

Publications

PTB departments 6.4 and 6.5
'Ion Accelerators and Reference Radiation Fields' and 'Neutron Radiation'
 (July 2003 – February 2009)

PTB department 6.4 'Neutron Radiation'
 (January 2000 - June 2003)

PTB departments 6.3 and 6.4
'Neutron and Ion Dosimetry' and 'Neutron Metrology'
 (March 1997 - December 1999)

- I. Contributions to journals, books, proceedings**
- II. PTB reports**
- III. PTB Laboratory reports**

Reprints are available upon request from:

Physikalisch-Technische Bundesanstalt
department 6.4 "Ion Accelerators and Reference Radiation Fields"
or
department 6.5 "Neutron Radiation"
Bundesallee 100
D-38116 Braunschweig
Germany

I. Contributions to journals, books, proceedings

- 323. **R. Lauck, M. Brandis, B. Bromberger, V. Dangendorf, M. B. Goldberg, I. Mor, K. Tittelmeier D. Vartsky:**
Low-Afterglow, High-Refractive-Index Liquid Scintillators for Fast-Neutron Spectrometry and Imaging Applications
 submitted for publication in IEEE Trans. Nucl. Science
- 322. **S. Röttger, A. Heiske, R. Nolte:**
Investigation of the Neutron Contribution in the 6 MeV to 7 MeV High Energy Photon Reference Field
 submitted for publication in Radiat. Prot. Dosim.
- 321. **I. Mor, D. Vartsky, D. Bar, G. Feldman, M. B. Goldberg, D. Katz, E. Sayag, I. Shmueli, Y. Cohen, A. Tal, Z. Vagish, B. Bromberger, V. Dangendorf, D. Mugai, K. Tittelmeier, M. Weierganz:**
High Spatial Resolution Fast-Neutron Imaging Detectors for Pulsed Fast-Neutron Transmission Spectroscopy
 submitted for publication in JINST (Journal of Instrumentation)

Publications of the PTB-section 7.2 'Neutron metrology' (since 1.1.1989)

I. Contributions to journals, books, proceedings

1. Mannhart, W.:
The Status of the Cf-252 Neutron Spectrum as a Standard.
In: Reactor Dosimetry: Methods, Applications and Standardization, ASTM STP 1001,
American Society for Testing and Materials, Philadelphia (1989) 340 - 347
2. Cub, J.; Finckh, E.; Gebhardt, K.; Geißdörfer, K.; Lin, R.; Strate, J.; Klein, H.:
The Neutron Detection Efficiency of NE213 Detectors Measured by Means of a Cf-252
Source.
Nucl. Instrum. Meth. A274 (1989) 217 - 221
3. Brede, H.J.; Dietze, G.; Kudo, K.; Schrewe, U.J.; Tancu, F.; Wen, C.:
Neutron Yields from Thick Be Targets Bombarded with Deuterons and Protons.
Nucl. Instrum. Meth. A274 (1989) 332 - 344
4. Böttger, R.; Guldbakke, S.; Klein, H.; Schölermann, H.; Schuhmacher, H.;
Strzelczyk, H.:
Problems Associated with the Production of Monoenergetic Neutrons.
Nucl. Instrum. Meth. A282 (1989) 358 - 367
5. Alberts, W. G.; Dietz, E.; Guldbakke, S.; Kluge, H.; Schuhmacher, H.:
International Intercomparison of TEPC Systems Used for Radiation Protection.
Radiat. Prot. Dosim. 29 (1989) 47 - 53
6. Dietze, G.; Menzel, H. G.; Schuhmacher, H.:
Determination of Dose Equivalent with Tissue-Equivalent Proportional Counters.
Radiat. Prot. Dosim. 28 (1989) 77 - 81
7. Guldbakke, S.; Schäffler, D.; Kramer, H. M.:
How Should the Individual Dose Equivalent be Measured in High Energy Photon
Fields?
Radiat. Prot. Dosim. 28 (1989) 127 - 129
8. Schrewe, U. J.; Brede, H. J.; Dietze, G.:
Dosimetry in Mixed Neutron-Photon Fields with Tissue-Equivalent Proportional
Counters.
Radiat. Prot. Dosim. 29 (1989) 41 - 45
9. Dietze, G.:
The New Operational Quantities in Radiation Protection and their Realisation with
Tissue-Equivalent Proportional Counters.
Radiat. Prot. Dosim. 29 (1989) 139 - 142

10. Bauer, B.W.; Alberts, W.G.; Burgkhardt, B.; Guldbakke, S.; Kluge, H.; Medioni, R.; Piesch, E.; Portal, G.; Siebert, B.R.L.:
Energy and Angle Dependence of and Phantom Influence on Readings of Neutron Individual Dosimeters: First Results of Experiments.
Radiat. Prot. Dosim. 28 (1989) 115 - 119
11. Knauf, K.; Alevra, A.; Klein, H.; Wittstock, J.:
Neutronenspektrometrie im Strahlenschutz.
PTB-Mitteilungen 99 (1989) 101 - 106
12. Cabral, S.; Börker, G.; Klein, H.; Mannhart, W.:
Neutron Production from the Deuteron Breakup Reaction on Deuterium.
Nucl. Sci. Eng. 106, No. 3 (1990) 308 - 317
13. Märten, H.; Richter, R.; Seeliger, D.; Fromm, W.D.; Böttger, R.; Klein, H.:
The ²⁵²Cf(sf) Neutron Spectrum in the 5 - 20-MeV Energy Range.
Nucl. Sci. Eng. 106, No. 3 (1990) 353 - 366
14. Antolkovic, B.; Dietze, G.; Klein, H.:
Reaction Cross Sections on Carbon for Neutron Energies from 11.5 MeV to 19 MeV.
Nucl. Sci. Eng. 107 (1991) 1 - 21
15. Mannhart, W.:
Status of the Cf-252 Fission Neutron Spectrum Evaluation with Regard to Recent Experiments.
Proc. IAEA Consultants' Meeting on the Physics of Neutron Emission in Fission, Mito, Japan, 24 - 27 May, 1988, INDC(NDS)-220, p. 305 - 336, Vienna 1989
16. Brede, H.J.; Dietze, G.; Klein, H.; Schölermann, H.:
Determination of Neutron Induced α -Particle Cross Sections on Carbon Using the Response of a Liquid Scintillation Detector.
Nucl. Sci. Eng. 107 (1991) 22 - 34
17. Böttger, R.; Klein, H.; Chalupka, A.; Strohmaier, B.:
Investigation of the Spectral Fluence of Neutrons from Spontaneous Fission of ²⁵²Cf by Means of Time-of-Flight Spectrometry.
Nucl. Sci. Eng. 106, No. 3 (1990) 377 - 398
18. Mannhart, W.; Smith, D.L.; Meadows, J.W.:
Measurement of the Ti-47(n,p)Sc-47 Reaction Cross Section.
Proc. NEANDC Specialists' Meeting on Neutron Activation Cross Sections for Fission and Fusion Energy Application, Argonne, USA, 13. - 15. September 1989, NEANDC-259 'U', OECD, Paris (1990) 121 - 134
19. Schlegel-Bickmann, D.; Brede, H.J.; Guldbakke, S.; Lewis, V.E.; Zoetelief, J.:
Measurement of k_U -Values of Argon-filled Magnesium Ionisation Chambers.
Phys. Med. Biol. 35 (1990) 717 - 730
20. Brede, H.J.; Schlegel-Bickmann, D.R.; Schrewe, U.J.; Schuhmacher, H.:
The PTB Facility for Neutron Therapy Dosimetry.
PSI-Report No. 69 (1990) 108 - 110

21. Guldbakke, S.; Pitt, E.; Scharmann, A.; Simmer, R.:
Simultaneous Measurement of Angle of Incidence and Energy in Fast Neutron Fields by CR-39.
Radiat. Prot. Dosim. 34 (1990) 39 - 41
22. Alevra, A.; Cosack, M.; Klein, H.; Knauf, K.; Matzke, M.; Plewnia, A.; Siebert, B.R.L.:
Development of Neutron Spectrometers for Radiation Protection Practice.
EUR-report 1326B, Vol. 1, p. 132 - 142, Luxembourg, 1991
23. Bätzner, R.; Bomba, B.; Bosch, S.; Brzosko, J.S.; van Calker, C.; Guldbakke, S.;
Hübner, K.; Ingrosso, L.; Klein, H.; Kucinski, J.; Robouch, B.V.; Wagner, R.:
Absolute Determination of High Neutron Yields for ASDEX.
Europhysics Conference Abstracts of the 17th EPS Conference on Controlled Fusion
and Plasma Heating, 25. - 29. Juni 1990, Amsterdam, Eds: G. Brifford, A. Nijssen-Vis,
F.C. Schüller, Vol. 14B, Geneva (1990), 1520 - 1523
24. Guldbakke, S.; Schäffler, D.:
Properties of High-Energy Photon Fields to be Applied for Calibration Purposes.
Nucl. Instrum. Meth. A299 (1990) 367 - 371
25. Rossiter, M.J.; Williams, T.T.; Guldbakke, S.; Schäffler, D.:
The Calibration of Secondary Standard Ionisation Chambers in High-Energy Photon
Fields.
Radiat. Prot. Dosim. 35 (1991) 237 - 240
26. Matzke, M.; Knauf, K.; Dietz, E.; Plewnia, A.; Alberts, W.G.:
Transmission of Neutrons of 20 keV to 1 MeV Through Iron.
Proceedings of the Seventh ASTM-EURATOM Symposium on Reactor Dosimetry,
Eds. G. Tsotridis, R. Diercks, P. D'Hondt, Kluwer Academic Publishers, Dordrecht
1992, report EUR 14356 EN, p. 377 - 384
27. Alevra, A.V.; Matzke, M.; Siebert, B.R.L.:
Findings of an International Unfolding Intercomparison with Bonner Spheres.
Proceedings of the Seventh ASTM-EURATOM Symposium on Reactor Dosimetry,
Eds. G. Tsotridis, R. Diercks, P. D'Hondt, Kluwer Academic Publishers, Dordrecht
1992, report EUR 14356 EN, p. 215 - 222
28. Luszik-Bhadra, M.; Alberts, W.G.; Dietz, E.; Guldbakke, S.:
A Track-Etch Neutron Dosimeter with Flat Response and Spectrometric Properties.
Nucl. Tracks Radiat. Meas. 19 (1991) 485 - 488
29. Rossiter, M.J.; Guldbakke, S.:
EUROMET Collaboration in the Radiation Protection Area.
Proceedings of the International Conference on Occupational Radiation Protection,
British Nuclear Energy Society, London 1991, p. 199 - 201
30. Knauf, K.; Vorbrugg, W.:
The Response of a Cylindrical Proton Recoil Proportional Counter to Neutrons
Impinging Perpendicular to its Axis.
Nucl. Instrum. Meth. A 305 (1991) 419 - 422

31. Robouch, B. V.; Hübner, K.; Ingrosso, L.; Brzosko, J. S.; Klein, H.; Guldbakke, S.:
A New Approach to Fast Neutron Diagnostic Simulation: Monte Carlo with Shower and
Drizzle Splittings and Finite Close-Collision Treatment.
Progress in Nuclear Energy 24 (1990) 409 - 415

32. Weise, K., Weyrauch, M.; Knauf, K.:
Neutron Response of a Spherical Proton Recoil Proportional Counter.
Nucl. Instrum. Meth. A309 (1991) 287 - 293

33. Börker, G.; Mannhart, W.; Siebert, B.R.L.:
Elastic and Inelastic Neutron Scattering on Carbon-12.
Proc. of the Int. Conf. on "Nuclear Data for Science and Technology", Ed. S.M. Qaim,
Springer-Verlag, Berlin 1992, p. 317 - 319

34. Meadows, J.W.; Smith, D.L.; Greenwood, L.R.; Geraldo, L.P.; Mannhart, W.;
Börker, G.:
Measurements of the Neutron Cross Section for Fe-54(n, α)Cr-51 between 5.3 and
14.6 MeV.
Proc. of the Int. Conf. on "Nuclear Data for Science and Technology", Ed. S.M. Qaim,
Springer-Verlag, Berlin 1992, p. 288 - 290

35. Smith, D.L.; Meadows, J.W.; Vonach, H.; Wagner, M.; Haight, R.C.; Mannhart, W.:
Comparison of Activation Cross Section Measurements Performed with Different
Neutron Source Reactions in the 5 - 13 MeV Range.
Proc. of the Int. Conf. on "Nuclear Data for Science and Technology", Ed. S.M. Qaim,
Springer-Verlag, Berlin 1992, p. 282 - 287

36. Chiba, S.; Takahashi, A.; Klein, H.; Smith, A.B.:
Neutron Scattering: Technological Achievements and Illustrative Results.
Proc. of the Int. Conf. on "Nuclear Data for Science and Technology", Ed. S.M. Qaim,
Springer-Verlag, Berlin 1992, p. 414 - 421

37. Condé, H.; Haight, R.; Klein, H.; Lisowski, P.:
New Neutron Facilities for Nuclear Data Measurements at $E_n > 10$ MeV.
Proc. of the Int. Conf. on "Nuclear Data for Science and Technology", Ed. S.M. Qaim,
Springer-Verlag, Berlin 1992, p. 386 - 394

38. Schrewe, U.J.; Brede, H.J.; Matzke, M.; Nolte, R.; Meulders, J.P.; Schuhmacher, H.;
Slypen, I.:
 $^{107,109}\text{Ag}(n,3/5n)^{105}\text{Ag}$ Reaction Cross Section for $20 \text{ MeV} < E_n < 70 \text{ MeV}$.
Proc. of the Int. Conf. on "Nuclear Data for Science and Technology", Ed. S.M. Qaim,
Springer-Verlag, Berlin 1992, p. 669 - 671

39. Dörschel, B.; Alberts, W.G.; Klein, H.; Piesch, E.; Pihet, P.; Schraube, H.:
Stand der Meßtechnik in der Neutronendosimetrie.
In: H. Jacobs, H. Bonka (Hrsg.): Strahlenschutz für Mensch und Umwelt, Verlag TÜV
Rheinland (1991), p. 812 - 821
40. Luszik-Bhadra, M.; Alberts, W.G.; Guldbakke, S.; Kluge, H.:
Influence of the Converter Configuration on the Angle Response of Track-Etched
Neutron Dosimeters.
Radiat. Prot. Dosim. 38 (1991) 271 - 277
41. Siebert, B.R.L.; Alberts, W.G.; Bauer, B.W.; Dietz, E.; Guldbakke, S.; Hollnagel, R.;
Jahr, R.; Kluge, H.:
Investigation of Dose Equivalent Quantities for Individual Dosimetry.
EUR-report 13268, Vol. 1, Luxembourg, 1991, p. 158 - 170
42. Alevra, A.V.; Cosack, M.; Hunt, J.B.; Thomas, D.J.; Schraube, H.:
Experimental Determination of the Response of Four Bonner Sphere Sets for
Monoenergetic Neutrons (II).
Radiat. Prot. Dosim. 40 (1992) 91 - 102
43. Luszik-Bhadra, M.; Alberts, W.G.; Dietz, E.; Guldbakke, S.; Kluge, H.:
A Simple Personal Dosimeter for Thermal, Intermediate and Fast Neutrons based on
CR-39 Track Etch Detectors.
Radiat. Prot. Dosim. 44 (1992) 313 - 316
44. Antolkovic, B.; Klein, H.; Dietze, G.:
Secondary-Alpha-Particle Spectra and Partial Kerma Factors of the Reaction
 $n + {}^{12}\text{C} \rightarrow n + 3\alpha$.
Radiat. Prot. Dosim. 44 (1992) 31 - 34
45. Weyrauch, M.; Knauf, K.:
Absolute Neutron Fluence Determination with a Spherical Proton Recoil Proportional
Counter.
Radiat. Prot. Dosim. 44 (1992) 97 - 100
46. Alevra, A.V.; Klein, H.; Knauf, K.; Wittstock, J.:
Neutron Field Spectrometry for Radiation Protection Dosimetry Purposes.
Radiat. Prot. Dosim. 44 (1992) 223 - 226
47. Nolte, R.; Schuhmacher, H.; Brede, H.J.; Schrewe, U.J.:
Measurement of High-Energy Neutron Fluence with Scintillation Detector and Proton
Recoil Telescope.
Radiat. Prot. Dosim. 44 (1992) 101 - 104
48. Schrewe, U.J.; Brede, H.J.; Gerdung, S.; Nolte, R.; Pihet, P.; Schmelzbach, P.;
Schuhmacher, H.:
Determination of Kerma Factors of A-150 Plastic and Carbon at Neutron Energies
between 45 and 66 MeV.
Radiat. Prot. Dosim. 44 (1992) 21 - 24

49. Pihet, P.; Guldbakke, S.; Menzel, H.G.; Schuhmacher, H.:
Measurement of Kerma Factors for Carbon and A-150 Plastic: Neutron Energies from 13.9 to 20.0 MeV.
Phys. Med. Biol. 37 (1992) 1957 - 1976
50. Hoenen, F.; Euringer, H.; Bosch, H.S.; Alevra, A.V.; Klein, H.; Delvigne, T.:
In-situ Calibration of Neutron Detectors on TEXTOR.
Rev. Scient. Instrum. 63 (1992) 1945 - 1952
51. Luszik-Bhadra, M.; Alberts, W.G.; Dietz, E.; Guldbakke, S.:
Aspects of Combining Albedo and Etched Track Techniques for Use in Individual Neutron Monitoring.
Radiat. Prot. Dosim. 46 (1993) 31 - 36
52. Luszik-Bhadra, M.; Alberts, W.G.; Dietz, E.; Guldbakke, S.; Matzke, M.:
A Wide Range Neutron Dosemeter Based on a CR-39 Track Detector.
Nucl. Tracks Radiat. Meas. 22, Nos 1 - 4 (1993) 671 - 674
53. Böttger, R.; Klein, H.; Nolte, R.; Schmidt, D.:
Specification of Beryllium Targets for Neutron Production.
Nucl. Instrum. Meth. A334 (1993) 160 - 164
54. H. Klein, D. Thomas, J.L. Chartier, H. Schraube (Eds.)
Determination and Realisation of Calibration Fields for Neutron Protection Dosimetry as Derived from Spectra Encountered in Routine Surveillance
Final Report on the CEC-Project Bi7-031 for the period of July 1990 to June 1992,
EUR report 14927 DE/EN/FR (1993) 159 - 174
55. Lommler, B.; Pitt, E.; Scharmann, A.; Guldbakke, S.:
Fast Neutron Dosimetry by Photoluminescence Detection of Proton Recoil Tracks in Laserscanned RPL Glasses.
Radiat. Prot. Dosim. 47 (1993) 285 -288
56. Büermann, L.; Ding, S.; Guldbakke, S.; Klein, H.; Novotny, T.; Tichy, M.:
Response of NE213 Liquid Scintillation Detectors to High-Energy Photons ($E_\gamma > 3$ MeV).
Nucl. Instrum. Meth. A332 (1993) 483 - 492
57. Mannhart, W.:
Data Fitting and Evaluation Techniques for Neutron Spectra.
Int. Symposium on Nuclear Data Evaluation Methodology, Ed. C.L. Dunford, World Scientific, Singapore (1993) 247 - 256
58. Mannhart, W.:
Generation of Covariance Data while Updating Evaluated Data Using 'Bayesian' Methods.
Proc. of a Specialists' Meeting on Evaluation and Processing of Covariance Data, Report NEA/NSC/DOC(93)3, OECD, Paris, 1993, 157 - 171

59. Alberts, W.G.; Dietz, E.; Kluge, H.; Guldbakke, S.:
Response of an Electronic Personal Neutron Dosemeter.
Radiat. Prot. Dosim. 51 (1994) 207 - 210
60. Carlson, A.D.; Poenitz, W.P.; Hale, G.M.; Peelle, R.W.; Dodder, D.C.; Fu, C.Y.;
Mannhart, W.:
The ENDF/B-VI Neutron Cross Section Measurement Standards.
Report NISTIR 5177, Gaithersburg, U.S.A., 1993
61. Schmidt, D.; Siebert, B.R.L.:
Partial Cross Section Determination of the Reaction $^{12}\text{C}(n,n')$ [$Q = -9.641$ MeV] Using a
DD-Neutron Source.
Nucl. Instrum. Meth. A342 (1994), 544 - 551
62. Thomas, D.J.; Alevra, A.V.; Hunt, J.B.; Schraube, H.:
Experimental Determination of the Response of Four Bonner Sphere Sets to Thermal
Neutrons.
Radiat. Prot. Dosim. 54 (1994) 25 - 31
63. Alevra, A.V.:
Accurate Neutron Fluence Measurements Using Bonner Spheres.
Reactor Dosimetry ASTM STP 1228, H. Farrar IV, E.P. Lippincott, J.G. Williams and
D.W. Vehar, Eds. American Society for Testing and Materials, Philadelphia, (1994)
290 - 299
64. Guldbakke, S.; Klein, H.; Meister, A.; Pulpan, J.; Scheler, U.; Tichy, M.; Unholzer, S.:
Response Matrices of NE213 Scintillation Detectors for Neutrons.
Reactor Dosimetry ASTM STP 1228, H. Farrar IV, E.P. Lippincott, J.G. Williams and
D.W. Vehar, Eds. American Society for Testing and Materials, Philadelphia, (1994)
280 - 289
65. d'Errico, F.; Curzio, G.; Apfel, R.E.; Alberts, W.G.; Guldbakke, S.:
Reactor Dosimetry Applications of Superheated Drop (Bubble) Detectors.
Reactor Dosimetry ASTM STP 1228, H. Farrar IV, E.P. Lippincott, J.G. Williams and
D.W. Vehar, Eds. American Society for Testing and Materials, Philadelphia, (1994)
225 - 232
66. Giese, H.; Kappler, F.; Tayama, R.; v. Möllendorff, U.; Alevra, A.; Klein, H.:
Measurements of Fusion Neutron Multiplication in Spherical Beryllium Shells.
7th International Conference on Emerging Nuclear Energy Systems (ICENES'93),
H. Yasuda (Ed.), World Scientific Publishing Co. Pte. Ltd., Singapore, 1994, 223 - 227
67. Edel, v. G.; Selke, O.; Pösch, C.; Smend, F.; Schumacher, M.; Nolte, R.; Schrewe, U.;
Schuhmacher, H.; Brede, H.J.; Henneck, R.; Sich, I.:
Response of Detector Modules of the Neutron Hadoscope SENECA to Neutrons with
Energies 7 - 70 MeV.
Nucl. Instrum. Meth. A332 (1993) 224 - 231
68. Thomas, D.J.; Klein, H.:
EURADOS Working Group 7: Radiation Spectrometry in Working Environments.
Radioprotection 28 (1993) 95 - 100

