

Nuclear Structure and Decay Data (NSDD)  
Network

Brookhaven National Laboratory

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Decay Data Evaluation Project (DDEP)

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# 1. Members of the DDEP Collaboration

CEA/LNHB (**France**): Dr. Marie-Martine Bé, Dr. Vanessa Chiste, Dr. B. Duchemin

PTB (**Germany**): Dr. Herbert Janssen, Dr. E. Schönfeld

LBNL (**USA**): Dr. Edgardo Browne, Dr. Coral Baglin,  
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INEEL (**USA**): Dr. Richard G. Helmer, Dr. Charles Reich

BNL (**USA**): Dr. Jagdish K. Tuli

ANL (**USA**): Dr. Filip Kondev

KRI (**Russia**): Dr. Valery P. Chechev

NPL (**UK**): Dr. T. Desmond MacMahon

IAEA (**Vienna**): Dr. Alan L. Nichols

USP (**Brazil**): Dr. Vito Vanin, Dr. Rui M. Castro

PTB (**Germany**): Dr. Rainer Dersch

### 3. Current Status of Evaluations

- **259** selected radionuclides
- As of October 1, 2004:
  - 103** evaluations have been produced
  - 29** evaluations have been published in the French *Table of Radionuclides* (1999)
  - 97** evaluations are available on the WWW (<http://www.bnm.fr/bnm-Inhb/DDEP.htm>)
  - 68** evaluations have been published in a *Bureau International des Poids et Mesures* (BIPM) Monography (2004)

# Table of Radionuclides (Vol. 1 - $A = 1$ to 150)

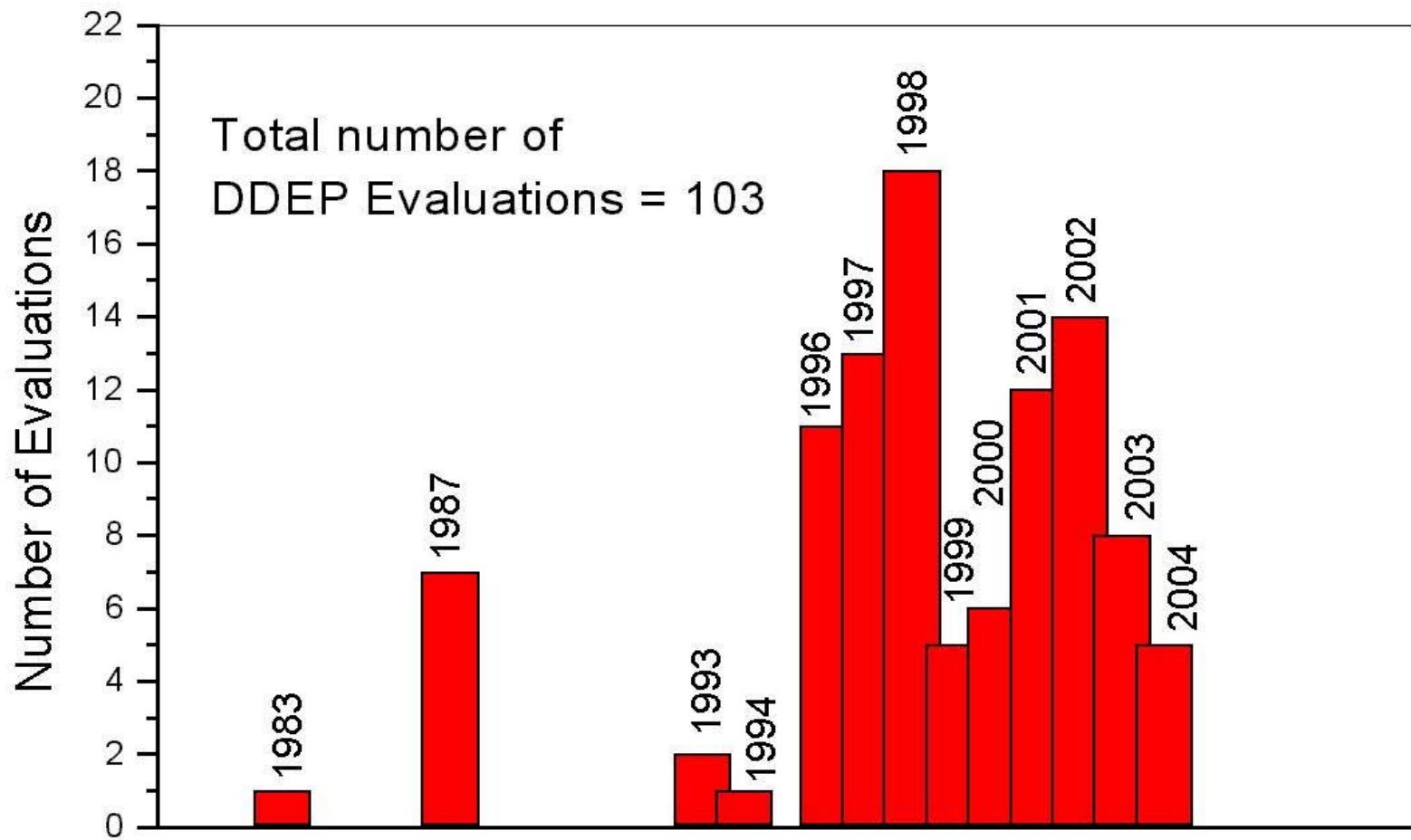
M.-M. Bé, V. Chisté, C. Dujieu  
E. Browne  
V. Chechev, N. Kuzmenko  
R. Helmer  
A. Nichols  
E. Schönfeld, R. Dersch

