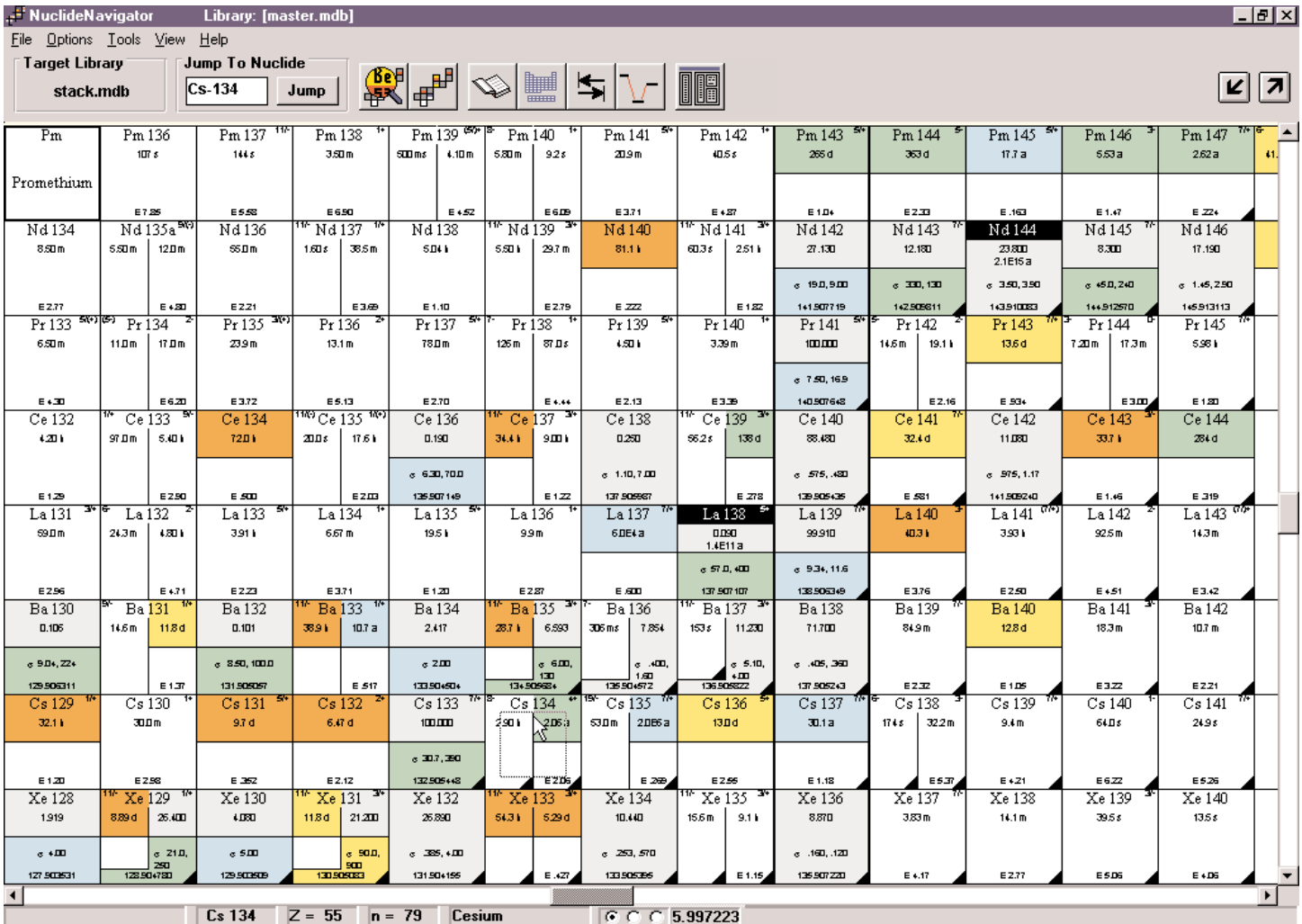


Chart of the Nuclides Database Software



PC-based chart of the nuclides for use with gamma spectroscopy analysis software (GammaVision-32) or as a stand-alone package.

New Features, Additional Libraries, and New Tools to retrieve information and identify isotopes.

The Most Comprehensive Nuclide Library Database Ever Available from ORTEC

NuclideNavigator III has expanded and updated its libraries to comprise the most accurate information available. The TORI database has been added to the list of available databases, and the NUDAT library has been updated from Brookhaven National Laboratory's latest archive. The Erdtmann and Soyka database remains in the software as well as some handy pre-selected libraries for environmental and nuclear power plant counting and calibration libraries for the standard mixed gamma and mixed europium sources. All libraries supplied with the software are available in Microsoft Access database (MDB) format and ORTEC GammaVision (LIB) format.

Each library contains the appropriate alpha, beta, and/or gamma decay. Viewing the information for a specific isotope allows quick access to both the parent and daughter isotopes with a simple click of the mouse.