69. Alevra, A.V.; Klein, H.; Knauf, K.; Wittstock, J.:
Neutron Spectrometry for Radiation Protection Purposes.
Strahlenschutz: Physik und Meßtechnik, Eds. W. Koelzer, R. Maushart, Verlag TÜV
Rheinland, Köln 1994, Vol. II, p. 578 - 584
70. Guldbakke, S.; Dietz, E.; Kluge, H.; Schlegel, D.:
PTB Neutron Fields for the Calibration of Neutron Sensitive Devices.
Strahlenschutz: Physik und Meßtechnik, Eds. W. Koelzer, R. Maushart, Verlag TÜV
Rheinland, Köln 1994, Vol. I, p. 240 - 247
71. Büermann, L.; Guldbakke, S.; Kramer, H.M.:
Referenzstrahlungsfelder zur Kalibrierung von Strahlenschutzdosimetern für Photonen
im Energiebereich oberhalb 3 MeV.
Strahlenschutz: Physik und Meßtechnik, Eds. W. Koelzer, R. Maushart, Verlag TÜV
Rheinland, Köln 1994, Vol. I, p. 224 - 229
72. Möllendorff, v. U.; Fischer, U.; Giese, H.; Kappler, F.; Tayama, R.; Wiegner, E.;
Klein, H.; Alevra, A.:
Nuclear Data Implications of the Karlsruhe Neutron Transmission Experiment on
Spherical Beryllium Shells.
Proceedings of the Advisory Group Meeting, 8. - 12. Nov. 93, Tokai-mura, Japan, to be
published
73. Hoenen, F.; Graffmann, E.; Finken, K.H.; Barrenscheen, H.J.; Klein, H.; Jaspers, R.:
Liquid Scintillation Detectors for Gamma und Neutron Diagnostic at TEXTOR and
Results of Runaway and Sawtooth Oscillations.
Rev. Scient. Instrum. 65 (1994) 2594 - 2598
74. Luszik-Bhadra, M.; Alberts, W.G.; Dietz, E; Guldbakke, S.; Matzke, M.:
A CR-39 Track Dosimeter for Routine Individual Neutron Monitoring.
Radiat. Prot. Dosim. 55 (1994) 285 - 293
75. Schmidt, D.; Mannhart, W.; Nolte, R.:
Neutron Scattering Cross Sections of Iron.
Nuclear Data for Science and Technology, J.K. Dickens (Eds.), American Nuclear
Society, La Grange Park, USA, 1994, Vol. II, p. 907 - 909
76. Mannhart, W.; Schmidt, D.; Xia, H.:
Measurements of the $^{59}\text{Co}(n,\alpha)^{56}\text{Mn}$, $^{59}\text{Co}(n,p)^{59}\text{Fe}$ and $^{59}\text{Co}(n,2n)^{58\text{m}+g}\text{Co}$ Cross
Sections between 8 and 14 MeV.
Nuclear Data for Science and Technology, J.K. Dickens (Eds.), American Nuclear
Society, La Grange Park, USA, 1994, Vol. I, p. 285 - 287

77. Miah, M.M.; Vonach, H.; Mannhart, W.; Schmidt, D.:
Measurement of the Cross Section for $^{103}\text{Rh}(n,n')^{103\text{m}}\text{Rh}$ in the Energy Range
6 - 12 MeV.
Nuclear Data for Science and Technology, J.K. Dickens (Eds.), American Nuclear
Society, La Grange Park, USA, 1994, Vol. I, p. 278 - 281
78. Moellendorff, v. U.; Giese, H.; Kappler, F.; Tayama, R.; Alevra, A.V.; Klein, H.:
Measurements of the 14-MeV Neutron Multiplication in Spherical Beryllium Shells.
Fusion Engineering and Design 28 (1995) 737 - 744
79. Mannhart, W.; Börker, G.; Klein, H.; Schmidt, D.:
Präzise Bestimmung der Streu- und Aktivierungsquerschnitte schneller Neutronen im
Energiebereich 6 - 16 MeV.
PTB-Mitteilungen 104 (1994) 439
80. Alevra, A.:
Measurements with the PTB Bonner Sphere Spectrometer and a Leake Rem Counter (at
nuclear facilities in Sweden).
SSI-report 95-15, Stockholm, 1995, p. 42 - 58
81. Kunze, V.; Schmidt-Ott, W.-D.; Bosch-Wicke, U.; Böttger, R.; Klein, H.:
A modular 4π counter for β -delayed neutrons.
Nucl. Instrum. Meth. A361 (1995) 263 - 269
82. Bardell, A.G.; Zieba, K.J.; Böttger, R.; Klein, H.:
Bilateral intercomparison of the neutron emission rate of a ^{252}Cf spontaneous fission
source between NPL and PTB.
EUROMET Project No. 221, External NPL-report RSA (EXT) No. 47, 1994
83. Schuhmacher, H.; Alberts, W.G.; Alevra, A.V.; Klein, H.; Schrewe, U.J.;
Siebert, B.R.L.:
Characterization of Photon-Neutron Radiation Fields for Radiation Protection
Monitoring and Optimisation.
Radiat. Prot. Dosim. 61 (1995) 81 - 88
84. Alberts, W.G.; Bordy, J.M.; Chartier, J.L.; Jahr, R.; Klein, H.; Luszik-Bhadra, M.;
Posny, F.; Schuhmacher, H.; Siebert, B.R.L.:
Neutron Dosimetry.
Radioprotection 31 (1996) 37 - 65
85. Lindborg, L.; Bartlett, D.; Drake, P.; Klein, H.; Schmitz, Th. and Tichy, M.:
Determination of Neutron and Photon Dose Equivalent at Work-Places in Nuclear
Facilities in Sweden. - A joint SSI-EURADOS comparison exercise. -
Radiat. Prot. Dosim. 61 (1995) 89 - 100
86. Freiesleben, H.; Hansen, W.; Klein, H.; Novotny, T.; Richter, D.; Schwierz, R.;
Seidel, K.; Tichy, M.; Unholzer, S.:
Experimental Results of an Iron Slab Benchmark.
Ext. Report TU Dresden, TUD-PHY-94/2 (1994)

87. d'Errico, F.; Alberts, W.G.; Curzio, G.; Guldbakke, S.; Kluge, H.; Matzke, M.:
Active Neutron Spectrometry with Superheated Drop (Bubble) Detectors.
Radiat. Prot. Dosim. 61 (1995) 159 - 162
88. Klein, H.; Lindborg, L. (Eds.):
Determination of Neutron and Photon Dose Equivalent at Workplaces in Nuclear
Facilities of Sweden. - An SSI-EURADOS Comparison Exercise. Part I: Measurements
and Data Analysis.
SSI-report 95-15, (1995), Stockholm, ISSN 0282-4434
89. Klein, H.; Thomas, D.J.; Chartier, J.L.; Schraube, H.; Kralik, M.; Osmera, B.;
Grecescu, M.:
Realistic Neutron Calibration Fields and Related Dosimetric Quantities.
Final report on the CEC-Project FI30P-CT92 002 for the period of July 1992 to
June 1995, EUR-report 16769, 1997, 161-217
90. Bartlett, D.; Drake, P.; Klein, H.; Lindborg, L.; Schmitz, T.; Tichy, M.:
Determination of Neutron and Photon Dose Equivalent at Workplaces in Nuclear
Facilities of Sweden. - An SSI-EURADOS Comparison Exercise. Part II: Evaluation
SSI-report 19:13, June 1999, ISSN 0282-4434
91. Knauf, K.; Alevra, A.V.; Luszik-Bhadra, M.; Wittstock, J. with contributions to:
a) Active Handling Experiment with Neutron Sources (AHE)
final report for the CEC contract FIZW-CT90-0069 and the BMBF contract
02 E 8472 7
b) Direkte Endlagerung ausgedienter Brennelemente (DEAB)
Aktives Handhabungsexperiment mit Neutronenquellen
Abschlußbericht Hauptband DEAB T 66
c) dito
Experimentelle Ermittlung der Spektren und Äquivalentdosisleistungen der
Neutronen und Photonen an dem AHE-Gebinde ohne und mit Salzumgebung
Technischer Anhang TA 3
(reports prepared by M. Khamis, DBE, Peine, 1995)
92. Miah, M.M.H.; Strohmaier, B.; Vonach, H.; Mannhart, W.; Schmidt, D.:
Cross Section for the $^{103}\text{Rh}(n,n')^{103\text{m}}\text{Rh}$ Reaction in the Energy Range 5.7 - 12 MeV.
Phys. Rev. C54 (1996) 222 - 226
93. Smith, A.B.; Schmidt, D.:
Neutron Scattering and Models: - Chromium
Argonne National Laboratory, 1996 (ANL-report ANL/NDM-138)
94. Alberts, W.G.; Brede, H.J.; Guldbakke, S.; Klein, H.; Siebert, B.R.L.:
Fortschritte in der Neutronendosimetrie.
PTB-Mitteilungen 106 (1996) 131 - 136 (in German)
95. Thomas, D.J.; Chartier, J.L.; Klein, H.; Naismith, O.F.; Posny, F.; Taylor, G.C.:
Results of a Large Scale Neutron Spectrometry and Dosimetry Comparison Exercise at
the Cadarache Moderator Assembly.
Radiat. Prot. Dosim. 70 (1997) 313-322

96. Alevra, A.V.; Schrewe, U.J.:
Measurements with the PTB "C" Bonner Sphere Spectrometer in the PSI Villigen
55 MeV Neutron Field for Spectrometry and Calibration Purposes.
Radiat. Prot. Dosim. 70 (1997) 295-298
97. d'Errico, F.; Apfel, R.E.; Curzio, G.; Dietz, E.; Egger, E.; Gualdrini, G.F.;
Guldbakke, S.; Nath, R., and Siebert, B.R.L.:
Superheated Emulsions: Neutrons and Thermodynamics.
Radiat. Prot. Dosim. 70 (1997) 109-112
98. Knauf, K.; Alevra, A.V.; Wittstock, J.; Engelmann, H.J.; Khamis, M.; Niehues, N.:
Neutron and Photon Spectra and Dose Rates around a Shielding Cask Placed in a Salt
Mine to Simulate a Nuclear Waste Package.
Radiat. Prot. Dosim. 70 (1997) 251-254
99. Kluge, H.; Alevra, A.V.; Jetzke, S.; Knauf, K.; Matzke, M.; Weise, K.; Wittstock, J.:
Scattered Neutron Reference Fields Produced by Radionuclide Sources.
Radiat. Prot. Dosim. 70 (1997) 327-330
100. Klein, H.:
Workplace Radiation Field Analysis.
Radiat. Prot. Dosim. 70 (1997) 225-234
101. Alevra, A.V.:
Neutron Spectrometry with Bonner Spheres: Applications in Physics and Dosimetry.
Proc. Intern. Conference: Neutrons in Research and Industry, Crete, Greece, 1996,
George Vourvopoulos (Ed.) Proc. SPIE 2867 (1997) 274-277, ISBN 0-8194-2263-0
102. Alevra, A.V.; Knauf, K.; Wittstock, J.; Engelmann, H.J.; Khamis, M.; Niehues, N.;
Bernnat, W.:
Neutron Spectrometry and Dosimetry Around the Mock-up of a POLLUX Cask in Free
Air and in a Salt Mine.
Proc. Intern. Conference: Neutrons in Research and Industry, Crete, Greece, 1996,
George Vourvopoulos (Ed.) Proc. SPIE 2867 (1997) 278-281, ISBN 0-8194-2263-0
103. Novotny, T.; Guldbakke, S.; Klein, H.:
Neutron Induced Photon Response of an NE213 Scintillation Detector.
Proc. Intern. Conference: Neutrons in Research and Industry, Crete, Greece, 1996,
George Vourvopoulos (Ed.) Proc. SPIE 2867 (1997) 627-630, ISBN 0-8194-2263-0
104. Guldbakke, S.; Schlegel, D.:
The Spectral Neutron Fluence Produced by the Interaction of Charged Particles with
Solid State Targets.
Proc. Intern. Conference: Neutrons in Research and Industry, Crete, Greece, 1996,
George Vourvopoulos (Ed.) Proc. SPIE 2867 (1997) 286-289, ISBN 0-8194-2263-0

105. Alevra, A.V.; Klein, H.; Knauf, K.; Luszik-Bhadra, M.; Matzke, M.; Schrewe, U.J.; Wittstock, J.:
Neutronen- und Photonenäquivalentdosisleistungen in der Umgebung eines beladenen CASTOR IIa-Behälters in dem Brennelementlager Gorleben.
BfS-Bericht BfS-ET-24/97(Ed. F. Heimlich), Salzgitter, 1997 (in German)
106. Smith, A.B.; Schmidt, D.:
Neutron Scattering and Models: - Chromium.
J. Physics G: Nucl. Part. Phys. 23 (1997) 197-209

II. PTB reports

(reports available upon request from PTB, Gruppe 7.2

- Neutronenmetrologie - Bundesallee 100, D-38116 Braunschweig or to be ordered at:
"Wirtschaftsverlag NW, Verlag für neue Wissenschaft GmbH,
Bürgermeister-Smidt-Str. 74 - 76, D-27568 Bremerhaven")

PTB-N-1

Börker, G.; Böttger, R.; Brede, H.J.; Klein, H.; Mannhart, W.; Siebert, B.R.L.:

Elastic and Inelastic Differential Neutron Scattering Cross Sections of Oxygen Between 6 and 15 MeV

June 1989

PTB-N-2

Bauer, B.W.; Alberts, W.G.; Luszik-Bhadra, M.; Siebert, B.R.L.:

Experimental Investigation into the Influence of Neutron Energy, Angle of Incidence and Phantom Shape on the Response of Individual Neutron Dosimeters: Detailed Analysis of Results for the Albedo Neutron Dosimeter in Use at the PTB

March 1990

((report of the PTB group 7.3))

PTB-N-4

Schlegel-Bickmann, D.R.; Brede, H.J.; Guldbakke, S.; Lewis, V.E.; Zoetelief, J.:

Measurement of k_U -Values of Argon-Filled Magnesium Ionisation Chambers

November 1990

PTB-N-5

Bauer, B.W.; Siebert, B.R.L.; Alberts, W.G.; Burgkhardt, B.; Dietz, E.; Guldbakke, S.;

Kluge, H.; Medioni, R.; Piesch, E.; Portal, G.:

Experimental Investigation into the Influence of Neutron Energy, Angle of Incidence and Phantom Shape of the Response of Individual Neutron Dosimeters: Experimental Procedure and Summary of Results

December 1990

PTB-N-7

Schmidt, D.; Böttger, R.; Klein, H.; Nolte, R.:

Investigation of the ${}^9\text{Be}(\alpha, n){}^{12}\text{C}$ Reaction

I: Experimental Procedure and Uncertainties

April 1992

PTB-N-8

Schmidt, D.; Böttger, R.; Klein, H.; Nolte, R.:

Investigation of the ${}^9\text{Be}(\alpha, n){}^{12}\text{C}$ Reaction

II: Differential Cross Sections for $E_\alpha = 7.02 - 15.70$ MeV and

$E_{\text{ex}}({}^{12}\text{C}) = 0.0, 4.439, 7.654, 9.641, 10.84, 11.83$ and 12.71 MeV

April 1992

PTB-N-9

Nolte, R.; Brede, H.J.; Schrewe, U.J.; Schuhmacher, H.:
Neutron Spectrometry with Liquid Scintillation Detectors at Neutron Energies between
20 MeV and 70 MeV: A Status Report
June 1993

PTB-N-10

Alberts, W.G.:
Investigation of Individual Neutron Monitors on the Basis of Etched-track Detectors: The
1990 EURADOS-Cendos Exercise
May 1992
((report of the PTB group 7.3))

PTB-N-12

Hollnagel, R.A.:
Comparison of the Effective Dose, E, and the Effective Dose Equivalent HE, from Neutron
Irradiation with Special Regard to the Dose from Induced Photons
December 1992
((report of the PTB group 7.3))

PTB-N-13

Schuhmacher, H.; Schrewe, U.J.:
Dose Equivalent Measurements on Board Civil Aircraft
March 1993
((report of the PTB group 7.3))

PTB-N-14

Schmidt, D.; Siebert, B.R.L.:
Monte Carlo Simulation of Fast Neutron Scattering Experiments Including DD-Breakup
Neutrons
June 1993

PTB-N-15

Alberts, W.G.; Kluge, H.:
PTB-Vergleichsmessungen an Personendosimetern für Neutronenstrahlung
July 1993
((report of the PTB group 7.3))

PTB-N-16

Untersuchung der Unsicherheiten bei der Messung mit Thermolumineszenz-Dosimetern
September 1993
((report of the PTB group 7.3))

PTB-N-18

Schmidt, D.; Xia, H.:
Neutron Production from the Deuteron Breakup on 4-He
October 1994

PTB-N-19

Matzke, M.:
Unfolding of Pulse Height Spectra:
The HEPRO Program System
October 1994
((report of the PTB group 7.3))

PTB-N-20

Schmidt, D.; Mannhart, W.; Klein, H.; Nolte, R.:
Neutron Scattering on Natural Iron at Incident Energies between 9.4 and 15.2 MeV
November 1994

PTB-N-21

Wiegel, B.; Alevra, A.V.; Siebert, B.R.L.:
Calculations of the Response Functions of Bonner Spheres with a Spherical ^3He Proportional
Counter Using a Realistic Detector Model
November 1994

PTB-N-22

Alevra, A.V.; Klein, H.; Schrewe, U.J.:
Measurements with the PTB Bonner Sphere Spectrometer in High-Energy Neutron
Calibration Fields at CERN
December 1994

PTB-N-25

Newhauser, W.D.; Schrewe, U.J.; Wiegel, B.:
Gas-to-wall Absorbed Dose Conversion Factors for Neutron Energies of 25 to 250 MeV
September 1995
((report of the PTB group 7.3))

PTB-N-27

Schmidt, D.; Mannhart, W.; Xia, H.:
Differential Cross Sections of Neutron Scattering on Elemental Lead at Energies between
8 MeV and 14 MeV
November 1996

PTB-N-28

Novotny, T. (PhD thesis):
Photon Spectrometry in Mixed Neutron-Photon Fields using NE213 Liquid Scintillation
Detectors
February 1997

III. PTB Laboratory reports

(reports available upon request from PTB, Gruppe 7.2
- Neutronenmetrologie - Bundesallee 100, D-38116 Braunschweig)

PTB-7.21-1989-1:

Strzelczyk, H.:

Das Monitorsystem an dem "Dosimetriemeßplatz" der Beschleunigeranlage der Abteilung
"Neutronenphysik"

November 1989

PTB-7.22-1990-1:

Alevra, A.V.; Siebert, B.R.L.; Aroua, A.; Buxerolle, M.; Grecescu, M.; Matzke, M.;
Mourgues, M.; Perks, C.A.; Schraube, H.; Thomas, D.J.; Zaborowski, H.L.:

Unfolding Bonner-Sphere Data: A European Intercomparison of Computer Codes
January 1990

PTB-7.2-1992-1:

Tichy, M.; Klein, H.; Pulpan, J.:

Calibration of an NE213 Scintillator

July 1992

PTB-7.2-1993-1:

Tichy, M.:

The DIFBAS Program - Description and User's Guide

April 1993

PTB-7.23-1994-1:

Schmidt, D.; Xia, H.