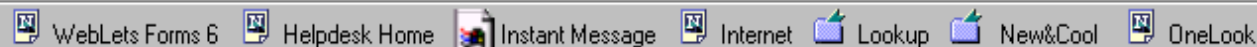


2004

BUREAU INTERNATIONAL DES POIDS ET MESURES

Pavillon de Breteuil, F-92310 SÈVRES





Bookmarks Netsite: [http://www.bnm.fr/bnm-lnhb/DDEP\\_WG/DDEPdata.htm](http://www.bnm.fr/bnm-lnhb/DDEP_WG/DDEPdata.htm) What's Related

Accueil

Remonter

Sommaire LNHB

Dosimétrie

Radioactivité



This [introduction](#) presents a brief description of the radioactivity physical processes, the enumeration of the evaluation rules leading to the recommended values, and a summary of the symbols and terms used in all the publications.

Explanation on recommended data and their evaluation :



to view pdf files

Tables of evaluated data and comments on evaluation

updated : 10th sept. 2004

latest updates : Fe-55, Ga-67, I-123, I-131, Ir-192, Pu-240, Tc-99m

131, 137, 152, 154, 159, 161, 165, 167, 170, 174, 176, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000

## 4. DDEP and IAEA-CRP

- Strong collaboration between these projects
- Values recommended in DDEP evaluations have been adopted in IAEA-CRP evaluations
- The DDEP Collaboration produced in 2003-2004 the evaluations of  $^{66}\text{Ga}$ ,  $^{56}\text{Co}$ ,  $^{125}\text{Sb}$ , and  $^{243}\text{Am}$ , which were needed by the IAEA-CRP project.

## 5. DDEP and ENSDF

- **Good news:** A new computer program (BRICC) for interpolating theoretical internal conversion coefficients from Band et al. is available to evaluators of ENSDF
- Both evaluators of ENSDF and DDEP will use the *same* internal conversion coefficients from Band. et al.
- Decay schemes and normalization factors for radiation intensities from DDEP evaluations may be used in ENSDF evaluations.
- ***Not so good news:*** The current (103) DDEP evaluations use Rosel theoretical internal conversion coefficients.



## 6. CONCLUSIONS

- The best way to access DDEP evaluations is through the Internet.
- Data from DDEP evaluations given in:  
<http://www.bnm-lnhb/DDEP.htm>  
may be used in ENSDF evaluations.