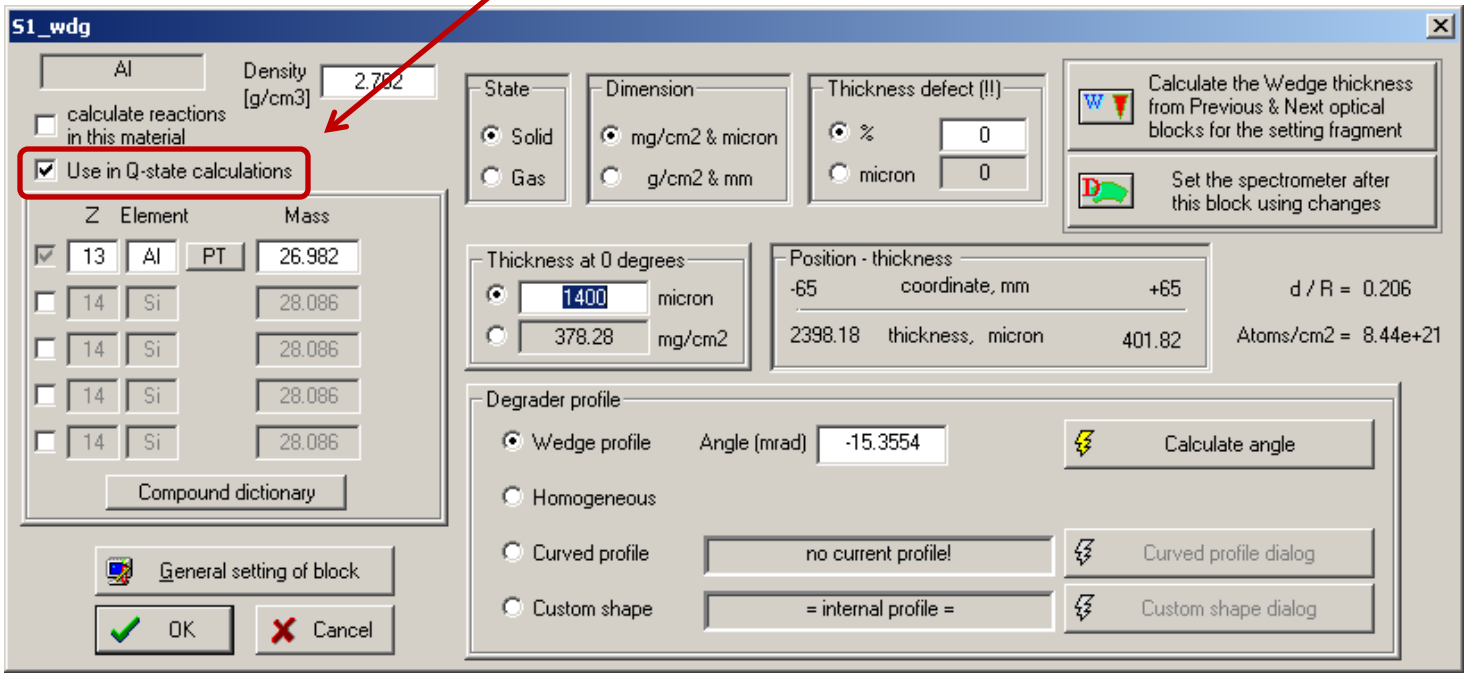
List of some modifications (2)