Analysis of the Gamma Ray Production in a Gas Target und Study of the Ion Pulse Shape
April 1994

PTB-7.31-1994-1:

Brede, H.J.; Dima, S.; Marcovei, M.; Schlegel, D.; Tancu, F.:

Kerma Distributions Free in Air and Inside a Water Phantom Irradiated with a Collimated
d(13 MeV) + Be Neutron Beam

November 1994

PTB-7.23-1995-1:

Schmidt, D.; Xia, H.:

Analysis of the Shape of Neutron TOF Lines

May 1995

PTB-7.22-1995-1:

Alevra, A.V.; Knauf, K.; Wittstock, J.:

Measurements with the Bonner Sphere Spectrometer and Various Dosemeters around a Model Storage Cask Filled with a ^{252}Cf Source both Free in Air and in a Salt Mine

December 1995

PTB-7.32-1995-2:

Luszik-Bhadra, M.; Alberts, W.G.; Matzke, M.; Wittstock, J.:

Messungen mit Personendosimetern in der Umgebung eines Modells eines beladenen Endlagerbehälters

August 1995

**Publications of the PTB-section 6.5 'Neutron dosimetry'
(until 31.12.1988)**

1. Cosack, M.; Jahr, R.; Schölermann, H.; Taubert, R.; Waibel, E.:
Das Projekt "Neutronendosimetrie" der Physikalisch-Technischen Bundesanstalt.
PTB-Mitt. 81 (1971) 343 - 347
2. Cosack, M.; Kutscha, M.; Paulsen, A.:
The Proton Recoil Proportional Counter as a Device to Measure Neutron Fluxes at
Energies below 100 keV.
Proc. First Symp. on Neutron Dosimetry in Biology and Medicine, EUR 4896,
Luxembourg 1972, Vol. I, p. 267 - 279
3. Dietze, G.; Jahr, R.; Schölermann, H.:
Effect of Neutron Background on the Standardization of Neutron Fields.
ib., Vol. II, p. 915-929
4. Paulsen, A.; Liskien, H.; Cosack, M.:
Flux Density Measurements for 250 keV Neutrons from the T(p,n) Source Reaction.
Nucl. Instrum. Meth. 105 (1972) 103 - 107
5. Siebert, B.R.L.; Jahr, R.:
A New Method of Time-of-Flight Spectroscopy with an Incompletely Pulsed
Cyclotron Beam.
Nucl. Instrum. Meth. 119 (1974) 445 - 450
6. Schlegel-Bickmann, D.; Dietze, G.:
Monte Carlo Calculations of a Collimator for Fast Neutron Therapy.
Proc. Second Symp. on Neutron Dosimetry in Biology and Medicine, EUR 5273,
Luxembourg 1975, Vol. II, p. 783 - 793
7. Siebert, B.R.L.; Jahr, R.:
An Improved Method for Time-of-Flight Spectroscopy with an Incompletely Pulsed
Cyclotron Beam.
Nucl. Instrum. Meth. 131 (1975) 375
8. Cosack, M.; Guldbakke, S.; Jahr, R.:
Status Report of the Standard Fast Neutron Dosimetry.
EUR 5629 e (1976) 9 - 12
9. Huynh, V.D., (Cosack, M.):
International Comparison of Flux Density Measurements for Monoenergetic Fast
Neutrons.
International Specialists Symp. on Neutron Standards and Applications, Washington,
28 - 31 March, 1977, NBS Special Publ. 493, 244

10. Guldbakke, S.; Jahr, R.; Klein, H.; Cosack, M.; Schölermann, H.:
A Neutron Calibration Technique for Detectors with High Photon and Low Neutron Sensitivity.
Proc. Third Symp. on Neutron Dosimetry in Biology and Medicine, EUR 5848, Luxembourg 1978, 821 - 834
11. Alberts, W.G.; Cosack, M.; Dietze, G.; Jahr, R.; Kluge, H.; Knauf, K.; Lesiecki, H.; Matzke, M.; Schuster, H.J.; Wagner, S.; Zill, H.W.:
Standard Neutron Fields for the Calibration of Neutron Monitors at the PTB.
IAEA-International Symp. on Advances in Radiation Protection Monitoring, Stockholm, 26 - 30 June, 1978, IAEA-SM-229/12, p. 625 - 637
12. Klein, H.; Guldbakke, S.; Jahr, R.; Lesiecki, H.:
The Fast Neutron Sensitivity of a Geiger-Müller Counter Photon Dosemeter by Time-of-Flight-Technique.
Phys. Med. Biol. 24 (1979) 748 - 755
13. Klein, H.; Schölermann, H.:
Improvement of the Light Collection in Scintillation Detectors.
IEEE-Trans., NS-26, No. 1 (1979) 373 - 377
14. Dietze, G.:
Energy Calibration of NE-213 Scintillation Counter by γ -Rays.
IEEE-Trans., NS-26, No. 1 (1979) 398 - 402
15. Cosack, M.; Lesiecki, H.; Klein, H.; Jahr, R.:
Fast Neutron Standard Fields at the Accelerators of the PTB.
Proc. to IAEA Advisory Group Meeting on Nuclear Data for Reactor Dosimetry, 13 - 17 November, 1978, Vienna Report INDC(NDS)-103 M (1979) p. 77 - 78
16. Mijnheer, B.J.; Visser, P.A.; Lewis, V.E.; Guldbakke, S.; Lesiecki, H.; Zoetelief, Z.; Broerse, J.J.:
The Relative Neutron Sensitivity of Geiger-Müller Counters.
Hrsg. Barendsen, G.W.; Broerse, J.J.; Breur, K., High-LET Radiation in Clinical Radiotherapy, Pergamon Press (1979) 162 - 163
17. Brede, H.J.; Cosack, M.; Dietze, G.; Gumpert, H.; Guldbakke, S.; Jahr, R.; Kutscha, M.; Schlegel-Bickmann, D.; Schölermann, H.:
The Braunschweig Accelerator Facility for Fast Neutron Research.
I. Building Design and Accelerators.
Nucl. Instrum. Meth. 169 (1980) 349 - 358
18. Klein, H.; Barrenscheen, H.-J.; Dietze, G.; Siebert, B.R.L.; Bretfeld, W.:
The Braunschweig Accelerator Facility for Fast Neutron Research.
II. Data Acquisition and Analysis.
Nucl. Instrum. Meth. 169 (1980) 359 - 367
19. Schlegel-Bickmann, D.; Dietze, G.; Schölermann, H.:
A Collimator System for Fast Neutron Scattering Experiments.
Nucl. Instrum. Meth. 169 (1980) 517 - 526

20. Schölermann, H.; Klein, H.:
Optimizing the Energy Resolution of Scintillation Counters at High Energies.
Nucl. Instrum. Meth. 169 (1980) 25 - 31
21. Jahr, R.; Brede, H.J.:
Scientific Note: Uncertainty of Kerma Factors in Neutron Dosimetry at $E_n = 14.5$ MeV.
Phys. Med. Biol. 25 (1980) 923 - 926
22. Guldbakke, S.; Jahr, R.; Lesiecki, H.; Schölermann, H.:
Neutron Sensitivity of Geiger-Müller Photon Dosimeters for Neutron Energies between 100 keV and 19 MeV.
Proc. of the IRPA-Conference, Jerusalem, March 1980, Radiation Protection, A Systematic Approach to Safety, Vol. 1, p. 388-391
23. Guldbakke, S.; Jahr, R.; Lesiecki, H.; Schölermann, H.:
Neutron Response of Geiger-Müller Photon Dosimeters for Neutron Energies between 100 keV and 19 MeV.
Health Phys. 39 (1980) 963 - 969
24. Jahr, R.; Hollnagel, R.; Siebert, B.R.L.:
A Theoretical Approach for the Measurement of the Effective Dose Equivalent for External Radiations.
Proc. of the IRPA-Conference, Jerusalem, March 1980, Radiation Protection, A Systematic Approach to Safety, Vol. 1, p. 317-320
25. Huynh, V.D.; (Jahr, R.; Cosack, M.):
International Comparison of Flux Density Measurements for Monoenergetic Fast Neutrons.
Metrologia 16 (1980) 31 - 49
26. Portal, G.; Seguin, H.; Wagner, S.:
Calibration of Dosimeters used for Radiation Protection in the European Community.
Proc. Symp. on Advances in Rad. Prot. Monitoring, Stockholm, 26 - 30 June, 1978, IAEA, Vienna 1979, p. 639 - 648
27. Jahr, R.; Hollnagel, R.; Siebert, B.R.L.:
A Theoretical Concept for the Determination of Radiation Protection Quantities for External Exposures.
PTB-Mitt. 91 (1981) 107 - 116
28. Jahr, R.; Hollnagel, R.; Siebert, B.R.L.:
Dose Equivalent Quantities - A Concept for their Measurement for External Exposures.
Proc. European Seminar on Rad. Prot. Quantities for External Exposures. PTB, Braunschweig, 13 - 15 October, 1980, Harwood Academic Publ. (1981) p. 223 - 237
29. Mijnheer, B.J.; Guldbakke, S.; Lewis, V.E.; Broerse, J.J.:
Comparison of the Fast Neutron Sensitivity of a Geiger-Müller Counter Using Different Techniques.
Phys. Med. Biol. 27 (1982) 91

30. Jahr, R.; Dietze, G.; Guldbakke, S.; Lesiecki, H.; Schlegel-Bickmann, D.:
A Technique for the Neutron Calibration of Ionisation Chambers.
Fourth Symp. on Neutr. Dos., Vol. I, EUR 7448, Luxembourg (1981) 453 - 463
31. Klein, H.; Brede, H.J.; Siebert, B.R.L.:
Energy and Angle Straggling Effects in a $D(d,n)^3\text{He}$ Neutron Source Using a Gas Target.
Nucl. Instrum. Meth. 193 (1982) 635 - 644
32. Guldbakke, S.; Klein, H.:
Dead Time of Geiger-Müller Photon Dosimeters.
Fourth Symp. on Neutr. Dos., EUR 7448, Luxembourg 1981, Vol. II, p. 385 - 394
33. Dietze, G.; Brede, H.J.; Klein, H.; Schölermann, H.:
Measurement of the $C-12(n,\alpha_0)Be-9$ Cross Section and Determination of Carbon Kerma Factors.
ib., Vol. I, p. 373 - 383
34. Jahr, R.; Hollnagel, R.; Siebert, B.R.L.:
Dose Equivalent Quantities - A Concept for their Measurement for External Exposures.
ib., Vol. I, p. 117 - 126
35. Hollnagel, R.; Siebert, B.R.L.:
Depth Dose Studies for Neutrons in Spherical Phantoms.
ib., Vol. I, p. 93 - 104
36. Champlong, P.; Chartier, J.L.; Cosack, M.; Schraube, H.; Wagner, S.R.;
Delafield, H.J.; Hunt, J.B.; Thompson, I.M.G.; Lembo, L.; Schwartz, R.B.;
Widell, C.O.; Alberts, W.G.; Kluge, H.:
ISO Working Group
Neutron Reference Radiations for Calibrating Neutron Measuring Devices Used for Radiation Protection Purposes and for Determining their Response as a Function of Neutron Energy.
ib., Vol. I, p. 387 - 394
37. Cosack, M.; Lesiecki, H.:
Dependence of the Response of Eight Neutron Dose Equivalent Survey Meters with Regard to the Energy and Direction of Incident Neutrons.
ib., Vol. I, p. 407 - 417
38. Dietze, G.; Klein, H.:
Gamma Calibration of NE 213 Scintillation Counters.
Nucl. Instrum. Meth. 193 (1982) 549 - 556
39. Jahr, R.; Hollnagel, R.; Siebert, B.R.L.:
Letter to the Editors "A Conceptual Physical Basis for Monitoring External Radiation".
Radiat. Prot. Dosim. 1 (1982) 299 - 304

40. Klein, H.; Siebert, B.R.L.; Böttger, R.; Brede, H.J.; Schölermann, H.:
Sample Size Corrections of Neutron Scattering Data and the Analysis of Angular Distributions.
In: Nuclear Data for Science and Technology. Ed. K.H. Böckhoff, Reidel Publ. Comp. Dordrecht 1983, 891 - 894
41. Böttger, R.; Klein, H.; Chalupka, A.; Strohmaier, B.:
The Neutron Energy Spectrum from the Spontaneous Fission of Cf-252 in the Energy-Range $2 \text{ MeV} \leq E_n \leq 14 \text{ MeV}$.
ib., p. 484 - 487
42. Böttger, R.; Brede, H.J.; Cosack, M.; Dietze, G.; Jahr, R.; Klein, H.; Siebert, B.R.L.; Schölermann, H.:
A Multi-Angle TOF-Spectrometer for Fast Neutron Scattering Experiments.
ib., p. 836 - 839
43. Dietze, G.; Brede, H.J.; Klein, H.; Schölermann, H.:
Differential Cross Section of the C-12(n, α)Be-9 Reaction in the Energy Range from 8 - 10 MeV Extracted from NE 213 Scintillation Detector Response Functions.
ib., p. 930 - 933
44. Alberts, W.; Lesiecki, H.:
Neutron Flux Density Measurements and REM Counter Calibration at the 24.5 keV Filtered Beam of the FMRB.
Radiat. Prot. Dosim. 2 (1982) 241 - 244
45. Siebert, B.R.L.; Hollnagel, R.; Jahr, R.:
A Theoretical Concept for Measuring Doses from External Radiation Sources in Radiation Protection.
Phys. Med. 28 (1983) 521 - 533
46. Siebert, B.R.L.; Caswell, R.S.; Coyne, J.J.:
Calculations of Quality Factors for Fast Neutrons in Materials Composed of H, C, N and O.
Proc. of the Eighth Symp. on Microdosimetry, EUR 8395 Luxembourg (1982)
1131 - 1140
47. Dietze, G.; Guldbakke, S.; Menzel, H.G.; Schuhmacher, H.; Bühler, G.:
Correlated Microdosimetric, Dosimetric, Spectroscopic and Fluence Measurements with Monoenergetic Neutrons between 14 and 19 MeV.
ib., p. 1155 - 1167

48. Dietze, G.; Brede, H.J.; Schlegel-Bickmann, D.:
Dosimetry for Neutron Therapy at the PTB.
in: Advances in Dosimetry for Fast Neutrons and Heavy Charged Particles,
IAEA-AG-371/4, Vienna (1984) 203 - 215
49. Cosack, M.; Lesiecki, H.:
Dosimetrische Eigenschaften von tragbaren Äquivalentdosisleistungsmeßgeräten für
Neutronen.
16. Jahrestagung des Fachverbandes für Strahlenschutz, GSF-Bericht A4/83,
München, (1982) 181 - 184
50. Siebert, B.R.L.; Hollnagel, R.; Jahr, R.:
Bestimmung von Teil- oder Ganzkörperdosen mit Personendosimetersystemen.
ib., p. 549 - 552
51. Guldbakke, S.; Lesiecki, H.:
Fast Protons in Neutron Calibration Fields.
Nucl. Instrum. Meth. 211 (1983) 559 - 560
52. Klein, H.:
The Neutron Energy Spectrum from Spontaneous Fission of Cf-252.
ZFK-491 (1983) 113 - 121, Dresden/Rosendorf
53. Cosack, M.; Lesiecki, H.:
Dose Equivalent Survey Meters.
Radiat. Prot. Dosim. 10 (1985) 111 - 119
54. Menzel, H.G.; Schuhmacher, H.; Dietze, G.:
Measurements with Low Pressure Tissue-Equivalent Proportional Counters in Well
Defined High Energy Neutron Beams.
Proc. of the Seventh Intern. Congress of Radiation Research, Amsterdam (1983) E1-
12
55. Siebert, B.R.L.; Hollnagel, R.; Jahr, R.:
Comparative Study of Radiation Protection Quantities for Neutrons.
In: Radiation Risk Protection, Vol. III, Hrgb. Fachverband für Strahlenschutz (1984)
1142 - 1145
56. Hollnagel, R., Jahr, R.; Siebert, B.R.L.:
Influence of Charged Particle Build-up on Dosimetric Quantities in the Surface Layer
of the ICRU Phantom.
ib., p. 970 - 973
57. Chalupka, A.; Strohmaier, B.; Böttger, R.; Klein, H.:
Properties of Fission Fragment Detectors for TOF Measurements.
Proceedings of the IAEA Consultants Meeting in Smolenice,
Report INDC (NDS)-146 (1983) 187 - 189

58. Klein, H.; Böttger, R.; Chalupka, A. Strohmaier, B.:
Investigation of the Neutron-Energy Spectrum from the Spontaneous Fission of Cf-252 by Means of TOF Spectroscopy.
ib., p. 191 - 194
59. Schlegel-Bickmann, D.; Dietze, G.:
Eine Einrichtung zur Kalibrierung von Dosimetern für die Therapie mit schnellen Neutronen.
In: Medizinische Physik (1983) 505 - 510
60. Dietze, G.; Schlegel-Bickmann, D.; Kudo, K.:
The Calibration Facility of Neutron-Therapy Dosimeters at PTB.
Strahlentherapie 160 (1984) 129
61. Jahr, R.:
Progress Report 82/83 (not available)
62. Jahr, R.; Hollnagel, R.; Siebert, B.R.L.:
Calculations of Specified Depth Dose Equivalent in the ICRU-Sphere Resulting from External Neutron Irradiation with Energies Ranging from Thermal to 20 MeV.
Radiat. Prot. Dosim. 10 (1985) 75 - 87
63. Menzel, H.G.; Bühler, G.; Schuhmacher, H.; Muth, H.; Dietze, G.; Guldbakke, S.:
Ionization Distributions and A-150 Plastic Kerma for Neutrons between 13.9 and 19.0 MeV Measured with a Low Pressure Proportional Counter.
Phys. Med. Biol. 29 (1984) 1537 - 1554
64. Dietze, G.; Menzel, H.G.; Bühler, G.:
Calibration of Tissue-Equivalent Proportional Counters Used as Radiation Protection Dosimeters.
Radiat. Prot. Dosim. 9 (1984) 245 - 250
65. Hunt, J.B.; Cosack, M.; Lesiecki, H.:
Calibration of Neutron Survey Meters over the Energy Range from 1 to 30 keV with Accelerator Produced Monoenergetic Neutrons.
Fifth Symp. on Neutron Dosimetry, EUR 9762, Luxembourg, Vol. I, p. 607 - 615
66. Guldbakke, S.; Jahr, R.:
Neutron Response of Ion Chamber Photon Dosimeters for Neutron Energies between 144 keV and 15.5 MeV.
ib., Vol. II, p. 739 - 748
67. Schlegel-Bickmann, D.; Dietze, G.; Guldbakke, S.; Bühler, G.; Schuhmacher, H.:
Determination of Kerma in A-150 Plastic for Various Neutron Fields Using Three Different Methods.
ib., Vol. I, p. 203 - 211

68. Brede, H.J.; Dietze, G; Schlegel-Bickmann, D; Kudo, K.:
Spectral Neutron Fluence and Tissue Kerma in Collimated Neutron Beams from Be + d.
ib., Vol. II, p. 907 - 916
69. Bühler, G.; Menzel, H.G.; Schuhmacher, H.; Guldbakke, S.:
Dosimetric Systems with Non-Hydrogeneous Proportional Counters in Well-Defined High Energy Neutron Fields.
ib., Vol. I, p. 309 - 320
70. Cosack, M.; Lesiecki, H.; Hunt, J.B.:
Monoenergetic Neutrons of Energies from 0.5 keV to 30 keV via the Reaction Sc-45(p,n)Ti-45.
ib., Vol. I, p. 597 - 606
71. Siebert, B.R.L.; Brede, H.J.; Lesiecki, H.:
Corrections and Uncertainties for Neutron Fluence Measurements with Proton Recoil Telescopes in Anisotropic Fields.
Nucl. Instrum. Meth. A 235 (1985) 542 - 552
72. Mannhart, W.:
Recent Experiments of Cf-252 Spectrum-Averaged Neutron Cross Sections.
In: Reactor Dosimetry, Vol. 2 EUR 9869 (1985) 801 - 812
73. Mannhart, W.:
Spectrum-Averaged Neutron Cross Sections Measured in the U-235 Fission-Neutron Field in Mol.
ib., p. 813 - 825
74. Schölermann, H.; Siebert, B.R.L.:
Calibration of a Van de Graaff Accelerator and Determination of the Threshold of the Reaction Sc-45(p,n)Ti-45 Using a Covariance Analysis.
Nucl. Instrum. Meth. A 236 (1985) 225 - 230
75. Cosack, M.:
Neutron Energies Selected by ISO for the Calibration of Radiation Protection Instruments.
In: Nuclear Standard Reference Data IAEA-TECDOC-335, IAEA, Vienna (1985) 388 - 389
76. Lesiecki, H.; Cosack, M.; Siebert, B.R.L.:
Influence of Target-Scattered Neutrons on Cross Section Measurements.
ib., p. 144 - 147
77. Klein, H.; Böttger, R.; Chalupka, A.; Strohmaier, B.:
Properties of Cf Fission Fragment Detection Systems Used for Neutron Time-of-Flight Measurements.
ib., p. 433 - 436

78. Brede, H.J.; Cosack, M.; Lesiecki, H.; Siebert, B.R.L.:
Neutron Fluence Measurements with a Proton Recoil Telescope.
ib., p. 340 - 344
79. Klein, H.:
Neutron Production Using Gas Targets.
ib., p. 454 - 456
80. Mannhart, W.:
State and First Result of the Evaluation of the Cf-252 Fission Neutron Spectrum.
ib., p. 294 - 303
81. Lewis, V.E.; (Cosack, M.; Lesiecki, H.) (not available):
International Intercomparison of d + T Neutron Fluence and Energy Using Niobium
and Zirkonium Activation.
Metrologia 20 (1984) 49 - 53
82. Liskien, H.; (Cosack, M.; Lesiecki, H.) (not available):
International Fluence-Rate Intercomparison for 2.5 MeV and 5.0 MeV Neutrons.
ib., p. 55 - 59
83. Kudo, K.; Dietze, G.:
Cross Section of C-12(n, α)Be-9 and C-12(n,n' α) Reactions at Neutron Energies from
10.2 MeV to 11.0 MeV.
Bul. Electrotech. Lab. 49 No. 1 (1985) 23 - 30
84. Märten, H.; Richter, D.; Seeliger, D.; Böttger, R.; Fromm, W.D.:
New Measurements of the Cf-252(sf) Neutron Spectrum in the High Energy Range.
In: Nuclear Standard Reference Data, IAEA-TECDOC-335, Vienna (1985) 310 - 311
85. Alberts, W.; Dietze, G.:
Practical Calibration of Neutron Area and Individual Monitors.
Radiat. Prot. Dosim. 12 (1985) 163 - 166
86. Mannhart, W.; Smith, D.L.; Meadows, J.W.:
The Discrepancy Between Differential and Integral Data on Ti-47(n,p).
In: Nuclear Data for Basic and Applied Science, Vol. I, Gordon and Breach Science
Publishers, New York (1986) 577 - 580
87. Brede, H.J.; Dietze, G.; Kudo, K.; Schlegel-Bickmann, D.:
Spectral Neutron Yield of an Intense Be + d Source.
ib., 803 - 806
88. Antunes, L.J.; Börker, G.; Klein, H.; Bulski, G.:
Unfolding of NE 213 Scintillation Spectra Compared with Neutron Time-of-Flight
Measurements.
ib., 1375 - 1378