Choose the Type of Decay (Alpha, Beta, or Gamma)

Select the Order (by Energy or Branching Ratio)

View Parent or Daughter Information

Energy	Branch (%)	Br Codes	A Gamma 1	A Gamma 2
609.31	44.80000		1764.49	1120.29
1764.49	15.36000		609.31	1120.29
1120.29	14.80000		609.31	1764.49
1238.11	5.86000		609.31	1764.49
2204.21	4.86000		609.31	1764.49
768.36	4.80000		609.31	1764.49
1377.67	3.92000		609.31	1764.49
934.06	3.03000		609.31	1764.49
1729.59	2.88000		609.31	1764.49
1407.98	2.80000		609.31	1764.49

Comprehensive Legend gives nuclear and physical properties of the isotopes.

Legend: Fission Yields, Binding Energy (1), Binding Energy (2), Half Lives, Neutron Cross Sections, Nuclear Processes, Stable, Artificially Radioactive, Naturally Radioactive.

Artificially Radioactive Nuclide: Symbol, Mass Number, Spin and Parity, Half Life, Beta Disintegration Energy (MeV), Fission Products.

Artificially Radioactive Nuclide with an Isomeric State: Spin and Parity of Metastable State, Spin and Parity of Ground State, Half Life, Thermal, Resonance cross sections (Barns), Beta Disint. Energy (MeV).

Legend: Stable, Artificially Radioactive, Naturally Radioactive, Fission Yields, Binding Energy (1), Binding Energy (2), Half Lives, Neutron Cross Sections, Nuclear Processes.

Relative locations of the products of various nuclear processes: 3He in, alpha in, t in, n in, B-, p in, d in, n out, d out, p out, B-, out, EC, alpha out, 3He out.

Legend: Fission Yields, Binding Energy (1), Binding Energy (2), Half Lives, Neutron Cross Sections, Nuclear Processes, Stable, Artificially Radioactive, Naturally Radioactive.

Naturally Occurring Radioactive Nuclide: Symbol, Mass Number, Spin and Parity, Abundance (%), Half Life, Isotopic Mass, Thermal, Resonance cross sections (Barns), Naturally R.

Naturally Occurring Radioactive Nuclide with an Isomeric State: Spin and Parity of Metastable State, Spin and Parity of Ground State, Half Life, Abundance (%), Half Life, Thermal, Resonance cross sections (Barns), Fission Product.

Legend: Half Lives, Neutron Cross Sections, Nuclear Processes, Stable, Artificially Radioactive, Naturally Radioactive.

Fission Yields: Binding Energy (1), Binding Energy (2). Graph showing Fission Yield (%) vs A for U-235, Pu-239, and U-233.

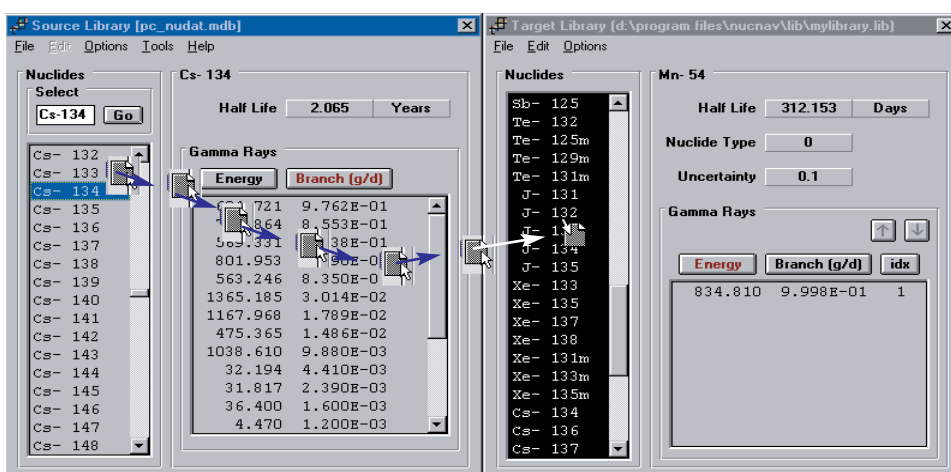
NuclideNavigator III

C53-B32

Interactive Creation/Editing of Libraries for use with ORTEC Software Products

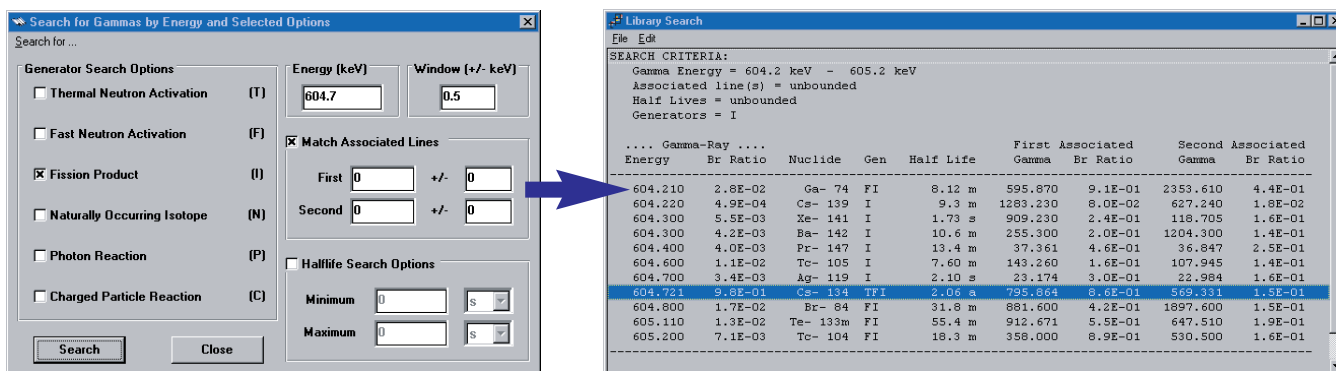
Creating and editing libraries in Nuclide Navigator is as easy as using a mouse. To add a nuclide simply drag and drop nuclides from the Master Library window to the Target Library.