- The Gas Density dialog is available from the MCP144 utility

  http://groups.nscl.msu.edu/lise/9_0/2010_MSP144/2010_MSP.pdf

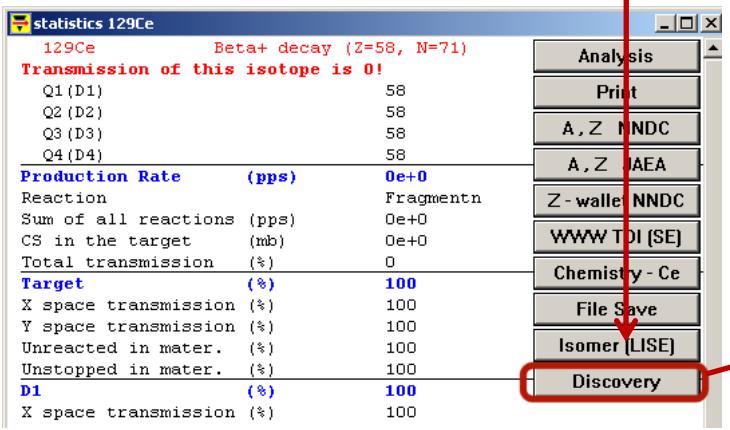
- Setup window timer update

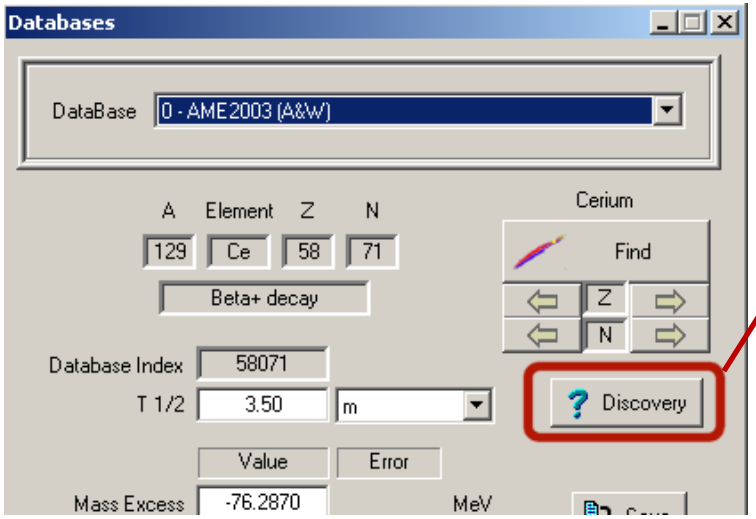
- Option on/off for a material to be used in Q-state calculations (dialogs "Material", "Wedge", "Target")

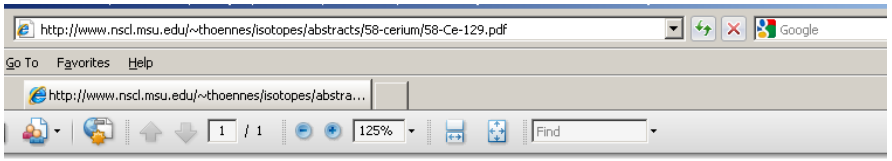


List of some modifications (3)

- The Discovery button in the Isotopes dialog. Discovery database: Ce,As,W,Au







^{129}Ce

The first identification of ^{129}Ce was reported in 1977 by Gizon et al. [1] in the paper "The $h_{11/2}$ and $g_{7/2}$ band structure in ^{131}Ce and ^{129}Ce". The isotope was produced in the fusion-evaporation reaction ^{116}Sn(^{16}O,3n) with an ^{16}O beam from the 88" sector-focussed cyclotron at Berkeley. ^{129}Ce was identified by $\gamma\gamma$ coincidence measurements of excitation functions. Two prior reports of half-life measurements mentioned in the paper "Before this work, no information was available on the energies and spin assignments of levels in ^{131}Ce and ^{129}Ce; only their half-lives had been determined" were not published in refereed journals [2,3].

[1] J. Gizon, A. Gizon, R. M. Diamond, F. S. Stephens, Nucl. Phys. A 290 (1977) 272.

[2] A. K. Lavrukhina and G. M. Kolesov, Soviet Phys. Doklady 8 (1963) 168.

[3] R. Arlt, G. Baier, G. Muziol, and K. Shtrusnyi, Proc. 19th Ann. Conf. Nucl. Spect. and Struct. of At. Nucl., p. 92 (1969).

Adapted from
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At. Data Nucl. Data. Tables **95**, 905 (2009)