89. Böttger, R.; Fromm, W.D.; Klein, H.; Märten, H.; Richter, D.; Seeliger, D.:
The Cf-252(sf) Neutron Spectrum in the High-Energy Range.
ib., 1471 - 1474
90. Böttger, R.; Brede, H.J.; Klein, H.; Schölermann, H.; Siebert, B.R.L.:
Elastic and Inelastic Scattering of Fast Neutrons on Carbon.
ib., 1455 - 1458
91. Bühler, G.; Menzel, H.G.; Schuhmacher, H.; Dietze, G.:
Neutron Interaction Data in Carbon Derived from Measured and Calculated Ionisation
Yield Spectra.
Radiat. Prot. Dosim. 13 (1985) 13 - 17
92. Lesiecki, H.; Cosack, M.:
Neutron Fields for the Calibration of Neutron Dosimeters at the PTB.
Proceedings of Knoxville Conference 1985, finally not published (see No. 124)
93. Lesiecki, H.; Cosack, M.:
Responses of Neutron Dose Equivalent Survey Meters.
Proceedings of Knoxville Conference 1985, finally not published
94. Mannhart, W.:
Least Squares Adjustment of a 'Known' Neutron Spectrum: The Importance of the
Covariance Matrix of the Input Spectrum.
In: Nuclear Data for Radiation Damage Estimates for Reactor Structural Material,
INDC(NDS)-179/G, Vienna: IAEA (1986) 127 - 140
95. Bühler, G.; Menzel, H.G.; Schuhmacher, H.; Dietze, G.; Guldbakke, S.:
Neutron Kerma Factors for Magnesium and Aluminum Measured with Low Pressure
Proportional Counters.
Phys. Med. Biol. 31 (1986) 601 - 611
96. Alevra, A.; Cosack, M.; Lesiecki, H.; Schölermann, H.:
Investigation of Low Energy Neutron Sources in the Energy Range 5 - 100 keV Using
Particle Accelerators and their Application to Radiation Protection Dosimetry.
In: Progress Report Programme Radiation Protection EU 9733 DE (1985) 128 - 131
97. Börker, G.; Böttger, R.; Brede, H.J.; Dietze, G.; Guldbakke, S.; Hollnagel, R.; Jahr,
R.; Klein, H.; Schölermann, H.; Siebert, B.R.L.:
Determination of Different Dose Equivalent Quantities for External Exposure with
Neutrons.
In: Progress Report Programme Radiation Protection EU 9733 DE (1985) 137 - 141
98. Ambrosi, P.; Guldbakke, S.; Hohlfeld, K.:
Ansprechvermögen von Stab- und Filmdosimetern bezüglich Photonenstrahlung hoher
Energie.
In: J. Böhm, E. Piesch, D. Regulla (Hrsg.) Neue Meßgrößen für Personendosimeter -
Ergebnisse der Vergleichsbestrahlung 1985 - PTB-Dos-14 (1986) 306 - 313

99. Dietze, G.:
Problems in the Determination and Application of Nuclear Data Relevant for Neutron Radiotherapy and Related Radiobiology.
In: Nuclear and Atomic Data for Radiotherapy and Related Radiobiology, Proc. IAEA Advisory Group Meeting, Rijswijk 1985, IAEA, Vienna, Panel Proc. Series, (1987) p. 83 - 98
100. Klein, H.:
Schnittstellen
In: F. Kohlrausch. Praktische Physik, Bd. 2, 23. Auflage, Stuttgart, Teubner (1985) Abschnitt 7.53, 387 - 390
101. Cosack, M.:
Messung der Ortsdosis
In: F. Kohlrausch. Praktische Physik, Bd. 2, 23. Auflage, Stuttgart, Teubner (1985) Abschnitt 9.8.7.4, 706 - 707
102. Dietze, G.:
Protonenrückstoßmethode, Messung der Energiedosis
In: F. Kohlrausch. Praktische Physik, Bd. 2, 23. Auflage, Stuttgart, Teubner (1985) Abschnitt 9.6.6.2, 626 - 629 und Abs. 9.8.7.3, 705 - 706
103. Antolkovic, B.; Dietze, G.; Klein, H.:
Neutron Reaction Cross Sections on Carbon.
In: Fast Neutron Physics, D. Miljanic, B. Antolkovic, G. Paic (Hrsg.), Ruder Boskovic Institute, Zagreb (1986) 137 - 139
104. H. Klein:
Progress in Fast Neutron Detection Technique.
ib., 203 - 218
105. Dietze, G.:
Dosimetry of Fast Neutrons with Energies below 20 MeV.
ib., 92 - 105
106. Lesiecki, H.; Cosack, M.; Siebert, B.R.L.:
Target Scattering in the Production of Monoenergetic Neutrons at Accelerators.
In: Proc. IAEA Advisory Group Meeting on "Properties of Neutron Sources", Leningrad, USSR, 1986 IAEA-TECDOC-410, IAEA, Vienna (1987) 274 - 278
107. Cosack, M.; Lesiecki, H.; Hunt, J.B.:
Monoenergetic Neutrons from the Reaction $^{45}\text{Sc}(p,n)^{45}\text{Ti}$.
ib., 270 - 273
108. Böttger, R.; Klein, H.; Chalupka, A.; Strohmaier, B.:
The Neutron Spectrum of the Spontaneous Fission of Cf-252 (3 - 12 MeV Neutron Energy).
ib., 186 - 189

109. Böttger, R.; Chalupka, A.; Malek, L.; Tagesen, S.:
Cf-252 Fission Neutron Spectrum above 15 MeV.
ib., 190 - 194
110. Mannhart, W.:
The High Energy Portion of the Cf-252 Neutron Spectrum Deduced from Integral Experiments.
ib., 194 - 201
111. Mannhart, W.:
Evaluation of the Cf-252 Fission Neutron Spectrum between 0 MeV and 20 MeV.
ib., 158 - 171
112. Zoetelief, J.; Schlegel-Bickmann, D.; Schraube, H.; Dietze, G.:
Characteristics of Mg/Ar Ionization Chambers Used as Gamma-Ray Dosimeters in Mixed Neutron-Photon Fields.
Phys. Med. Biol. 31 (1986) 1339 - 1351
113. Märten, H.; Richter, R.; Seeliger, D.; Fromm, W.D.; Böttger, R.; Klein, H.:
The Cf-252 Spontaneous Fission Neutron Spectrum in the 5 - 20 MeV Energy Range.
Report INDC(NDS)-194/L (1987) IAEA Vienna
114. Schuhmacher, H.; Alberts, W.G.; Menzel, H.G.; Bühler, G.:
Dosimetry of Low Energy Neutrons Using Low-Pressure Proportional Counters.
Radiat. Res. 111 (1987) 1 - 13
115. Mannhart, W.:
Californium-252 Spectrum Averaged Neutron Cross Sections.
In: Handbook on Nuclear Activation Data, Tech. Report Series No. 273, IAEA, Vienna (1987) 413 - 437
116. Mannhart, W.:
The Neutron Spectrum of Spontaneous Fission of Californium-252.
ib., 163 - 185
117. Mannhart, W.:
The Status of the Cf-252 Neutron Spectrum as a Standard.
In: Reactor Dosimetry: Methods, Applications, and Standardization, ASTM STP 1001, American Society for Testing and Materials, Philadelphia (1989) 340 - 347 (see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 1)
118. Schuhmacher, H.; Menzel, H.G.; Kluge, H.:
Dosimetry of a Bare and a D₂O-Moderated ²⁵²Cf Source using Low-Pressure Proportional Counters.
Radiat. Prot. Dosim. 19 (1987) 103 - 109
119. Lewis, V.E.; (Dietze, G.; Schlegel-Bickmann, D.):
Neutron Dosimetry Intercomparison at the NPL.
NPL Rep. RS (EXT) 79, 1985

120. Brede, H.J.; Schlegel-Bickmann, D.; Dietze, G.; Daures-Caumes, J.; Ostrowsky, A.:
Determination of Absorbed Dose within an A150 Plastic Phantom for a
d(13.35 MeV) + Be Neutron Source.
Phys. Med. Biol. 33 (1988) 413 - 426
121. Schlegel-Bickmann, D.; Brede, H.J.; Dietze, G.; Guldbakke, S.; Zielczynski, M.:
Application of High and Normal Pressure Ionization Chambers for the Determination
of A150 Kerma Components in a 19 MeV Neutron Field.
Phys. Med. Biol. 33 (1988) 1055 - 1069
122. Brede, H.J.; Dietze, G.; Schrewe, U.J.; Tancu, F.; Wen, Ch.:
Investigation of Intense Neutron Fields.
Radiat. Prot. Dosim. 23 (1988) 301 - 304
123. Börker, G.; Böttger, R.; Brede, H.J.; Klein, H.; Siebert, B.R.L.:
Partial Kerma Factors for Carbon and Oxygen Obtained from Cross Section
Measurements.
Radiat. Prot. Dosim. 23 (1988) 23 - 26
124. Lesiecki, H.; Cosack, M.; Schölermann, H.:
Monoenergetic Neutron Fields for the Calibration of Neutron Dosimeters at the
Accelerator Facility of the PTB.
PTB-Mitteilungen 97 (1987) 373 - 376
125. Dietze, G.; Booz, J.; Edwards, A.A.; Guldbakke, S.; Kluge, H.; Leroux, J.B.;
Lindborg, L.; Menzel, H.G.; Nguyen, V.D.; Schmitz, Th.; Schuhmacher, H.:
Intercomparison of Dose Equivalent Meters Based on Microdosimetric Techniques.
Radiat. Prot. Dosim. 23 (1988) 227 - 234
126. Schrewe, U.J.; Brede, H.J.; Dietze, G.:
Investigation of Tissue-Equivalent Proportional Counters in Mixed Neutron-Photon
Fields also Applying Time-of-Flight Techniques.
Radiat. Prot. Dosim. 23 (1988) 239 - 244
127. Alevra, A.V.; Cosack, M.; Hunt, J.B.; Thomas, D.J.; Schraube, H.:
Experimental Determination of the Response of Four Bonner Spheres Sets to
Monoenergetic Neutrons.
Radiat. Prot. Dosim. 23 (1988) 293 - 296
128. Schrewe, U.J.; Brede, H.J.; Pihet, P.; Menzel, H.G.:
On the Calibration of Tissue-Equivalent Proportional Counters with Built-in \hat{A} -
Particle Sources.
Radiat. Prot. Dosim. 23 (1988) 249 - 252
129. Brede, H.J.; Schlegel-Bickmann, D.; Dietze, G.:
Absorbed Dose Distribution within an A150 Plastic Phantom for the
Be + d(13.35 MeV) Reference Neutron Source of the PTB.
In: Dosimetry in Radiotherapy, IAEA, Vienna, STI/PUB/760 (1988) Vol. 2,
p. 343 - 345

130. Menzel, H.G.; Dietze, G.; Schuhmacher, H.:
Practical Determination of Dose Equivalent Using Low Pressure Tissue Equivalent Proportional Counters.
In: Radiation Protection Practice, Vol. I, (1988) 308 - 311
131. Börker, G.; Böttger, R.; Brede, H.J.; Klein, H.; Mannhart, W.; Siebert, B.R.L.:
The Differential Neutron Scattering Cross Section of Oxygen Between 6 and 15 MeV.
In: Nuclear Data for Science and Technology, Ed. S. Igarasi, Saikon Publ. Comp., Tokyo, (1988) 193 - 196
132. Börker, G.; Klein, H.; Mannhart, W.; Wagner, M.; Winkler, G.:
Measurements of the Al-27(n, α) and Mg-24(n,p) Cross Section Between 8 MeV and 15 MeV.
ib., 1025 - 1028
133. Cub, J.; Finckh, E.; Gebhardt, K.; Geißdörfer, K.; Lin, R.; Strate, J.; Klein, H.:
The Neutron Detection Efficiency of NE213 Detectors Measured by Means of a Cf-252 Source.
Nucl. Instrum. Meth. A274 (1989) 217 - 221 (see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 2)
134. Brede, H.J.; Dietze, G.; Kudo, K.; Schrewe, U.J.; Tancu, F.; Wen, C.:
Neutron Yields from Thick Be Targets Bombarded with Deuterons and Protons.
Nucl. Instrum. Meth. A274 (1989) 332 - 344 ((see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 3)
135. Dietze, G.; Edwards, A.A.; Guldbakke, S.; Kluge, H.; Leroux, J.B.; Lindborg, L.; Menzel, H.G.; Nguyen, V.D.; Schmitz, Th.; Schuhmacher, H.:
Investigation of Radiation Protection Instruments Based on Tissue-Equivalent Proportional Counters.
CEC-Report, EUR 11867 EN, (1988)
136. Böttger, R.; Guldbakke, S.; Klein, H.; Schölermann, H.; Strzelczyk, H.:
Problems Associated with the Production of Monoenergetic Neutrons.
accepted for publication in Nucl. Instrum. Meth. (see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 4)
137. Alberts, W. G.; Dietz, E.; Guldbakke, S.; Kluge, H.; Schuhmacher, H.:
International Intercomparison of TEPC Systems Used for Radiation Protection.
(see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 5)
138. Dietze, G.; Menzel, H. G.; Schuhmacher, H.:
Determination of Dose Equivalent with Tissue-Equivalent Proportional Counters.
(see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 6)
139. Guldbakke, S.; Schäffler, D.; Kramer, H. M.:
How Should the Individual Dose Equivalent be Measured in High Energy Photon Fields?
accepted for publication in Radiat. Prot. Dosim. (see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 7)

140. Schölermann, H.; Böttger, R.:
Q-Values for p-n Reactions on ^{65}Cu and ^{51}V .
Nucl. Phys. A501 (1989) 86-94
141. Schrewe, U. J.; Brede, H. J.; Dietze, G.:
Dosimetry in Mixed Neutron-Photon Fields with Tissue-Equivalent Proportional
Counters.
(see Publications of the PTB-section 7.2 'Neutron metrology': Nr. 8)
142. Menzel, H. G.; Lindborg, L.; Schmitz, Th.; Schuhmacher, H.; Waker, A. J.:
Intercomparison of Dose Equivalent Meters Based on Microdosimetric Techniques:
Detailed Analysis and Conclusions.
Radiat. Prot. Dosim. 29 (1989) 55-68
143. Kunz, A.; Menzel, H. G.; Arend, E., Schuhmacher, H.; Grillmaier, R.E.:
Practical Experiences with a Prototype TEPC Area Dosimeters.
Radiat. Prot. Dosim. 29 (1989) 99-104
144. Dietze, G.:
The New Operational Quantities and their Realization with a TEPC.
Radiat. Prot. Dosim. 29 (1989) 139-142
145. Bauer, B.W.; Alberts, W.G.; Burgkhardt, B.; Guldbakke, S.; Kluge, H.; Medioni, R.;
Piesch, E.; Portal, G.; Siebert, B.R.L.:
Actual Results about Energy and Angular Dependence of and Phantom Influence on
Readings of Individual Dosimeters.
accepted for publication in Radiat. Prot. Dosim. (see Publications of the PTB-section
7.2 'Neutron metrology': Nr. 10)

PTB - Reports (until 31.12.1988):

(Reports available upon request from: Physikalisch-Technische Bundesanstalt Gruppe 7.2 - Neutronenmetrologie - , Bundesallee 100 D-38116 Braunschweig)

PTB-ND-1:

Schölermann, H.:

Berechnung des Anteils von Streuneutronen an verschiedenen Meßplätzen in der geplanten Experimentierhalle des Bauvorhabens Neutronendosimetrie der Physikalisch-Technischen Bundesanstalt.

March 1970

PTB-ND-2:

Jahr, R.:

Zum Signal-zu-Rausch-Verhältnis an einem Präzisions-Laufzeit-Spektrometer mit schwenkbarem Zykotron. Teil I: (x,n)-Reaktionen.

March 1970

PTB-ND-3:

Cosack, M.; Kutscha, M.:

Planungsgrundlagen für das Strahlführungs-System des Beschleuniger-Projektes "Neutronendosimetrie" der Physikalisch-Technischen Bundesanstalt.

October 1970

PTB-ND-4:

Dietze, G.:

Ein Programm zur Berechnung der Antwort-Funktion von organischen Szintillatoren bei Einfall von monochromatischen Neutronen im Energiebereich 0.05 bis 20 MeV.

June 1973

PTB-ND-5:

Leung, M.K.:

A Proposal for a Gas Target for Neutron Production.

December 1973

PTB-ND-6:

Dietze, G.; Kluge, H.; Matzke, M.; Ramthun, H.; Siegel, V.; Zill, H.W.:

Untersuchungen an der Pu-238-Quelle einer Thermonuklidbatterie für Herzschrittmacher.

February 1974

PTB-ND-7:

Leung, M.K.:

Neutron Yields from Li-7(p,n)Be-7, V-51(p,n)Cr-51, D(d,n)He-3 and T(p,n)He-3 Reactions.

March 1974

PTB-ND-8:

Jahr, R.:
Dosimetrie schneller Neutronen.
March 1975

PTB-ND-9:

Siebert, B.R.L.; Jahr, R.:
Neutronen-Flugzeit-Spektroskopie mit einem Kompaktzyklotron.
April 1975

PTB-ND-10:

Jahr, R.; Guldbakke, S.; Cosack, M.; Dietze, G.; Klein, H.:
A Neutron Calibration Technique for Detectors with Low Neutron / High Photon
Sensitivity.
March 1978

PTB-ND-11:

Leung, M.K.; Dietze, G.; Brede, H.J.:
Emittanzmeßanordnung am PTB-Zyklotron.
October 1977

PTB-ND-12:

Siebert, B.R.L.; Matzke, M.:
ENDF-TR 440 - Ein Programmpaket zur Verarbeitung von ENDF-Daten am PTB-
Telefunkenrechner TR 440.
February 1978

PTB-ND-13:

Dietze, G.:
"SPEKT" - Ein Dialogprogramm zur Auswertung von Vielkanalspektren.
June 1978

PTB-ND-14:

Schlegel-Bickmann, D.:
Optimierung eines Kollimator-Fächers für ein Multi-Detektor-Flugzeitspektrometer
für schnelle Neutronen.
January 1979

PTB-ND-15:

Jahr, R.; Brede, H.J.:
Die Bedeutung der Streuquerschnitte schneller Neutronen für die Neutronendosimetrie
in weichem Gewebe.
May 1979

PTB-ND-16:

Jahr, R.; Guldbakke, S.; Cosack, M.:
Expositionszeiten und Verhältnis der Anzeigen, die durch Photonen und Neutronen
bei der Bestrahlung von Thermo-Luminiszenz-Dosimetern in PTB-Neutronen-
Standardfeldern zwischen 0,1 MeV und 19 MeV erzeugt werden.
June 1979

PTB-ND-17:

Alberts, W.G.; Cosack, M.; Kluge, H.; Lesiecki, H.; Wagner, S.; Zill, H.W.:
European Workshop on Neutron Dosimetry for Radiation Protection.
September 1979

PTB-ND-18:

Heinzelmann, M.; Höfert, M.; Kühn, H.; Jahr, R.; Piesch, E.; Schneider, W.;
Wagner, S.:
Neutronenmeßgeräte für den Strahlenschutz.
September 1979

PTB-ND-19:

Brede, H.J.; Siebert, B.R.L.:
"Mars-TR440" - Ein Programm zur Berechnung des Bremsvermögens, der
Reichweite, der Energie- und Kleinwinkelstreuung von Ionen in Materie.
July 1980

PTB-ND-20:

Siebert, B.R.L.; Brede, H.J.; Klein, H.; Schlegel-Bickmann, D.R.; Schölermann, H.:
Optimierung der Streuprobenwahl im Neutronenflugzeitexperiment.
March 1981

PTB-ND-21:

Siebert, B.R.L.; Hollnagel, R.; Jahr, R.:
A Theoretical Concept for Measuring Doses from External Radiation in Radiation
Protection - A Supplement -
June 1983

PTB-ND-22:

Dietze, G.; Klein, H.:
NRESP4 and NEFF4 - Monte Carlo Codes for the Calculation of Neutron Response
Functions and Detection Efficiencies for NE 213 Scintillation Detectors.
October 1982

PTB-ND-23:

Siebert, B.R.L.; Brede, H.J.; Lesiecki, H.:
SINENA - A Monte Carlo Program for Transferring Proton-Recoil Telescope Neutron
Fluence Measurements to Detectors.
November 1982

PTB-ND-24:

Guldbakke, S.; Jahr, R.:
Untersuchung der Eigenschaften von Strahlendosimetern in gemischten Neutronen-
Gamma Strahlenfeldern.
May 1985

PTB-ND-25:

Lesiecki, H.; Cosack; M:
International Intercomparison of Fluences of Fast Neutrons Using In-115(n, γ)
Activation.
July 1985

PTB-ND-26:

Schlegel-Bickmann, D.:
COLLI - Ein Monte-Carlo-Programm zur Berechnung der spektralen Fluenz von
Neutronen im Energiebereich von 10 keV bis 20 MeV - Beschreibung und
Anwendung -
August 1985

PTB-ND-27:

Strzelczyk, H:
Experimentelle Einrichtungen für Kalibrierungen am Dosimetriemeßplatz der Gruppe
6.5, "Neutronendosimetrie" der Physikalisch-Technischen Bundesanstalt
July 1986

PTB-ND-28:

Alevra, A.V.; Siebert, B.R.L.:
Influence of Neutron Spectra and Fluence Response Data on the Determination of
Dose Equivalent with Bonner Spheres.
October 1986

PTB-ND-29:

Dietze, G.; Guldbakke, S.; Kluge, H.; Schmitz, Th.:
Intercomparison of Radiation Protection Instruments Based on Microdosimetric
Principles.
November 1986

PTB-ND-31:

Schuhmacher, H.; Guldbakke, S.; Klein, H.; Strzelczyk, H.:
Response of Two Bonner Spheres for 2.5 and 14.7 MeV Neutrons Determined with
Two Different Methods.
June 1988

PTB-FMRB-117:

Alberts, W.G.; Dietz, E.; Guldbakke, S.; Kluge, H. Schuhmacher, H.:
Radiation Protection Instruments Based on Tissue Equivalent Proportional Counters:
Part II of an International Intercomparison
April 1988