The source and target libraries can be in Microsoft Access database format or the ORTEC format for GammaVision (LIB) libraries. Once created in Nuclide Navigator, LIB files can be edited and used for analysis directly in the GammaVision software.¹



Search for Unknowns

The comprehensive Search Tool in Nuclide Navigator lets the user define search criteria for specific energy peaks. The search results window gives other associated lines (in order of intensity) to look for in the spectrum.



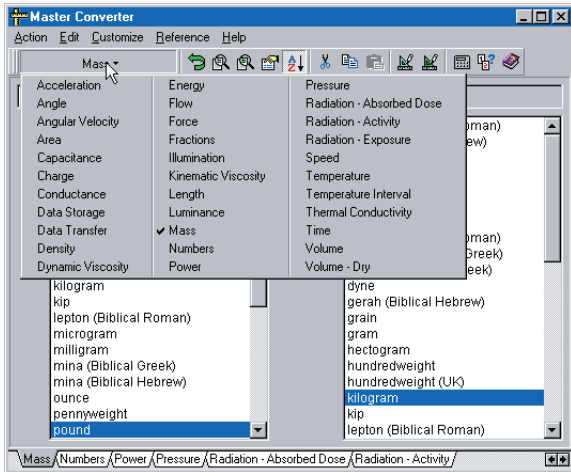
¹GammaVision 5.20 and higher can also read and edit the Access MDB format database libraries. For GammaVision upgrade information, contact your local sales representative or visit our website at www.ortec-online.com.

NuclideNavigator III

C53-B32

Units Converter:

With many built-in and user-defined conversions.

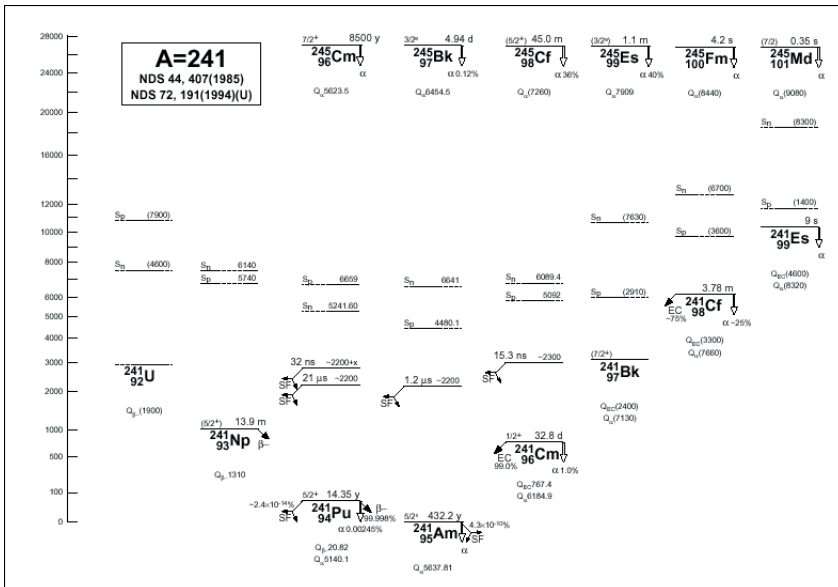


Ordering Information:

Model	Description
C53-B32	NuclideNavigator III Master Library
C53-CD32	NuclideNavigator III for 5 additional users (Non-Educational)
C53-CD32-K	Upgrade from B53-CD to C53-CD32
C53-CD32-M	Upgrade from C53-CD to C53-CD32
C53-ED32	NuclideNavigator III for 5 additional users (Educational Inst. Only)
C53-ED32-K	Upgrade from B53-ED to C53-ED32
C53-ED32-M	Upgrade from C53-ED to C53-ED32
C53-FR	LARA, une création du CEA, est une option additionnelle. Requires previous or accompanying purchase of C53-B32.
C53-G32	Documentation for C53-B32
C53-K32	Upgrade from A53-BI to C53-B32
C53-L32	Upgrade from B53-BI to C53-B32
C53-M32	Upgrade from C53-BI to C53-B32
C53-U32	Update for C53-B32

Decay Scheme View:

In PDF format.



Specifications subject to change
050108

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