1. Getting Started with Nuclides.net

1.1 The Nuclides.net Program Suite

The Nuclides.net software suite contains the following modules/features:

- Nuclide Explorer – this computer program, together with a “thin” database, resides on the user’s computer and provides access to nuclide information through nuclide charts. From the Nuclide Explorer taskbar, a variety of applications (to obtain data, perform calculations, etc.) can be launched. Most of these applications run on a central webserver. Input and output is transmitted over the internet through Active Server Pages (ASPs).

- A “thin” database for use with the Nuclide Explorer (the main database is accessed via the internet).

- Datasheets – a software module to show the basic data on approximately 3650 ground states and isomers (obtained from the webserver).

- FactSheets – a software module to show basic properties (obtained from the webserver).

- Element info, articles, weblinks – software modules which allow access to the information on the webserver.

- Decay Engine – a software module for decay calculations (module resident on the webserver).

- Dosimetry & Shielding module for such calculations (module resident on the webserver).

- Virtual Nuclides – with this module decay calculations and dosimetry and shielding calculations can be made with mixtures of nuclides.

- Fission Yield module for fission products and yields (module resident on the webserver).

- Cross-Sections – this module gives averaged cross-sections from the main international datafiles. Data includes the cross-sections for room temperature, Maxwell averaged, resonance integral, fission averaged, and 14 MeV neutrons.

- The Universal Nuclide Chart – this program runs locally on the user computer (no access over the internet is required) and displays basic data in nuclide charts, shows decay chains and reaction paths in nuclear reactors.

- A Data Search Engine to search the web server database for nuclide data (module resident on the webserver).

- A Text Search Engine to search the Nuclides.net webspace for articles, etc. (text string search).

- Forum – allows users to communicate through a web-based forum.
1. Getting Started with Nuclides.net

- News – gives users latest information on Nuclides.net, the web server, new modules etc.
- Help – online help – gives access to the book online.

1.2 Computer System Requirements

To access the applications in Nuclides.net, the recommended and minimum system requirements are listed in Table 1.1. As with many applications, the higher the system resources, the better the applications will run.

Table 1.1. Computer system requirements for Nuclides.net

<table>
<thead>
<tr>
<th>Processor</th>
<th>Pentium II or equivalent processor, 350 MHz recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM drive</td>
<td>2x minimum</td>
</tr>
<tr>
<td>Hard disk space</td>
<td>21 MB</td>
</tr>
<tr>
<td>Pointing device</td>
<td>Mouse etc.</td>
</tr>
<tr>
<td>System memory (RAM)</td>
<td>256 MB recommended, 64 MB minimum</td>
</tr>
<tr>
<td>Monitor</td>
<td>17&quot; recommended, 800x600 resolution, 256-colour video display (16 bit colour recommended)</td>
</tr>
<tr>
<td>Operating system</td>
<td>Windows 95, NT4.0, 98, 2000, ME, XP</td>
</tr>
<tr>
<td>Web Browser</td>
<td>Microsoft Internet Explorer (version 5.0 or higher)</td>
</tr>
</tbody>
</table>

1.3 End User License Agreement (EULA)

The software license agreement which comes with Nuclides.net is based on a single user license. Organisations wishing to purchase multiple copies of Nuclides.net should contact: Dr. J. Magill, European Commission, Institute for Transuranium Elements, Postfach 2340, 76125 Karlsruhe, Germany, email: magill@itu.fzk.de.

1.4 Installing Nuclides.net on a Hard Disk

To install Nuclides.net, place the CD into the compact disk drive. If the autoplay feature is active, the installation menu shown in Fig. 1.1 will appear on the screen. If this is not the case, the setup program can be run directly from the CD.

For the full installation, the three steps shown in Fig. 1.1 must be followed:

[Step 1] Nuclides.net Setup
This will install Nuclides.net on the user’s computer. Before installation starts, the End User License Agreement (EULA) is shown on the screen. The user must accept the license conditions before the installation can proceed. Thereafter, setup will
- create a Nuclides.net program group under Windows
- create a directory on the hard disk
- copy all required files into that directory