PTB-FMRB-119:

Dietz, E.; Guldbakke, S.; Matzke, M.; Schollmeier, W.; Urbach, G.:
Spektrometrische Untersuchung der Streuteile in Photonenstrahlungsfeldern von
¹³⁷Cs- und ⁶⁰Co-Quellen.
Juni 1988

320. **F. d'Errico, R. Ciolini, A. Di Fulvio, M. Reginatto, J. Esposito, C. Ceballos Sánchez, P. Colautti:**
Angle- and energy-differential neutron spectrometry for the SPES BNCT facility
submitted for publication in Applied Radiation and Isotopes
319. **D. Vartsky, G. Feldmann, I. Mor, M.B. Goldberg, D. Bar, V. Dangendorf:**
Signal and Noise Analysis in TRION - Time Resolved Integrative Optical Fast Neutron Detector
JINST 4 P02001, 18 pages
<http://www.iop.org/EJ/abstract/-alert=39871/1748-0221/4/02/P02001>
318. **M. Mosconi, M. Heil, F. Käppler, R. Plag, A. Mengoni, and R. Nolte:**
Monoenergetic neutrons for stellar applications
submitted for publication in: Publications of the Astronomical Society of Australia (PASA)
317. **M. Silari, S. Agosteo, P. Beck, R. Bedogni, E. Cale, M. Caresana, C. Domingo, L. Donadille, N. Dubourg, A. Esposito, G. Fehrenbacher, F. Fernández, M. Ferrarini, A. Fiechtner, A. Fuchs, M. J. García, N. Golnik, F. Gutermuth, S. Khurana, Th. Klages, M. Latocha, V. Mares, S. Mayer, T. Radon, H. Reithmeier, S. Rollet, H. Roos, W. Rühm, S. Sandri, D. Schardt, G. Simmer, F. Spurný, F. Trompier, C. Villa-Grasa, E. Weitzenegger, B. Wiegel, M. Wielunski, F. Wissmann, A. Zechner, M. Zielczyński:**
Intercomparison of radiation protection devices in a high-energy stray neutron field Part III: Instrument response
submitted for publication in Radiat. Meas.
316. **B. Wiegel, S. Agosteo, R. Bedogni, M. Caresana, A. Esposito, G. Fehrenbacher, M. Ferrarini, E. Hohmann, C. Hranitzky, A. Kasper, S. Khurana, V. Mares, M. Reginatto, S. Rollet, W. Rühm, D. Schardt, M. Silari, G. Simmer, E. Weitzenegger:**
Intercomparison of radiation protection devices in a high-energy stray neutron field Part II: Bonner sphere spectrometry
submitted for publication in Radiat. Meas.
315. **A. Breskin, R. Alon, M. Cortesi, R. Chechik, J. Miyamoto, V. Dangendorf, J. Maia, J.M.F. Dos Santos:**
A Concise Review on THGEM Detectors
submitted for publication in Nucl. Instrum. Meth.
314. **V. Dangendorf, D. Bar, B. Bromberger, G. Feldman, M.B. Goldberg, R. Lauck, I. Mor, K. Tittelmeier, D. Vartsky, M. Weierganz:**
Multi-Frame Energy-Selective Imaging System for Fast-Neutron Radiography
submitted for publication in IEEE Transactions of Nuclear Science
313. **D. Marocco, F. Belli, B. Esposito, M. Riva, L. Giacomelli, R. Reginatto, K. Tittelmeier, A. Zimbal:**
High Count Rate Neutron Spectrometry with Liquid Scintillation Detectors
submitted for publication in Transactions on Nuclear Science

312. **R. Behrens and S. Röttger**
Characterisation of three High-energy Photons and Fast Neutron Reference Radiation Fields
Radiat. Prot. Dosim. **132** (2008), 283 – 296
311. **A. Breskin, R. Alon, M. Cortesi, R. Chechik, J. Miyamoto, V. Dangendorf, J.M. Maia, J.M.F. Dos Santos:**
A concise review on THGEM detectors
Nucl. Instrum. Meth. A **598** (2009) 107 - 111
310. **M. Albers, C. Kiefer, M. Reginatto:**
Measurement analysis and quantum gravity
Physical Review D, **78** (2008) 064051-1 - 064051-17
309. **R. Behrens, N. Greif, F. Wissmann:**
Qualitätssicherung bei Software in der Orts- und Personendosimetrie
Strahlenschutz PRAXIS, 14. Jahrgang, Heft 4 (2008) 22 - 24
308. **P. Beck, D. T. Bartlett, P. Bilski, C. Dyer, E. Flückiger, N. Fuller, P. Lantos, G. Reitz, W. Rühm, F. Spurny, G. Taylor, F. Trompier and F. Wissmann:**
Validation of modelling the radiation exposure due to solar particle events at aircraft altitudes
Radiat. Prot. Dosim. **131** (2008) 51 - 58
307. **Alexander V. Prokofiev, Jan Blomgren, Ralf Nolte, Simon P. Platt, Stefan Röttger, and Andrey N. Smirnov:**
Characterization of the ANITA Neutron Source for Accelerated SEE Testing at The Svedberg Laboratory
Proceedings from the 8th European Workshop on Radiation Effects on Components and Systems (RADECS), September 10 - 12, 2008, Jyväskylä, Finland, pp. 260 - 267
306. **L. Giacomelli, A. Hjalmarsson, J. Källne, C. Hellesen, M. Tardocchi, G. Gorini, D. Van Eester, E. Lerche, T. Johnson, V. Kiptily, S. Conroy, E. Andersson Sundén, G. Ericsson, M. Gatu Johnson, H. Sjöstrand, M. Weiszflog, and JET-EFDA Contributors:**
Neutron emission spectroscopy results for internal transport barrier and mode conversion ion cyclotron resonance heating experiments at JET
Review of Scientific Instruments **79** (2008) 10E514-1 - 10E514-4
305. **C. Domingo-Pardo, I. Dillmann, T. Faestermann, U. Giesen, J. Görres, M. Heil, S. Horn, F. Käppeler, S. Köchli, G. Korschinek, J. Lachner, M. Maiti, J. Marganiec, J. Neuhausen, R. Nolte, M. Poutivtsev, R. Reifarth, R. Rugel, D. Schumann, E. Uberseder, F. Voss, S. Walter, M. Wiescher:**
s-process nucleosynthesis in massive stars: new results on ^{60}Fe and ^{64}Ni
submitted for publication in: Proceedings of the "Thirteenth International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics", Köln, 25. bis 29. August 2008
304. **H. Schuhmacher, E. Fantuzzi:**
A co-ordinated network for radiation dosimetry (CONRAD): An overview
Radiat. Prot. Dosim. **131** (2008) 3 - 6

303. **W. Rapp, I. Dillmann, F. Käppeler, U. Giesen, H. Klein, T. Rauscher, D. Hentschel, S. Hilpp:**
Cross section measurements of α -induced reactions on $^{92,94}\text{Mo}$ and ^{112}Sn for p-process studies
Physical Review C **78** (2008) 025804-1 - 025804-9
302. **L. Buchmann, J. D' Auria, M. Dombisky, U. Giesen, K. P. Jackson, P. McNeely, J. Powell, and A. Volya:**
 β -delayed α emission of ^{18}N : Broad $J^\pi = I^-$ states in the $^{14}\text{C} + \alpha$ system
Physical Review C **75** (2007) 012804-1 -012804-15
301. **A. Öhrn, J. Blomgren, H. Park, S. Khurana, R. Nolte, D. Schmidt, K. Wilhelmssen:**
Calibration procedure for a neutron monitor at energies below 20 MeV
Nucl. Instrum. Meth. A **592** (2008) 405 – 413
300. **F. Belli, B. Esposito, D. Marocco, M. Riva, and A. Zimbal:**
Application of a Digital Pileup Resolving Method to High Count Rate Neutron Measurements
Review of Scientific Instruments **79** (2008) 10E515-1 - 10E515-3
299. **M. Reginatto:**
What can we Learn about the Spectrum of High-Energy Stray Neutron Fields from Bonner Sphere Measurements?
submitted for publication in Radiat. Meas.
298. **K. Seidel, P. Batistoni, U. Fischer, H. Freiesleben, A. Klix, D. Leichtle, E. Pönitz, S. Unholzer:**
Measurement and Analysis of the Neutron and Gamma-ray Flux Spectra in a Neutronics Mock-Up of the HCPB Test Blanket Module
Fusion Engineering and Design **82** (2007) 2212 - 2216
297. **M. Reginatto, E. Hohmann, B. Wiegel:**
How Accurately can we Determine Spectra in High-Energy Neutron Fields with Bonner Spheres?
submitted for publication in Nuclear Technology
296. **E. Hohmann, M. Luszik-Bhadra, H. Schuhmacher, B. Wiegel, G. Fehrenbacher:**
Bonner Sphere Spectrometer with Active Detector for Measurements in Pulsed Neutron Fields
submitted for publication in Nuclear Technology
295. **D. Schmidt:**
Determination of Neutron Scattering Cross Sections with High Precision at PTB in the Energy Region 8 MeV to 14 MeV
Nuclear Science and Engineering **160** (2008) 349 - 362
294. **P. Bilski, J. Blomgren, F. d'Errico, A. Esposito, G. Fehrenbacher, F. Fernández, A. Fuchs, N. Golnik, V. Lacoste, A. Leuschner, S. Sandri, M. Silari, F. Spurny, B. Wiegel, P. Wright:**
The Problems Associated with the Monitoring of Complex Workplace Radiation Fields at European High-Energy Accelerators and Thermonuclear Fusion Facilities
Radiat. Prot. Dosim. **126** (2007) 491 - 496

293. **F. Wissmann:**
Dosimetrie in Verkehrsflugzeugen
Strahlenschutz PRAXIS, 14. Jahrgang, Heft 2 (2008) 13 - 17
292. **M. Reginatto:**
Unfolding techniques for neutron spectrometry
Proceedings of the International Workshop on Uncertainty Assessment in Computational Dosimetry - A comparison of approaches, Bologna, Italy, October 8 - 10, 2007, 8 pages, G. Gualdrini, P. Ferrari (editors), ISBN: 978-3-9805741-9-8
291. **M. Wielunski, W. Wahl, N. EL-Faramawy, W. Rühm, M. Luszik-Bhadra, H. Roos**
Intercomparison exercise with MeV neutrons using various electronic personal dosimeters
Radiation Measurements **43** (2008) 1063 - 1067
290. **R. Alon, J. Miyamoto, M. Cortesi, A. Breskin, R. Chechik, I. Carne, J.M. Maia, J.M.F. dos Santos, M. Gai, D. Mc. Kinsey, V. Dangendorf:**
Operation of a Thick Gas Electron Multiplier (THGEM) in Ar, Xe and Ar-Xe
JINST 3 PO1005 (2008)
<http://www.iop.org/EJ/abstract/1748-0221/3/01/P01005>
289. **L. Lindborg, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, D. Hallfarth, B. Lievens, J.-E. Lillhök, A. Lövefors-Daun, V. Lacoste M. Luszik-Bhadra, M. Reginatto, H. Schuhmacher, R. Tanner, F. Vanhavere:**
Application of Workplace Correction Factors to Dosemeter Results for the Assessment of Personal Doses at Nuclear Facilities
Radiat. Prot. Dosim. **124** (2007) 213 - 218
288. **A. Zimbal, M. Reginatto, H. Schuhmacher:**
Compact neutron spectrometers and their performance under fusion-relevant conditions
Proceedings of the International Conference "Burning Plasma Diagnostics", Varenne (Italy), 24. -28. September 2007, AIP Conference Proceedings, Vol. **988** (2008) 323 - 326
287. **J. Chen, Z. Wang and C. Rong, G. Lövestam, A. Plompen and N. Puglisi, D.M. Gilliam, C.M. Eisenhauer, J.S. Nico and M.S. Dewey, K. Kudo, A. Uritani, H. Harano and N. Takeda, D.J. Thomas, N.J. Roberts, A. Bennett and P. Kolkowski, N.N. Moisseev and I.A. Kharitonov, S. Guldbakke, H. Klein, R. Nolte and D. Schlegel:**
International Key Comparison of Neutron Fluence Measurements in Monoenergetic Neutron Fields - CCRI(III)-K10
Metrologia **44** (2007, Technical Supplement, 06005
[www.bipm.org/utis/common/pdf/final_reports/RI/CCRI\(III\)/CCRI\(III\)-K10.pdf](http://www.bipm.org/utis/common/pdf/final_reports/RI/CCRI(III)/CCRI(III)-K10.pdf)
286. **H. Schuhmacher, B. Wiegel:**
Spektrometrie und Umgebungsdosimetrie von Neutronenstrahlung
PTB-Mitteilungen **4/2006** (2006) 393 - 396

285. **F. Wissmann:**
Natürliche Strahlenexposition in Flughöhen durch kosmische Strahlung
PTB-Mitteilungen **4/2006** (2006) 384 - 387
284. **M. Cortesi, R. Alon, R. Chechik, A. Breskin, D. Vartsky and V. Dangendorf:**
Investigations of a THGEM-based imaging detector
JINST **2** (2007) P09002
(<http://arxiv.org/pdf/0707.3257>)
283. **A. Czasch, V. Dangendorf, J. Milnes, S. Schössler, R. Lauck, U. Spillmann, J. Howorth, O. Jagutzki:**
Position and time sensitive photon counting detector with image charge delay-line readout
to be published in in: Proc. 'Optics and Optoelectronics 2007/SPIE
282. **F. Vanhavere, M. Luszik-Bhadra, D. Bartlett, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, F. d'Errico, A. Fichtner, J.-E. Kyllönen, V. Lacoste, L. Lindborg, M. Reginatto, H. Schuhmacher, R. Tanner:**
Summery of the neutron dosimeter results of the EVIDOS Project
Annales de l'Association belge de Radioprotection **32** (2007) 65 - 76
281. **H. Dombrowski, F. Wissmann:**
Meteorological influences on the results of area dose rate measurements
Kerntechnik **73**, Nr. 3 (2008) 113 - 117
280. **M. Reginatto and A. Zimbal:**
Bayesian and maximum entropy methods for fusion diagnostic measurements with compact neutron spectrometers
Review of Scientific Instruments **79** (2008) 023505-1 – 023505-13
279. **F. Becker, S. Nagels, B. Burgkhardt, R. Böttger, A. Lizon Aguilar, G. Hampel, B. Wortmann:**
Dosimetry in Mixed Gamma-Neutron Radiation Fields and Energy Compensation Filters for CaF₂:Tm TL Detectors
Radiat. Meas. **43** (2008) 921 - 924
278. **M. Luszik-Bhadra, M. Nakhostin, K. Niita, R. Nolte:**
Electronic Personal Neutron Dosimeters for Energies up to 100 MeV: Calculations using the PHITS Code
Radiat. Meas. **43** (2008) 1044 - 1048
277. **F. Wissmann, A. Rupp, U. Stöhlker:**
Characterization of dose rate instruments for environmental radiation monitoring
Kerntechnik **72**, Nr. 4 (2007) 193 - 198
276. **R. Cruz Suárez, H. Schuhmacher, J.L. Pochat, A. Zimbal, K. Mrabit:**
Intercomparison on Measurements of the Quantity Personal Dose Equivalent H_p(d) in Mixed (Neutron-Gamma) Fields - An IAEA Project
Radiat. Prot. Dosim **125** (2007) 61 - 68

275. **J. Becker, E. Brunckhorst, A. Roca, F. Stecher-Rasmussen, R. Moss, R. Böttger and R. Schmidt:**
Set-up and Calibration of a Triple Ionization Chamber System for Dosimetry in Mixed Neutron/Photon Fields
 Phys. Med. Biol. **52** (2007) 3715 - 3727
274. **E. Pönitz, D. Schmidt, R. Nolte:**
Measurement of Scattering Cross Sections of ^{nat}Pb at an Incident Neutron Energy of 2.94 MeV
 Proceedings der Jahrestagung Kerntechnik, Karlsruhe, 22. - 24. Mai 2007, edited by Deutsches Atomforum e. V., Kerntechnische Gesellschaft (available on CD)
273. **R. Nolte, S. Röttger, D. Schmidt, F. Wissmann:**
The PTB Neutron Reference Fields and Their Potentials to Investigate Neutron Induced Reactions
 Proceedings der Jahrestagung Kerntechnik, Karlsruhe, 22. - 24. Mai 2007, edited by Deutsches Atomforum e. V., Kerntechnische Gesellschaft (available on CD)
272. **D. Frankenberg, K.-D. Greif, W. Beverung, F. Langner and U. Giesen:**
The Role of Nonhomologous End Joining and Homologous Recombination in the Clonogenic Bystander Effects of Mammalian Cells after Exposure to Counted 10 MeV Protons and 4.5 MeV α -Particles of the PTB Microbeam
 Radiation and Environmental Biophysics **47** (2008) 431 - 438
271. **R. Beyer, E. Grosse, K. Heidel, J. Hutsch, A.R. Junghans, J. Klug, D. Lédrády, R. Nolte, R. Röttger, M. Sobiella, A. Wagner:**
Proton-recoil detectors for time-of-flight measurements of neutrons with kinetic energies from some tens of keV to a few MeV
 Nucl. Instrum. Meth. A **575** (2007) 449 - 455
270. **M. Kerveno, R. Nolte, P. Baumann, Ph. Dessagne, E. Jericha, S. Jokic, J.P. Meulders, A. Nachab, A. Pavlik, M. Reginatto, G. Rudolf:**
Measurement of $^{232}\text{Th}(n,5n\gamma)$ Cross Sections from 29 to 42 MeV
 in: Proceedings of the International Conference on Nuclear Data for Science and Technology, April 22-27, 2007, Nice, France, editors O. Bersillon, F. Gunsing, E. Bauge, R. Jacqmin, and S. Leray, EDP Sciences, 2008, p. 1019 - 1022
 Article available at <http://nd2007.edpsciences.org> or <http://dx.doi.org/10.1051/ndata:07415>
269. **E. Pönitz, R. Nolte and D. Schmidt:**
Measurement of Scattering Cross Sections of ^{nat}Pb at an Incident Neutron Energy of 2.94 MeV
 in: Proceedings of the International Conference on Nuclear Data for Science and Technology, April 22-27, 2007, Nice, France, editors O. Bersillon, F. Gunsing, E. Bauge, R. Jacqmin, and S. Leray, EDP Sciences, 2008, p. 513 - 516
 Article available at <http://nd2007.edpsciences.org> or <http://dx.doi.org/10.1051/ndata:07390>
268. **C. E. Hellweg, L. Spitta, A. Arenz, S. C. Bogner, R. Ruscher, C. Baumstark-Khan, K.-D. Greif, U. Giesen:**
Transcriptional response of human cells to microbeam irradiation with 2.1 MeV α -particles
 Advances in Space Research **39** (2007) 1056 - 1065

267. **O. Jagutzki, V. Dangendorf, R. Lauck, A. Czasch, J. Milnes:**
A Position- and Time-sensitive Photon-Counting Detector with Delay-line read-out
 in: Optical Sensing Technology and Applications, Francesco Baldini, Jiri Homola,
 Robert A. Lieberman, Miroslav Miler, Editors, Proceedings SPIE Vol **6585** (2007),
 ISBN 9780819467133
<http://arxiv.org/abs/physics/0703186>
266. **M. Luszik-Bhadra, D. Bartlett, T. Bolognese-Milsztajn, M. Boschung, M. Coeck,
 G. Curzio, F. d'Errico, A. Fiechtner, V. Lacoste, L. Lindborg, M. Reginatto,
 H. Schuhmacher, R. Tanner, F. Vanhavere:**
*Characterisation of Mixed Neutron-Photon Workplace Fields at Nuclear Facilities by
 Spectrometry (Energy and Direction) within the EVIDOS Project*
 Radiat. Prot. Dosim. **124** (2007) 219 - 229
265. **A. Murari, L. Bertalot, S. Conroy, G. Ericsson, V. Kipitily, S. Popovichev,
 H. Schuhmacher, J.M. Adams, V. Afanasyiev, M. Angelone, G. Bonheure,
 B. Esposito, J. Källne, M. Mironov, P. Pillon, M. Reginatto, D. Stork, A. Zimbal
 and JET-EFDA Contributors:**
*New Developments in JET Neutron γ -Ray and Particle Diagnostics with Relevance to
 ITER*
 Nucl. Fusions **45** (2005) S195 - S202
264. **H. Dombrowski, F. Wissmann:**
Metrologische Einflüsse auf die Ergebniss von Ortsdosisleistungsmessungen
 Publikationsreihe: Fortschritte im Strahlenschutz: FS-06-141-T (2006) 369 - 376,
 Eckhard Ettenhuber, Reinhart Giessing, Evelin Beier, Anton Bayer (Hrgs.),
 "Strahlenschutzaspekte bei natürlicher Radioaktivität", 38. Jahrestagung des
 Fachverbandes für Strahlenschutz e. V., Dresden, 18. bis 22. September 2006
263. **S. Neumaier, F. Wissmann, H. Dombrowski:**
*Kalibrierung von Dosimetern zur Bestimmung der Ortsdosisleistung natürlicher
 Radioaktivität*
 Publikationsreihe: Fortschritte im Strahlenschutz: FS-06-141-T (2006) 361 - 368,
 Eckhard Ettenhuber, Reinhart Giessing, Evelin Beier, Anton Bayer (Hrgs.),
 "Strahlenschutzaspekte bei natürlicher Radioaktivität", 38. Jahrestagung des
 Fachverbandes für Strahlenschutz e. V., Dresden, 18. bis 22. September 2006
262. **A. Rupp, U. Stöhlker, F. Wissmann:**
*Qualitätssicherungsmaßnahmen im Ortsdosisleistungsmessnetz des BfS bei
 Umstellung auf die neue Dosisleistungsmessgröße $H^*(10)$*
 in: Umweltpolitik, 13. Fachgespräch, Überwachung der Umweltradioaktivität,
 Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (Herausgeber),
 2006, p. 89 - 95
261. **P. Bilski, J. Blomgren, F. d'Errico, A. Esposito, G. Fehrenbacher, F. Fernández,
 A. Fuchs, N. Golnik, V. Lacoste, A. Leuschner, S. Sandri, M. Silari (Editor),
 F. Spurny, B. Wiegel, P. Wright:**
*Complex Workplace Radiation Fields at European High-Energy Accelerators and
 Thermonuclear Fusion Facilities*
 CERN-2006-007, 24 July 2006

