The Virtual Gamma Spectrometry Laboratory

Presented at the ICRM gamma spectroscopy working group meeting at Laboratoire National d’Essais, Paris, 23 February 2009

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CTBT Radionuclide Particulate Station Network  79 + 1 TBD
Efficiency vs. Energy (keV) for New Zealand Calibration and Virtual Lab Calculation.
Welcome to

VGSL

THE VIRTUAL GAMMA SPECTROSCOPY LABORATORY
Virtual Gamma Spectroscopy Laboratory

Setup: NZP46_001
Source: Lead

Acquisition time (min): 60

Acquisition
Normal Spectrum with decay coincidence summation turned off and with sharp resolution
Energy (KeV) =
Channel Count =
Summing correction factor =
Peaks only with decay coincidence summation turned off and with sharp resolution
Investing in the laboratory
SETUP CONFIGURATION

Laboratory setup

- Detector: BE5030
- Shielding: Shl1
- Source geometry: petriadisk

Distance from Detector window to inner Shielding cup surface
D (cm): 2.0 cm

Shift of the source center to the detector axis (z=0 at end cup window)
Radial (cm): 4 cm
Axial (cm): 4 cm

Existing Setups
- NZP46_001
- NZP46_002
- NZP46_003
- Ronfort03

Efficiency Table

<table>
<thead>
<tr>
<th>ID</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>0.037102</td>
</tr>
<tr>
<td>20</td>
<td>0.1122</td>
</tr>
<tr>
<td>30</td>
<td>0.2376</td>
</tr>
<tr>
<td>40</td>
<td>0.33047</td>
</tr>
<tr>
<td>50</td>
<td>0.3832</td>
</tr>
<tr>
<td>60</td>
<td>0.38371</td>
</tr>
</tbody>
</table>

Efficiency table written in file NZP46_001.eff

Setup name: test

PLOT EFFICIENCY

Remove selected
Efficiency curve after half a minute
Efficiency curve after 7.6 minutes

Elapsed Time = 7.6422 min
(estimated 77.2208 min)
Running an experiment
Thank you