260. **F. Jeanneau, R. Junca, J. Pancin, M. Voytchev, S. Andriamonje, V. Dangendorf, I. Espagnon, H. Friedrich, A. Giganon, I. Giomataris, A. Menelle, A. Pluquet, and L.R. Rodríguez:**
Neutron Imaging With a Micromegas Detector
IEEE Transactions on Nuclear Science **53** (2006) 595 - 600
259. **F. Wissmann:**
Strahlenschutz ohne Normen?
Strahlenschutz PRAXIS, 12. Jahrgang, Heft 4 (2006) 58 - 61
258. **M. Cortesi, R. Chechik, A. Breskin, G. Guedes, V. Dangendorf, D. Vartzky, D. Bar:**
Advances in Imaging THGEM-based Detectors
Nucl. Instrum. Meth. A **572** (2007) 175 - 176
e-Print Archive: [physics/0606210](#)
257. **M. Luszik-Bhadra and S. Perle:**
Topics under Debate
Electronic Personal Dosimeters will Replace Passive Dosimeters in the Near Future
J.C. McDonald, Moderator
Radiat. Prot. Dosim. **123** (2006) 546 - 553
256. **A. Öhrn, J. Blomgren, H. Parks, S. Khurana, R. Nolte, D. Schmidt and K. Wilhelmssen:**
A Monitor for Neutron Flux Measurements up to 20 MeV
Radiat. Prot. Dosim. **126** (2007) 394 - 397
255. **F.D. Brooks, A. Buffler, M.S. Allie, M.S. Herbert, M.R. Nchodu, D.T.L. Jones, F.D. Smit, R. Nolte and V. Dangendorf:**
A Compact High-energy Neutron Spectrometer
Radiat. Prot. Dosim. **126** (2007) 218 - 222
254. **R.J. Tanner, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, J.-E. Lillhök, V. Lacoste, L. Lindborg, M. Luszik-Bhadra, M. Reginatto, H. Schuhmacher and F. Vanhavere:**
Achievements in Workplace Neutron Dosimetry in the last Decade: Lessons learned from the EVIDOS Project
Radiat. Prot. Dosim. **126** (2007) 471 - 476
253. **L. Lindborg, P. Beck, J.F. Bottolier-Depois, M. Latocha, J. Lillhök, S. Rollet, H. Roos, J. Roth, H. Schraube, F. Spurny, G. Stehno, F. Trompier and F. Wissmann:**
Determinations of $H^(10)$ and its Dose Components Onboard Aircraft*
Radiat. Prot. Dosim. **126** (2007) 577 - 580
252. **U. Giesen, H.J. Brede and K.-D. Greif:**
Dosimetry with a Transportable Water Calorimeter in Neutron, Proton and Heavy Ion Radiation Fields
Radiat. Prot. Dosim. **126** (2007) 600 - 603
251. **S. Röttger, K. Schäler, R. Behrens, R. Nolte and F. Wissmann:**
The Neutron Component of Two High-Energy Photon Reference Fields
Radiat. Prot. Dosim. **126** (2007) 404 - 407

250. **A. Zimbal:**
Measurement of the Spectral Fluence Rate of Reference Neutron Sources with a Liquid Scintillation Detector
Radiat. Prot. Dosim. **126** (2007) 413 - 417
249. **L. Lebreton, A. Zimbal and D. Thomas:**
Experimental Comparison of ^{241}Am -Be Neutron Fluence Energy Distributions
Radiat. Prot. Dosim. **126** (2007) 3 - 7
248. **H. Schuhmacher, R. Nolte, B. Wiegel and A. Zimbal:**
Calibration of Personal Dosemeters in Mixed Neutron-Photon Fields: Some Problems and their Solution
Radiat. Prot. Dosim. **126** (2007) 482 - 486
247. **M. Luszik-Bhadra:**
Electronic Personal Neutron Dosemeters for High Energies: Measurements, New Developments and Further Needs
Radiat. Prot. Dosim. **126** (2007) 487 - 490
246. **M. Luszik-Bhadra, V. Lacoste, M. Reginatto and A. Zimbal:**
Energy and Directional Distribution of Neutrons at Workplace Fields: Implication of the Results from the EVIDOS Project for the Set-Up of Simulated Workplace Fields
Radiat. Prot. Dosim. **126** (2007) 151 - 154
245. **F. Langner, S. Löb, R. Nolte, V. Gressier, B. Asselineau, V. Lacoste and L. Lebreton:**
Photon Contribution to Ambient Dose Equivalent $H^(10)$ in the Wide-Spectrum Neutron Reference Fields of the IRSN*
Radiat. Prot. Dosim. **126** (2007) 145 - 150
244. **G. Fehrenbacher, K. Kozlova, F. Gutermuth, T. Radon, R. Schütz, R. Nolte and R. Böttger:**
Measurement of the Fluence Response of the GSI Neutron Ball Dosemeter in the Energy Range from thermal to 19 MeV
Radiat. Prot. Dosim. **126** (2007) 546 - 548
243. **M. Reginatto:**
Bayesian Approach for Quantifying the Uncertainty of Neutron Doses Derived from Spectrometric Measurements
Radiat. Prot. Dosim. **120** (2006) 64 - 69
242. **J. Lillhök, P. Beck, J.F. Bottolier-Depois, M. Latocha, L. Lindborg, H. Roos, J. Roth, H. Schraube, F. Spurny, G. Stehno, F. Trompier, F. Wissmann:**
A Comparison of Ambient Dose Equivalent Meters and Dose Calculations at Constant Flight Conditions
Radiat. Measurements **42** (2007) 323 - 333
241. **D.E. Gonzalez Trotter, F. Salinas Meneses, W. Tornow, C.R. Howell, Q. Chen, A.S. Crowell, C.D. Roper, R.L. Walter, D. Schmidt, H. Witala, W. Glöckle, T. Tang, Z. Zhou, I. Slaus:**
Neutron-deuteron Breakup Experiment at $E_n = 13$ MeV: Determination of the 1S_0 Neutron-neutron Scattering Length α_{nn}
Physical Review C **73** (2006) 034001

240. **K. Seidel, M. Angelone, P. Batistoni, U. Fischer, H. Freiesleben, A. Klix, D. Leichtle, M. Pillon, E. Pönitz, I. Schäfer, S. Unholzer:**
Fusion Neutronics Experiments
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)093
http://pos.sissa.it/archive/conferences/025/093/FNDA2006_093.pdf
239. **A. Zimbal, H. Klein, M. Reginatto, H. Schuhmacher, L. Bertalot, A. Murari and the JET-EFDA Contributors:**
High Resolution Neutron Spectrometry with Liquid Scintillation Detectors for Fusion Applications
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)035
http://pos.sissa.it/archive/conferences/025/035/FNDA2006_035.pdf
238. **A. Öhrn, J. Blomgren, H. Park, S. Khurana, R. Nolte, D. Schmidt, K. Wilhelmssen:**
A Monitor for Neutron Flux Measurements up to 20 MeV
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)048
http://pos.sissa.it/archive/conferences/025/048/FNDA2006_048.pdf
237. **M.B. Smith, H.R. Andrews, E.T.H. Clifford, H. Ing, V.T. Koslowsky, R.A. Noulty, M. Zhang, L.G.I. Bennett, M.L. Boudreau, A.R. Green, B.J. Lewis, R. Nolte, S. Röttger:**
Canadian High-Energy Neutron Spectrometry System (CHENSS)
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)006
http://pos.sissa.it/archive/conferences/025/006/FNDA2006_006.pdf
236. **I. Mor, D. Vartsky, I. Mardor, M.B. Goldberg, D. Bar, G. Feldman, V. Dangendorf, A. Breskin, R. Chechik:**
Monte-Carlo Simulations of Time-Resolved, Optical Readout Detector for Pulsed, Fast-Neutron Transmission Spectroscopy (PFNTS)
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)064
http://pos.sissa.it/archive/conferences/025/064/FNDA2006_064.pdf
235. **V. Dangendorf, R. Lauck, F. Kaufmann, J. Barnstedt, A. Breskin, O. Jagutzki, M. Kramer, D. Varsky:**
Time-Resolved Fast-Neutron Imaging with a Pulse-Counting Image Intensifier
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)008
http://pos.sissa.it/archive/conferences/025/008/FNDA2006_008.pdf
234. **H. Klein, F.D. Brooks:**
Scintillation Detectors for Fast Neutrons
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)097
http://pos.sissa.it/archive/conferences/025/097/FNDA2006_097.pdf

233. **H. Klein:**
International Control of Neutron Calibration Measurements
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)014
http://pos.sissa.it/archive/conferences/025/014/FNDA2006_014.pdf
232. **E. Pönitz, R. Nolte, D. Schmidt:**
Investigation of the $^{15}\text{N}(p,n)$ Reaction for Use as a Neutron Source in Scattering Experiments
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)059
http://pos.sissa.it/archive/conferences/025/059/FNDA2006_059.pdf
231. **R. Nolte, V. Dangendorf, A. Buffler, F.D. Brooks, J.P. Slabbert, F.D. Smit, M. Haney, E. Schmid, G. Stephan:**
Relative Biological Efficiency of 192 MeV Neutron Radiation for the Induction of Chromosome Aberrations in Human Lymphocytes of the Peripheral Blood
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)082
http://pos.sissa.it/archive/conferences/025/082/FNDA2006_082.pdf
230. **D. Marocco, M. Riva, B. Esposito, L. Bertalot, A. Zimbal:**
A Digital Data Acquisition System Optimized for Spectrometry with Liquid Scintillation Detectors
 In proceedings of "International Workshop on Fast Neutron Detectors and Applications" PoS(FNDA2006)028
http://pos.sissa.it/archive/conferences/025/028/FNDA2006_028.pdf
229. **R. Chechik, M. Cortesi, A. Breskin, D. Vartsky, D. Bar, V. Dangendorf:**
The GEM-Like (THGEM) Detectors and their Possible Applications
 Proceedings of the SNIC Symposium, Stanford, California, 3 -6 April 2006
<http://www.slac.stanford.edu/econf/C0604032/papers/0025.PDF>
228. **E.H. Lehmann, V. Dangendorf:**
Neutronen-Imaging - Eine Alternative zum normalen Röntgen
 Bulletin der electrosuisse SEV/AES 11/06, p. 9 - 15
http://www.electrosuisse.ch/cms.cfm/s_page/63880
227. **F. Wissmann:**
Long-term Measurements of $\dot{H}^(10)$ at Aviation Altitudes in the Northern Hemisphere*
 Radiat. Prot. Dosim. **121** (2006), 347 - 357
226. **F. Wissmann, J.C. Saez Vergara:**
Dosimetry of Environmental Radiation – A Report on the Achievements of EURADOS WG3
 Radiat. Prot. Dosimetry **118** (2006) 167 - 175
225. **F. Wissmann:**
Variations Observed in Environmental Radiation at Ground Level
 Radiat. Prot. Dosim. **118** (2006) 3 - 10

224. **L. Weissmann, M. Gai, A. Breskin, R. Chechik, V. Dangendorf, K. Tittelmeier, H.R. Weller:**
Amplification and Scintillation Properties of Oxygen-Rich Gas Mixtures for Optical-TPC Applications
 JINST 1(2006) 05002
<http://www.iop.org/EJ/toc/1748-0221/1/05>
223. **G. Reitz, R. Beaujean, E. Benton, S. Burmeister, Ts. Dachev, S. Deme, M. Luszik-Bhadra and P. Olko:**
Space Radiation Measurements on Board ISS - The DOSMAP Experiment
 Radiat. Prot. Dosim. **116** (2005) 374 - 379
222. **W. Hoffmann, A. Heimers, H.J. Brede, U. Giesen:**
Beeinflussung der Ergebnisse der biologischen Dosimetrie durch Zellzyklusverzögerungen bei höheren Dosen
 BMU-Bericht: Schriftreihe Reaktorsicherheit und Strahlenschutz, BMU-2005-670 (Abschlußbericht BfS-StSch 4321)
 (pdf-files: O:\6-4\64_65\Veröffentlichungen, allgemein\Veröffentl._aus_Bibliogr\Zeitschriften_conference_proceedings_berichte)
221. **H.J. Brede, K.-D. Greif, O. Hecker, P. Heeg, J. Heese, D.T.L. Jones, H. Kluge and D. Schardt:**
Absorbed dose to water determination with ionization chamber dosimetry and calorimetry in restricted neutron, photon, proton and heavy ion radiation fields
 Phys. Med. Biol. **51** (2006) 3667 - 3682
220. **R. Nolte, M.S. Allie, F.D. Brooks, A. Buffler, V. Dangendorf, J.P. Meulders, H. Schuhmacher, F.D. Smit, M. Weierganz:**
Cross Sections for Neutron Induced Fission of ^{235}U , ^{238}U , ^{209}Bi and ^{nat}Pb in the Energy Range from 33 to 200 MeV Measured Relative to n-p Scattering
 Nucl. Sci. Eng. **156** (2007) 197 - 210
219. **K.-D. Greif, W. Beverung, F. Langner, D. Frankenberg, A. Gellhaus and F. Banaz-Yaşar:**
The PTB microbeam: A Versatile Instrument for Radiobiological Research
 Radiat. Prot. Dosim. **122** (2006) 313 - 315
218. **A.C. Morton, J.C. Chow, J.D. King, R.N. Boyd, N.P.T. Bateman, L. Buchmann, J.M. D'Auria, T. Davinson, M. Dombisky, W. Galster, E. Gete, U. Giesen, C. Iliadis, K.P. Jackson, J. Powell, G. Roy, A. Shotter:**
Beta-delayed particle decay of ^{17}Ne
 Nucl. Phys. A **706** (2002) 15 - 47
217. **R. Nolte, K.-H. Mühlbradt, J.P. Meulders, G. Stephan, M. Haney, E. Schmid:**
RBE of Quasi-monoenergetic 60 MeV Neutron Radiation for Induction of Dicentric in Human Lymphocytes
 Radiation and Environmental Biophysics **44** (2005) 201 - 209

216. **V. Kamenopoulou, J.W.E. van Dijk, P. Ambrosi, T. Bolognese-Milsztajn, C.M. Castellani, L. Currivan, R. Falk, E. Fantuzzi, M. Figel, J. Garcia Alves, M. Ginjaume, H. Janzekovic, D. Kluszczynski, M.A. Lopez, M. Luszik-Bhadra, P. Olko, H. Roed, H. Stadtmann, F. Vanhavere, E. Vartiainen, W. Wahl, A. Weeks, C. Wernli:**
Aspects of Harmonisation of Individual Monitoring for External Radiation in Europe: Conclusions of a EURADOS Action
Radiat. Prot. Dosim. **118** (2006) 139 - 143
215. **A. Heimers, H.J. Brede, U. Giesen, W. Hoffmann:**
Chromosome Aberration Analysis and the Influence of Mitotic Delay after Simulated Partial-Body Expose with High Doses of Sparsely and Densely Ionising Radiation
Radiation and Environmental Biophysics **45** (2006) 45 - 54
214. **L. Bertalot, S. Conroy, A. Murari, M. Reginatto, H. Schuhmacher, A. Zimbal and contributors to the EFDA-JET workprogramme:**
Neutron Energy Measurements of Trace Tritium Plasmas with NE213 Compact Spectrometer at JET
Proceedings of the 32nd EPS Conference on Plasma Phys., Tarragona (Spain), 27 June - 1 July 2005, ECA Vol. **29C**, P-1.078 (2005)
213. **B. Burgkhardt, P. Bilski, M. Budzanowski, R. Böttger, K. Eberhardt, G. Hampel, P. Olko and A. Straubing:**
Application of Different TL-Detectors for the Photon Dosimetry in Mixed Radiation Fields used for BNCT
Radiat. Prot. Dosim. **120** (2006) 83 - 86
212. **A. Heimers, H.J. Brede, U. Giesen, W. Hoffmann:**
Influence of Mitotic Delay on the Results of Biological Dosimetry for High Doses of Ionising Radiation
Radiation and Environmental Biophysics **44** (2005) 211 - 218
211. **M. Gai, A. Breskin, R. Chechik, V. Dangendorf, and H.R. Weller:**
Optical Readout Time Projection Chamber (O-TPC) for a Study of Oxygen Formation In Stellar Helium Burning
Acta Phys. Hung. **A 25**, Nos. 2-4 (2006) 461 - 468
210. **M. Luszik-Bhadra, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, D. Derau, F. d'Errico, A. Fiechtner, J.-E. Kyllönen, V. Lacoste, B. Lievens, L. Lindborg, A. Lovefors Daun, M. Reginatto, H. Schuhmacher, R. Tanner, F. Vanhavere:**
Summary of Personal Neutron Dosemeter Results obtained within the EVIDOS Project
Radiat. Prot. Dosim. **125** (2007) 293 - 299
209. **M. Luszik-Bhadra, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, V. Lacoste, L. Lindborg, M. Reginatto, H. Schuhmacher, R. Tanner, F. Vanhavere:**
Direction Distributions of Neutrons and Reference Values of the Personal Dose Equivalent in Workplace Fields
Radiat. Prot. Dosim. **125** (2007) 364 - 368

208. **M. Reginatto, M. Luszik-Bhadra:**
Determination of the Full Response Function of Personal Neutron Dosemeters
Radiat. Prot. Dosim. **125** (2007) 285 - 288
207. **V. Lacoste, M. Reginatto, B. Asselineau, H. Muller:**
Bonner Sphere Neutron Spectrometry at Nuclear Workplaces in the Framework of the EVIDOS Project
Radiat. Prot. Dosim. **125** (2007) 304 - 308
206. **M. Ginjaume, T. Bolognese-Milsztajn, M. Luszik-Bhadra, F. Vanhavere, W. Wahl and A. Weeks:**
Overview of Active Personal Dosemeters for Individual Monitoring in the European Union
Radiat. Prot. Dosim. **125** (2007) 261 - 266
205. **M. Luszik-Bhadra:**
Compliance of Electronic Personal Neutron Dosemeters with the New International Standard IEC 61526
Radiat. Prot. Dosim. **125** (2007) 15 - 18
204. **H. Schuhmacher, D. Bartlett, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, J.-E. Kyllönen, V. Lacoste, L. Lindborg, M. Luszik-Bhadra, M. Reginatto, R. Tanner, F. Vanhavere:**
Evaluation of Individual Dosimetry in Mixed Neutron and Photon Radiation Fields (EVIDOS). Part II: Conclusions and recommendations
Radiat. Prot. Dosim. **125** (2007) 281 - 284
203. **F. d'Errico, D. Bartlett, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, A. Fiechtner, J.-E. Kyllönen, V. Lacoste, L. Lindborg, M. Luszik-Bhadra, M. Reginatto, H. Schuhmacher, R. Tanner, F. Vanhavere:**
Evaluation of Individual Dosimetry in Mixed Neutron and Photon Radiation Fields (EVIDOS). Part I: Scope and Methods of the Project
Radiat. Prot. Dosim. **125** (2007) 275 - 280
202. **R.J. Tanner, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, L.G. Hager, M. Hussein, J.-E. Kyllönen, V. Lacoste, L. Lindborg, M. Luszik-Bhadra, C. Molinos, M. Reginatto, H. Schuhmacher, F. Vanhavere:**
Neutron Area Survey Instrument Measurements in the EVIDOS Project
Radiat. Prot. Dosim. **125** (2007) 300 - 303
201. **V. Lacoste, M. Reginatto, H. Muller:**
Neutron Spectrometry with Bonner Spheres at the Belgonuléaire MOX Fuel Processing Plant - EVIDOS Compaig no 2
IRSA Rapport SDE/2004-34, July 2004
200. **D. Frankenberg, K.-D. Greif, U. Giesen:**
Radiation Response of Primary Human Skin Fibroblasts and their Bystander Cells after Exposure to Counted Particles at Low and High LET
Int. J. Radiat. Biol. **82** (2006) 59 - 67

199. **M. Reginatto:**
Exact Uncertainty Principle and Quantization: Implications for the Gravitational Field
Brazilian Journal of Physics **35** (2005) 476 - 480
198. **A. Gorelov, D. Melconian, W.P. Alford, D. Ashery, G. Ball, J.A. Behr, P.G. Bricault, J.M. D'Auria, J. Deutsch, J. Dilling, M. Dombisky, P. Dubé, J. Fingler, U. Giesen, F. Glück, S. Gu, O. Häusser, K.P. Jackson, B.K. Jennings, M.R. Pearson, T.J. Stocki, T.B. Swanson, and M. Trinczek:**
Scalar Interaction Limits from the β - ν Correlation of Trapped Radioactive Atoms"
Phys. Rev. Letters **94** (2005) 142501-1 - 142501-4
197. **D. Melconian, M. Trinczek, A. Gorelov, W.P. Alford, J.A. Behr, J.M. D'Auria, M. Dombisky, U. Giesen, K.P. Jackson, T.B. Swanson and W. Wong:**
Release of ^{37}K from Catcher Foils
Nucl. Instrum. Meth. A. **538** (2005) 93-99
196. **K. Gunzert-Marx, D. Schardt, R.S. Simon, F. Gutermuth, T. Radon, V. Dangendorf, R. Nolte:**
Response of a BaF_2 Scintillation Detector to Quasi-Monoenergetic Fast Neutrons in the Range of 45 to 198 MeV
Nucl. Instrum. und Meth. A **536** (2005) 146 - 153
195. **F. Wissmann, V. Dangendorf, U. Schrewe:**
Radiation Exposure at Ground Level by Secondary Cosmic Radiation
Radiat. Meas. **39** (2005) 95 - 104
194. **T. Lahaye, Q. Chau, S. Ménard, V. Lacoste, H. Muller, M. Luszik-Bhadra, M. Reginatto, and P. Bruguier:**
Performance of the Electronic Personal Dosemeter for Neutron 'Saphydose-N' at Different Workplaces of Nuclear Facilities
Radiat. Prot. Dosim. **120** (2006) 383 - 386
193. **F. Vanhavere, D. Bartlett, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, J. Kyllönen, V. Lacoste, T. Lahaye, L. Lindborg, M. Luszik-Bhadra, C. Molinos, H. Muller, M. Reginatto, H. Schuhmacher, R. Tanner:**
Evaluation of Individual Monitoring in Mixed Neutron/Photon Fields: Mid-Term Results from the EVIDOS Project
Radiat. Prot. Dosim. **120** (2006) 263 - 267
192. **M. Luszik-Bhadra, D. Bartlett, M. Boschung, M. Coeck, G. Curzio, D. Derdau, F. d'Errico, A. Fiechtner, C. Itié, J.-E. Kyllönen, V. Lacoste, T. Lahaye, L. Lindborg, C. Molinos, H. Muller, M. Reginatto, H. Schuhmacher, R. Tanner, F. Vanhavere:**
Electronic Neutron Personal Dosemeters: Their Performance in Mixed Radiation Fields in Nuclear Power Plants
Radiat. Prot. Dosim. **120** (2006) 378 - 382
191. **T. Bolognese-Milsztajn, M. Ginjaume, M. Luszik-Bhadra, F. Vanhavere, W. Wahl and A. Weeks:**
Active Personal Dosemeters for Individual Monitoring and other New Developments
Radiat. Prot. Dosim. **112** (2004) 141 - 168

190. **I.V. Ryzhov, G.A. Tutin, V.P. Eismont, A.G. Mitryukhin, V.S. Oplavin, S.M. Soloviev, J.-P. Meulders, Y. El Masri, Th. Keutgen, R. Priels, and Ralf Nolte:**
Neutron-Induced Fission Cross Sections of Nuclei in the Vicinity of ^{208}Pb at Incident Energies below 60 MeV
 AIP Conference Proceedings of the International Conference on Nuclear Data, Santa Fe, USA, September 26 to October 1, 2004, Vol. **769**, R.C. Haight, M.B Chadwick, T. Kawano, P. Talou (Eds.), American Institute of Physics, Melville, New York, 2005, pp. 684 - 687
189. **A. Pavlik, P. Baumann, C. Borcea, E. Jericha, S. Jokić, M. Kerveno, S. Lukić, J. P. Meulders, L. C. Mihailescu, R. Nolte, A. J. M. Plompen, I. Raškinytė, G. Rudolf, and the n_TOF Collaboration:**
Cross Section Measurements for (n,xn) Reactions by In-beam Gamma-ray Spectroscopy
 AIP Conference Proceedings of the International Conference on Nuclear Data, Santa Fe, USA, September 26 to October 1, 2004, Vol. **769**, R.C. Haight, M.B Chadwick, T. Kawano, P. Talou (Eds.), American Institute of Physics, Melville, New York, 2005, pp. 876 - 879
188. **W. Mannhart, D. Schmidt:**
Measurement of Neutron Reaction Cross Sections between 8 and 14 MeV
 AIP Conference Proceedings of the International Conference on Nuclear Data, Santa Fe, USA, September 26 to October 1, 2004, Vol. **769**, R.C. Haight, M.B Chadwick, T. Kawano, P. Talou (Eds.), American Institute of Physics, Melville, New York, 2005, pp. 609 - 612
187. **R. Michel, W. Glasser, U. Herpers, H. Schuhmacher, H.J. Brede, V. Dangendorf, R. Nolte, P. Malmborg, A.V. Prokofiev, A.N. Smirnov, I. Rishkov, D. Kollár, J.P. Meulders, M. Duijvestijn, A. Koning:**
Residual Nuclide Production From Iron, Lead, And Uranium By Neutron-Induced Reactions Up To 180 MeV
 AIP Conference Proceedings of the International Conference on Nuclear Data, Santa Fe, USA, September 26 to October 1, 2004, Vol. **769**, R.C. Haight, M.B Chadwick, T. Kawano, P. Talou (Eds.), American Institute of Physics, Melville, New York, 2005, pp. 861 - 864
186. **L. Bertalot, J.M. Adams, M. Angelone, S. Conroy, B. Esposito, Y. Kaschuck, H. Henriksson, P. Lamalle, D. Marocco, A. Murari, N. Hawkes, M. Pillon, S. Popovichev, M. Reginatto, M. Riva, H. Schuhmacher, D. Stork, K.-D. Zastrow, A. Zimbal and "the JET EDFA contributors":**
ITER Relevant Developments in NeutronDiagnostics during the JET Trace Tritium Campaign
 Fusion Engineering and Design **74** (2005) 835 - 839
185. **H. Iwase, B. Wiegel, G. Fehrenbacher, D. Schardt, T. Nakamura, K. Niita and T. Radon:**
Comparison between Calculation and Measured Data on Secondary Neutron Energy Spectra by Heavy Ion Reactions from Different Thick Targets
 Radiat. Prot. Dosim. **116** (2005) 640 - 646

184. **B. Esposito, L. Bertalot, D. Marocco, M. Riva, Y. Kaschuck, D. Skopintsev, A. Zimbal, M. Reginatto, H. Schuhmacher, J.M. Adams, A. Murari:**
Neutron Measurements on Joint European Torus using an NE213 Scintillator with Digital Pulse Shape Discrimination
Review of Scientific Instruments **75** (2004) 3550 - 3552
183. **A. Zimbal, M. Reginatto, H. Schuhmacher, L. Bertalot, B. Esposito, F. Poli, J.M. Adams, S. Popovichev, V. Kiptily, A. Murari:**
Compact NE213 Neutron Spectrometer with High Energy Resolution for Fusion Applications
Review of Scientific Instruments **75** (2004) 3553 - 3555
182. **B. Wiegel, J. Wittstock, A.V. Alevra, M. Matzke:**
Contribution to the Report of EURADOS WG 5 "Cosmic Radiation Exposure of Aircraft Crew"; Radiation Protection **140** (2004), p. 200 - 210 (ed. L. Lindborg, D.T. Bartlett, P. Beck, I.R. McAulay, K. Schnuer, H. Schraube and F. Spúrny)
181. **D. Vartsky, I. Mor, M.B. Goldberg, I. Mardor, G. Feldman, D. Bar, A. Shor, V. Dangendorf, G. Laczko, A. Breskin, R. Chechik:**
Time-Resolved Fast Neutron Imaging: Simulations of Detector Performance
Nucl. Instrum. Meth. A **542** (2005) 206 - 212
180. **V. Dangendorf, G. Laczko, M. Reginatto, D. Vartsky, M. Goldberg, I. Mor, A. Breskin, R. Chechnik:**
Detectors for Time-of-Flight Fast Neutron Radiography
I. Neutron-Counting Gas Detectors
Nucl. Instrum. Meth. A **542** (2005) 197 - 205
179. **P. Pihet, C. Wernli, H. Schuhmacher, J. Zoetelief, D.T. Bartlett, F. d'Errico, L. Lindborg, P. Olko, H. Paretzke, A. Rannou, F. Spurny, D.J. Thomas:**
The European Radiation Dosimetry Group: EURADOS
Proceedings of the 11th Intern. Congress of Radiation Protection Association (IRPA11), Madrid, May 2004 (available only on CD)
178. **H. Fehrenbacher, B. Wiegel, H. Iwase, T. Radon, D. Schardt, H. Schuhmacher, J. Wittstock:**
Spectrometry behind Concrete Shielding for Neutrons Produced by 400 MeV/u ¹²C Ions Impinging on a Thick Graphite Target
Proceedings of the 11th Intern. Congress of Radiation Protection Association (IRPA11), Madrid, May 2004 (available only on CD)
177. **E. Schmid, D. Schlegel, M. Krumrey, G. Stephan:**
RBE of Neutrons at Energies of 36 keV - 15 MeV and Photons at Energies of 1.8 - 40 keV for Induction of Dicentric Chromosomes in Human Lymphocytes
Proceedings of the 11th Intern. Congress of the International Radiation Protection Association (IRPA11), Madrid, May 2004, (available only on CD)
176. **W. Mannhart:**
Response of Activation Reactions in the Neutron Field of Spontaneous Fission of ²⁵²Cf
IAEA TECDOC, International Reactor Dosimetry File 2002 (IRDF-2002), Technical Report Series No. **452** (2006) 30 - 45

175. **D. Schmidt, Z. Zhou, X. Ruan, H. Tang, B. Qi, H. Xia, J. Deng:**
Application of Non-Monoenergetic Sources in Fast Neutron Scattering Measurements
Nucl. Instrum. Meth. A **545** (2005) 658 - 682
174. **V. Dangendorf, C. Kersten, G. Laczko, D. Vartsky, I. Mor, M.B. Goldberg, G. Feldmann, A. Breskin, R. Chechik, O. Jagutzky, U. Spillman:**
Detectors for Energy-Resolved Fast Neutron Imaging
Nucl. Instrum. Meth. A **535** (2004) 93 - 97
173. **M. Luszik-Bhadra, M. Boschung, M. Coeck, G. Curzio, D. Derdau, F. d'Errico, A. Fiechtner, J.-E. Kyllönen, V. Lacoste, L. Lahaye, L. Lindborg, C. Molinos, H. Muller, M. Reginatto, H. Schuhmacher, R. Tanner, F. Vanhavere:**
EVIDOS: Optimisation of Individual Monitoring in Mixed Neutron/Photon Fields at Workplaces of the Nuclear Fuel Cycle
Contribution of the "4th ISOE European Workshop on Occupational Exposure Management at NPPs", Lyon, France, March 24 to 26, 2004, published on website:
<http://isoe.cepn.asso.fr>
172. **V. Gressier, V. Lacoste, L. Lebreton, H. Muller, G. Pelcot, M. Bakali, F. Fernandez, M. Tomas, N.J. Roberts, D.J. Thomas, M. Reginatto, B. Wiegel, J. Wittstock:**
Characterization of the IRSN Facility CANEL/T400 Producing Realistic Neutron Fields for Calibration and Test Purposes
IRSN Rapport Nr. SDE /2004-08
[[6-Alle\Öffentlichkeit\Vorträge+Publikationen\EU Berichte\EUROMET-670 8Report.pdf]]
171. **G. Fehrenbacher, B. Wiegel, H. Iwase, T. Radon, D. Schardt, H. Schuhmacher, J. Wittstock:**
Spectrometry behind Concrete Shielding for Neutrons Produced by 400 MeV/u ¹²C Ions Impinging on a Thick Graphite Target
GSI-Bericht 2004-06
170. **H. Schraube, W.G. Alberts, H.J. Brede, B. Burgkhardt, B. Dörschel, M. Heinzelmann, A. Hess, M. Höfert, E. Piesch:**
Die Bestimmung der Energiedosis eines Neutronenstrahls mit Hilfe von Ionisationskammern
GSF-Bericht 10/03, Neuherberg, 2003
169. **R. Chechik, A. Breskin, G.P. Guedes, D. Mörmann, J. Maia, V. Dangendorf, D. Vartsky, J.M.F. Dos Santos, and J.F.C.A. Veloso:**
Recent Investigations of Cascaded GEM and MHSP Detectors
IEEE Transactions on Nuclear Science **51** (2004) 2097 - 2103
168. **T. Bolognese-Milsztajn, D. Bartlett, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, V. Giusti, V. Gressier, J. Kyllönen, V. Lacoste, L. Lindborg, M. Luszik-Bhadra, C. Molinos, G. Pelcot, M. Reginatto, H. Schuhmacher, R. Tanner, F. Vanhavere, D. Derdau:**
Individual Neutron Monitoring in Workplaces with Mixed Neutron/Photon Radiation
Radiat. Prot. Dosim. **110** (2004) 753 - 758

167. **M. Luszik-Bhadra:**
Electronic Personal Dosimeters: The Solution to Problems of Individual Monitoring in Mixed Neutron/Photon Fields?
Radiat. Prot. Dosim. **110** (2004) 747 - 752
166. **F. d'Errico, V. Giusti, M. Reginatto and B. Wiegel:**
A Telescope-Design Directional Neutron Spectrometer
Radiat. Prot. Dosim. **110** (2004) 533 - 537
165. **F. Wissmann, F. Langner, J. Roth and U. Schrewe:**
A Mobile TEPC-Based System to Measure the Contributions to $H^(10)$ at Flight Altitudes*
Radiat. Prot. Dosim. **110** (2004) 347 - 349
164. **M. Luszik-Bhadra, M. Reginatto and V. Lacoste:**
Measurement of Energy and Direction Distribution of Neutron and Photon Fluences in Workplace Fields
Radiat. Prot. Dosim. **110** (2004) 237 - 241
163. **H. Schuhmacher:**
Neutron Calibration Facilities
Radiat. Prot. Dosim. **110** (2004) 33 - 42
162. **D.R. Schlegel:**
Determination of Absorbed Dose in the Vicinity of a Neutron Source
Radiat. Prot. Dosim. **110** (2004) 819 - 821
161. **V. Gressier, V. Lacoste, L. Lebreton, H. Muller, G. Pelcot, M. Bakali, F. Fernandez, M. Tomás, N.J. Roberts, D.J. Thomas, M. Reginatto, B. Wiegel, and J. Wittstock:**
Characterisation of the IRSN CANEL/T400 Facility Producing Realistic Neutron Fields for Calibration and Test Purposes
Radiat. Prot. Dosim. **110** (2004) 523 - 527
160. **F.D. Brooks, M.S. Allie, A. Buffler, V. Dangendorf, M.S. Herbert, S.A. Makupula, R. Nolte and F.D. Smit:**
Measurement of Neutron Fluence Spectra up to 150 MeV using a Stacked Scintillator Neutron Spectrometer
Radiat. Prot. Dosim. **110** (2004) 151 - 155
159. **M. Reginatto, M. Luszik-Bhadra and F. d'Errico:**
An Unfolding Method for Directional Spectrometers
Radiat. Prot. Dosim. **110** (2004) 539 - 543
158. **H. Tagziria, B. Wiegel, H. Klein, K. Knauf, J. Wittstock and A. Zimbal:**
Measurement and Monte Carlo Modelling of the JRC $^{241}\text{Am-Li}(\alpha,n)$ Source Spectrum
Radiat. Prot. Dosim. **110** (2004) 129 - 134
157. **M. Luszik-Bhadra, W. Wendt and M. Weierganz:**
The Electronic Neutron/Photon Dosimeter PTB DOS-2002
Radiat. Prot. Dosim. **110** (2004) 291 - 295

156. **R. Nolte, M.S. Allie, R. Böttger, F.D. Brooks, A. Buffler, V. Dangendorf, H. Friedrich, S. Guldbakke, H. Klein, J.P. Meulders, D. Schlegel, H. Schuhmacher and F.D. Smit:**
Quasi-Monoenergetic Neutron Calibration Fields in the Energy Range from Thermal to 200 MeV
Radiat. Prot. Dosim. **110** (2004) 97 - 102
155. **G. Laczko, V. Dangendorf, M. Krämer, D. Schardt, K. Tittelmeier:**
High Resolution Heavy Ion Track Structure Imaging
Nucl. Instrum. Meth. A **535** (2004) 216 - 220
154. **H. Klein, D.T. Thomas:**
Chapter 10: *Quality Assurance*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 175 - 188
153. **M. Matzke:**
Chapter 9: *Unfolding Procedures*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 155 - 174
152. **H. Klein:**
Chapter 7: *Photon Spectrometry in Mixed Fields*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 125 - 131
151. **F. d'Errico, M. Matzke:**
Chapter 6: *Neutron Spectrometry in Mixed Fields: Superheated Drop (or Bubble) Detectors*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 111 - 124
150. **H. Klein:**
Chapter 5: *Neutron Spectrometry in Mixed Fields: NE213/BC501A Liquid Scintillation Spectrometers*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 95 - 109
149. **A.V. Alevra, D.J. Thomas:**
Chapter 3: *Neutron Spectrometry in Mixed Fields: Multisphere Spectrometers*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 37 - 72

148. **D.T. Bartlett, J.-L. Chartier, M. Matzke, A. Rimpler, D.J. Thomas:**
Chapter 2: *Concepts and Quantities in Spectrometry and Radiation Protection*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 23 - 35
147. **D.J. Thomas, H. Klein:**
Chapter 1: *Introduction*
Handbook on "Neutron and Photon Spectrometry Techniques for Radiation Protection", Eds. D.J. Thomas and H. Klein
Radiat. Prot. Dosim. **107** (2003) 13 - 21
146. **E. Bourhis-Martin, H.J. Brede, K.-D. Greif, W. Baumhoer, J. Rassow, W. Sauerwein:**
Absolute Dosimetry in a d (14 MeV)+Be Fast Neutron Beam
Med. Phys. **31** (2004) 832-838
145. **W. Göhde, D. Uthe, N. Wedemeyer, E. Severin, K.-D. Greif, D. Schlegel, H.J. Brede, W. Köhnlein:**
Mutagenic Effect of Low Energy Neutrons on the Human Chromosome 11
Intern. Journ. of Radiat. Biolog. **79** (2003) 911 - 918
144. **K.-D. Greif, H.J. Brede, D. Frankenberg, U. Giesen:**
The PTB Single Ion Microbeam for Irradiation of Living Cells
Nucl. Instrum. Meth. **B 217** (2004) 505-512
143. **E. Schmid, D. Schlegel, S. Guldbakke, R.-P. Kapsch, D. Regulla:**
RBE of Nearly Monoenergetic Neutrons at Energies of 36 keV - 14.6 MeV for Induction of Dicentric Chromosomes in Human Lymphocytes
Radiation and Environmental Biophysics **42** (2003) 87 - 94
142. **A.V. Alevra, K. Knauf, J. Wittstock:**
Neutronenspektren in der Umgebung eines POLLUX-Ersatzbehälters
PTB-Bericht DOS-43 (2003), p. 59 - 60 (in German)
141. **B. Wiegel, J. Wittstock:**
Apparativer Nulleffekt von ^3He -Proportionalzählern in Bonnerkugeln
PTB-Bericht DOS-43 (2003), p. 32 - 34 (in German)
140. **J.C. Chow, J.D. King, N.P.T. Bateman, R.N. Boyd, L. Buchmann, J.M.D'Auria, T. Davinson, M. Dombisky, E. Gete, U. Giesen, C. Iliadis, K.P. Jackson, A.C. Morton, J. Powell, and A. Shotton:**
 β -Delayed Particle Decay of ^{17}Ne into $\rho + \alpha + ^{12}\text{C}$ through the Isobaric Analog State in ^{17}F
Physical Review C **66** (2002) 064316-1 - 064316-9
139. **C. Borcea, P. Cennini, M. Dahlfors, A. Ferrari, G. Garcia-Munoz, P. Haefner, A. Herrarar-Martinez, Y. Kadi, V. Lacoste, E. Rademacher, F. Saldana, V. Vlachoudis, L. Zanini, C. Rubbia, S. Buono, V. Dangendorf, R. Nolte, M. Weierganz:**
Results from the Commissioning of the n_TOF Spallation Neutron Source at CERN
Nucl. Instrum. Meth. **A 513** (2003) 524-537

138. **M. Trinczek, A. Gorelov, D. Melconian, W.P. Alford, D. Asgeirsson, D. Ashery, J.A. Behr, P.G. Bricault, J.M. D'Auria, J. Deutsch, J. Dilling, M. Dombsky, P. Dubé, S. Eaton, J. Fingler, U. Giesen, S. Gu, O. Häusser, K.P. Jackson, B. Lee, J.H. Schmid, T.J. Stocki, T.B. Swanson, W. Wong:**
Novel Search for Heavy ν Mixing from the β^+ Decay of ^{38m}K Confined in an Atom Trap
Phys. Rev. Letters 90 (2003) 012501-1 - 012501-4
137. **F. Hoenen, G. Degenhardt, H. Klein, S. Guldbakke, D. Schlegel:**
Digital Pulse Processing with High-Throughput and High-Resolution Neutron Spectroscopy on DD Fusion Plasmas with Spherical Ionization Chambers
Nucl. Instrum. Meth. A **498** (2003) 470-481
136. **F. d'Errico, V. Giusti, E. Nava, M. Reginatto, G. Curzio, J. Capala:**
Fast Neutron Spectrometry of BNCT Beams
Proc. Research and Development in Neutron Capture Therapy, Essen, September 8-13, 2002, W. Sauerwein, R. Moss, A. Wittig (Eds.), p. 1139-1144
135. **M. Luszik-Bhadra, A. Rimpler, W. Wahl:**
Status and Prospects of Electronic Personal Dosemeters for Neutron/Photon Radiation Fields
Kerntechnik **68** (2003) 135-139
134. **C. Borcea, S. Buono, P. Cennini, M. Dahlfors, V. Dangendorf, A. Ferrari, G. Garcia-Munoz, Y. Kadi, V. Lacoste, R. Nolte, E. Radermacher, C. Rubbia, E. Saldana, V. Vlachoudis, M. Weierganz, L. Zanini:**
First Results from the Neutron Facility (nTOF) at CERN
Appl. Phys. A **74** (2002) S55-S57
133. **H. Friedrich, V. Dangendorf, A. Bräuning-Demian:**
Position-Sensitive Thermal Neutron Detector with 6Li -foil Converter Coupled to Wire Chambers
App. Phys. A **74** (2002) 124-126
132. **J. Nickles, H. Bräuning, A. Bräuning-Demian, V. Dangendorf, K. Rauschnabel, H. Schmidt-Böcking:**
Studies of an Integrated Photosensor and Imaging Optics to Readout the Light from Gas Scintillation Proportional Counters
IEEE Transactions of Nuclear Science **49** (2002) 808-811
131. **V. Dangendorf, G. Laczko, C. Kersten, O. Jagutzki, U. Spillmann:**
Fast Neutron Resonance Radiography in a Pulsed Neutron Beam
Neutron Radiography, Proceedings of the Seventh World Conference, Rome, Italy, September 15-21, 2002, Vol. 7, P. Chirco, R. Rosa (Eds.) ENEA, Public Relations Department - Communication Unit, Rome, 2005, pp. 383 - 398
130. **M. Luszik-Bhadra, J. Coleman, D. Schlegel, A. Zimbal:**
Active Neutron/Photon Personal Dosemeters
Proceedings of the European IRPA Congress 2002 "Towards Harmonisation of Radiation Protection in Europe", Florence, Italy, 8-11 October 2002, Eds. F.D' Alberti and C. Osimani, ISBN 88-88648-09-7 (available only on CD)

129. **W. Glasser, R. Michel, S. Neumann, H. Schuhmacher, V. Dangendorf, R. Nolte, U. Heppers, A.N. Smirnov, I. Ryzhov, A.V. Prokofiev, P. Malmborg, D. Kollár, J.-P. Meulders:**
Radionuclide Production from Lead by Neutron-Induced Reactions up to 175 MeV
Journal of Nuclear Science and Technology, Supplement 2 (August 2002),
p. 373 - 376
128. **F. d'Errico, M. Luszik-Bhadra, T. Lahaye:**
State of the Art of Electronic Personal Dosimeters for Neutrons
Nucl. Instrum. Meth. A **505** (2003) 411-414
127. **F. d'Errico, A. Prokofiev, A. Sannikov, H. Schuhmacher:**
High Energy Neutron Detection and Spectrometry with Superheated Emulsions
Nucl. Instrum. Meth. A **505** (2003) 50-53
126. **M. J.W. Hall and M. Reginatto:**
Schrödinger Equation from an Exact Uncertainty Principle
J. Phys. A: Math. Gen. **35** (2002) 3289-3303
125. **M. Reginatto:**
Resolving Power of a Multisphere Neutron Spectrometer
Nucl. Instrum. Meth. A **480** (2002) 690-695
124. **D. Anthony, L. Buchmann, P. Bergbusch, J.M. D'Auria, M. Domsbky, U. Giesen, K.P. Jackson, J.D. King, J. Powell, F.C. Barker:**
 β -Delayed Deuteron Emission from ${}^6\text{He}$
Phys. Rev. C **65** (2002) 034310-1 - 034310-7
123. **P. Tischhauser, R.E. Azuma, L. Buchmann, R. Detwiler, U. Giesen, J. Görres, M. Heil, J. Hinnefeld, F. Käppeler, J.J. Kolata, H. Schatz, A. Shotter, E. Stech, S. Vouzoukas, M. Wiescher:**
Elastic α - ${}^{12}\text{C}$ Scattering and the ${}^{12}\text{C}(\alpha, \gamma){}^{16}\text{O}$ E2 S Factor
Phys. Rev. Letters **88** (2002) 072501-1 - 072501-4
122. **M. Luszik-Bhadra:**
Elektronische Personendosimeter - Stand der Technik
Strahlenschutzpraxis 2 (2002) 20 - 23
121. **M. Luszik-Bhadra, A. Rimpler:**
Stand und Perspektiven elektronischer Personendosimeter für Neutronen / Photonenstrahlungsfelder
Praxis des Strahlenschutzes: Messen, Modellieren, Dokumentieren. Fachverband für Strahlenschutz e. V. (ed. R. Michel, M. Täschner, A. Bayer)FS-02-199-T, 2002,
p. 3-10, ISSN 1013-4506
120. **J. Nickles, H. Bräuning, A. Bräuning-Demian, V. Dangendorf, A. Breskin, R. Chechik, K. Rauschnabel, H. Schmidt-Böcking:**
A Gas Scintillation Counter with Imaging Optics and Large Area UV-Detector
Nucl. Instrum. Meth. A **477** (2002) 59-63
119. **W. Rapp, M. Heil, D. Hentschel, F. Käppler, R. Reifarth, H.J. Brede, H. Klein, T. Rauscher:**
 α -and Neutron Induced Reactions on Ruthenium Isotopes
Phys. Rev. C **66** (2002) 015803-1 - 015803-11

118. **K.-D. Greif, H.J. Brede:**
The PTB Microbeam Facility
Radiat. Res. **158** (2002) 367
117. **E. Schmid, D. Regulla, S. Guldbakke, D. Schlegel, M. Roos:**
Relative Biological Effectiveness of 144 keV Neutrons in Producing Dicentric Chromosomes in Human Lymphocytes Compared with ^{60}Co γ -Rays under Head-to-Head Conditions
Radiat. Res. **157** (2002) 453-460
116. **A. Mitaroff, E. Dimovasili, S. Mayer, C. Birattari, B. Wiegel, M. Silari, H. Aiginger:**
Calibration and Experiment of an Extended Range Bonner Sphere Spectrometer
Strahlenschutz für Mensch und Gesellschaft im Europa von morgen, Fachverband für Strahlenschutz e. V. (ed. K. Mück, A. Hefner, N. Vana), TÜV Rheinland GmbH (2001), 21 - 25
115. **C. Borcea, S. Buono, P. Cennini, M. Dalfors, V. Dangendorf, A. Ferrari, G. Garcia-Munoz, Y. Kadi, V. Lacoste, R. Nolte, E. Rademacher, C. Rubbia, F. Saldana, V. Vlachoudis, T. Weierganz, L. Zanini:**
The Neutron Time of Flight Facility at CERN
Journal of Nuclear Science and Technology, Supplement 2 (August 2002), p. 653 - 656
114. **R. Nolte, M.S. Allie, P.J. Binns, F.D. Brooks, A. Buffler, V. Dangendorf, K. Langen, J.-P. Meulders, W.D. Newhauser, F. Roos, H. Schuhmacher:**
Measurement of ^{235}U , ^{238}U , ^{209}Bi and ^{nat}Pb Fission Cross Sections using Quasi-monoenergetic Neutrons with Energies from 30 MeV to 150 MeV
Journal of Nuclear Science and Technology, Supplement 2 (August 2002), p. 311 - 314
113. **A. Koning, H. Beijers, J. Benlliure, O. Bersillon, J. Cugnon, M. Duijvestijn, P. Eudes, D. Filges, F. Haddad, C. Lebrun, F.-R. Lecolley, S. Leray, J.-P. Meulders, R. Michel, R. Neef, R. Nolte, N. Olsson, E. Ramström, K.-H. Schmidt, H. Schuhmacher, I. Slypen, H.-A. Synal, R. Weinreich:**
HINDAS - A European Nuclear Data Program for Accelerator-Driven Systems
Journal of Nuclear Science and Technology, Supplement 2 (August 2002), p. 1161 - 1166
112. **D. Schmidt, W. Mannhart:**
Precise Measurement of Neutron Scattering Cross Sections on Silicon at Energies between 8 and 14 MeV
Journal of Nuclear Science and Technology, Supplement 2 (August 2002), p. 226 - 229
111. **W. Mannhart, D. Schmidt:**
Measurement of the $^{28}\text{Si}(n,p)$, $^{29}\text{Si}(n,p)$ and $^{30}\text{Si}(n,\alpha)$ Cross Sections between 6.9 and 14.0 MeV
Journal of Nuclear Science and Technology, Supplement 2 (August 2002), p. 218 - 221

110. **B. Burkhardt, D. Hermsdorf, K. Kadener, D. Arnold, M. Luszik-Bhadra, M., S. Neumaier:**
Experience in Long-Term Neutron Dose Equivalent Measurements using Etched-Track Detectors with (n, α) Converters in Moderators
Radiat. Prot. Dosim. **101** (2002) 579 - 584
109. **M. Luszik-Bhadra, M.:**
Individual Monitoring in Mixed Neutron/Photon Fields using a Single Silicon Detector
Radiat. Prot. Dosim. **101** (2002) 179 - 182
108. **A. Bräuning-Demian, V. Dangendorf, H. Friedrich:**
Thermal Neutron Imaging Detector with ^6Li -Foil Converter and MWPC Readout
published as extended abstract in "Book of Abstracts of the Intern. Workshop on Position Sensitive Neutron Detectors", HMI Berlin, 2001, p. 55 -56
107. **H. Schuhmacher, V. Dangendorf:**
Experimental Tools for Track Structure Investigations: New Approaches for Dosimetry and Microdosimetry
Radiat. Prot. Dosim. **99** (2002) 317 - 323
106. **V. Dangendorf, H. Schuhmacher, U. Titt, K. Tittelmeier:**
Imaging of Microscopic Features of Charged Particle Tracks in Low Pressure Gas
Radiat. Prot. Dosim. **99** (2002) 353 - 354
105. **U. Titt, V. Dangendorf, G. Großwendt, H. Schuhmacher:**
Development and Application of an Optical TPC for Charged Particle Track Structure Imaging in Microdosimetry
Nucl. Instrum. Meth. A **477** (2002) 536-539
104. **J.P. Meulders, H. Beijers, J. Benlliure, O. Bensillon, J. Cugnon, Ph. Eudes, D. Filges, A. Koning, J.F. Lecolley, S. Leray, R. Michel, N. Olsson, K.H. Schmidt, H. Schuhmacher, I. Slypen, H. Synal, R. Weinreich:**
High and Intermediate Energy Nuclear Data for Accelerator-Driven Systems - The HINDAS Project
Proceedings of the 6th Information Exchange Meeting on "Actinide and Fission Product Partitioning and Transmutation", Madrid, 11-13. December 2000, NEA-OCDE, p. 771-780 (available only on CD-Rom)
103. **Klein, H.:**
Neutron Spectrometry for Radiation Protection
TRANSACTIONS **83** (2000) 255 - 256
102. **Dietze, G.; Schuhmacher, H.:**
Neutronenmessung bei geringer Strahlendosis
Spektrum der Wissenschaft (1999) A48 - A49
101. **Dangendorf, V.; Nolte, R.; Roos, F.; Schuhmacher, H.; Siebert, B.R.L.; Weyrauch, M.:**
Proton Recoil Telescopes for Fluence Measurement in Neutron Beams of 20 - 200 MeV Energie
Nucl. Instrum. Meth. A **469** (2001) 205 - 215

100. **Alberts, W.G.; Alexandre, P.; Arend, E.; d'Errico, F.; Fiechtner, A.; Roos, H.; Schuhmacher, H.; Wernli, Ch.; Wimmer, S.:**
Development of Electronic Personal Neutron Dosemeters: A European Co-operation
Radiat. Prot. Dosim. **96** (2001) 251-254
99. **Luszk-Bhadra, M.:**
A Prototype Personal Neutron Dosimeter with one Silicon Diode
Radiat. Prot. Dosim. **96** (2001) 227 - 229
98. **Brede, H.J.:**
Eine Messapparatur zur Bestimmung der Wasser-Energiedosis für die Protonen- und Schwerionentherapie
PTB-Mitteilungen **110** (2000) 270 - 271
97. **d'Errico, F.; Luszk-Bhadra, M.; Nath, R.; Siebert, B.R.L.; Wolf, U.:**
Depth Dose-Equivalent and Effective Energies of Photoneutrons Generated by 6 - 18 MV X-Ray Beams for Radiotherapy
Health Physics **80** (2001) 4 - 11
96. **Rapp, W.; Brede, H.J.; Heil, M.; Hentschel, D. Käppeler, F.; Klein, H.; Reifarth, R.; Rauscher, T.:**
Alpha and neutron induced reactions on ruthenium
Nucl. Phys. **A688** (2001) 427c - 429c
95. **Schlegel, D.; Guldbakke, S.:**
Why do we need Target ?
Proceedings of the Monte Carlo 2000 Conference "Advanced Monte Carlo for Radiation Physics, Particle Transport Simulation and Applications", A. Kling, F. Barao, M. Nakagawa, L. Tavora, P. Vaz (Eds.), Springer-Verlag (2001), 881 - 886
94. **Buffler, A.; Brooks, F.D.; Allie, M.S.; Binns, P.J.; Dangendorf, V.; Langen, K.M.; Nolte, R.; Schuhmacher, H.:**
Measurement of Neutron Energy Spectra from 15 - 150 MeV using Stacked Liquid Scintillators
Nucl. Instrum. Meth. **A 476** (2002) 181-185
93. **Thomas, D.J.; Alevra, A.V.:**
Bonner Sphere Spectrometers - A Critical Review
Nucl. Instrum. Meth. **A 476** (2002) 12-20
92. **Alevra, A.V.; Plostinaru, V.D.:**
Characterisation of the IPNE Bonner Sphere Spectrometer by Comparison with the PTB System
Nucl. Instrum. Meth. **A 476** (2002) 21-25
91. **Luszk-Bhadra, M.; d'Errico, F.; Hecker, O.; Matzke, M.:**
A Wide-Range Direction Neutron Spectrometer
Nucl. Instrum. Meth. **A 476** (2002) 291-297
90. **Luszk-Bhadra, M.; Derdau, D.; Hallfarth, G.; Matzke, M.; Wiegel, B.; Wittstock, J.:**
Measurement of Energy and Directional Distribution of Neutron Fluence Inside a Nuclear Power Plant
Nucl. Instrum. Meth. **A 476** (2002) 457-462

89. **Wiegel, B.; Alevra, A.V.; Matzke, M.; Schrewe, U.J.; Wittstock, J.:**
Spectrometry using the PTB Neutron Multisphere Spectrometer (NEMUS) at Flight Altitudes and at Ground Level
Nucl. Instrum. Meth. A **476** (2002) 52-57
88. **Wiegel, B.; Alevra, A.V.:**
NEMUS - The PTB Neutron Multisphere Spectrometer: Bonner Spheres and More
Nucl. Instrum. Meth. A **476** (2002) 36-41
87. **Neumann, S.; Böttger, R.; Guldbakke, S.; Matzke, M.; Sosaat, W.:**
Neutron and Photon Spectrometry in Monoenergetic Neutron Fields
Nucl. Instrum. Meth. A **476** (2002) 353-357
86. **Reginatto, M.; Goldhagen, P.; Neumann, S.:**
Spectrum Unfolding, Sensitivity Analysis and Propagation of Uncertainties with the Maximum Entropy Deconvolution Code MAXED
Nucl. Instrum. Meth. A **476** (2002) 242-246
85. **Pichenot, G.; Guldbakke, S.; Asselineau, B.; Gressier, V.; Itié, C.; Klein, H.; Knauf, K.; Lebreton, L.; Löb, S.; Pochon-Guérin, L.; Schlegel, D.; Sosaat, W.:**
Characterisation of a Spherical Recoil Proton Proportional Counter used for Neutron Spectrometry
Nucl. Instrum. Meth. A **476** (2002) 165-169
84. **Unholzer, S.; Freiesleben, H.; Klein, H.; Seidel, K.:**
The Measurement of Neutron- and Neutron-Induced Photon Spectra in Fusion Reactor Related Assemblies
Nucl. Instrum. Meth. A **476** (2002) 160-164
83. **Brooks, F.D.; Klein, H.:**
Neutron Spectrometry - Historical Review and Present Status
Nucl. Instrum. Meth. A **476** (2002) 1-11
82. **Klein, H.; Neumann, S.:**
Neutron and Photon Spectrometry with Liquid Scintillation Detectors in Mixed Fields
Nucl. Instrum. Meth. A **476** (2002) 132-142
81. **Schweda, K.; Schmidt, D.:**
Improved Response Function Calculations for Scintillation Detectors using an Extended Version of the MCNP Code
Nucl. Instrum. Meth. A **476** (2002) 155-159
80. **Schmidt, D.; Asselineau, B.; Böttger, R.; Klein, H.; Lebreton, L.; Neumann, S.; Nolte, R.; Pichenot, G.:**
Characterization of Liquid Scintillation Detectors
Nucl. Instrum. Meth. A **476** (2002) 186-189
79. **d'Errico, F.; Matzke, M.; Siebert, B.R.L.:**
Energy- and Angle-Differential Neutron Fluence Measurements with Superheated Drop (Bubble) Detectors
Nucl. Instrum. Meth. A **476** (2002) 277-290

78. **Kudo, K.; Takeda, N.; Koshikawa, S.; Toyokawa, H.; Ohgaki, H.; Matzke, M.:**
Photon Spectrometry in Thermal Neutron Standard Field
Nucl. Instrum. Meth. A **476** (2002) 213-217
77. **Bartlett, D.T.; Drake, P.; d'Errico, F.; Luszik-Bhadra, M.; Matzke, M.; Tanner, R.J.:**
The Importance of the Direction Distribution of Neutron Fluence, and Methods of Determination
Nucl. Instrum. Meth. A **476** (2002) 386-394
76. **Weyrauch, M.; Dietz, E; Matzke, M.:**
Determination of Neutron Spectra using the Programs GNSR and SPECTRIX
Nucl. Instrum. Meth. A **476** (2002) 208-212
75. **Matzke, M.:**
Propagation of Uncertainties in Unfolding Procedures
Nucl. Instrum. Meth. A **476** (2002) 230-241
74. **Nolte, R.; Allie, M.S.; Binns, P.J.; Brooks, F.; Buffler, A.; Dangendorf, V.; Meulders, J.P.; Roos, F.; Schuhmacher, H.; Wiegel, B.:**
High-Energy Neutron Reference Fields for the Calibration of Detectors used in Neutron Spectrometry
Nucl. Instrum. Meth. A **476** (2002) 369-373
73. **d'Errico, F.; Nath, R.; Nolte, R.:**
A Model for Photon Detection and Dosimetry with Superheated Emulsions
Med. Phys. **27** (2000) 401-409
72. **Schnürer, M.; Nolte, R.; Rousse A.; Grillon, G.; Cheriaux, G.; Kalachnikov, M.P.; Nickles, P.V.; Sandner, W.:**
Dosimetric Measurements of Electron and Photon Yield from Solid Targets Irradiated with 30 fs Pulses from a 14 TW Laser
Phys. Rev. **E61** (2000) 4394-4401
71. **Lüdemann, L.; Kampmann, R.; Sosaat, W.; Staron, P.; Wille, P.:**
Properties of a Cold-Neutron Irradiation Facility for in Vitro Research on Boron Neutron Capture Therapy at the Geesthacht Neutron Facility
Nucl. Sci. Eng. **135** (2000) 57-63
70. **González Trotter, D.E.; Salinas, F.; Chen, Q.; Crowell, A.S.; Glöckle, W.; Howell, C.R.; Roper, C.D.; Schmidt, D.; Slaus, I.; Tornow, W.; Walter, R.L.; Witala, H.; Zhou, Z.:**
New Measurement of the 1S_0 Neutron-Neutron Scattering Length Using the Neutron-Proton Scattering Length as a Standard
Phys. Rev. Letters **83** (1999) 3788-3791
69. **Schrewe, U. J.; Newhauser, W. D.; Brede, H. J.; DeLuca, P. M., Jr.:**
Experimental Kerma Coefficients and Dose Distributions of C, N, O, Mg, Al, Si, Fe, Zr, A-150 Plastics, Al₂O₃, AlN, SiO₂, ZrO₂ for Neutron Energies up to 66 MeV
Phys. Med. Biol. **45** (2000) 651 - 683

68. **Frankenberg, D.; Brede, H.J.; Schrewe, U.J.; Steinmetz, Ch.; Frankenberg-Schwager, .; Kasten, G.; Pralle, E.:**
Induction of DNA Double-Strand Breaks in Mammalian Cells and Yeast
Adv. Space Res. **25** (2000) 2085 - 2094
67. **Alberts, W.G.; Hecker, O.; Hollnagel, R. Luszik-Bhadra, M.; Kluge, H.; Matzke, M.:**
Vergleichsmessungen an amtlichen Personendosimetern für Neutronenstrahlung Änderungen aufgrund der neuen europäischen Grundnorm für den Strahlenschutz
PTB-Mitteilungen **2** (2000) 111-115
66. **Beck, P.; Schrewe, U.J.; O'Brien, K.; Ambrosi, P.**
ACREM Air Crew Radiation Exposure Monitoring.
Report OEFZS-G-0008, Austrian Research Centers, November 1999
65. **Bücherl, T.; Lierse, Ch.; Vicini, C.; Grossi, G.; Lisi, D.; Caspary, G.; Filß, P.; Kühne, J.; Guldbakke, S.; Dietz, E.; Klein, H.; Schlegel, D.; Bruggeman, M.; Baeten, P.; Carchon, R.; Lyoussi, A.; Mariani, A.; Coulon, J.P.:**
Improvement of Passive and Active Neutron Assay Techniques for the Characterisation of Radioactive Waste Packages.
"Euradwaste 99", Radioactive waste management strategies and issues, Fifth European Commission Conference on Radioactive Waste Management and Disposal and Decommissioning, Luxembourg, 15 to 18 November 1999, ed. C. Davies, EUR 19143, EN, ISBN 92.828-9420-7, p. 1-4
[.pdf-file, 6alle\Fachbereich 64: veroeff_65.pdf]
64. **Bücherl, T.; Vicini, C.; Filß, P.; Caspary, G.; Guldbakke, S.; Bruggeman, M.; Frazzoli, F.V.; Lyoussi, A.:**
Improvement of Passive and Active Neutron Assay Techniques for the Characterisation of Radioactive Waste Packages.
Final Report of the Contract No FI4W-CT95-001, EC-Report, EUR 19121 EN, 1999, p. 1-124 [.pdf-file, 6alle\Fachbereich 64: veroeff_64.pdf]
63. **Schmid, E.; Regulla, D.; Guldbakke, S.; Schlegel, D.; Bauchinger, M.:**
The Effectiveness of Monoenergetic Neutrons at 565 keV in Producing Dicentric in Human Lymphocytes at Low Doses
Radiat. Res. **154** (2000) 307-312
62. **Alberts, W.G.; Schuhmacher, H.:**
Responses of advanced neutron dosimeters at a neutron energy of 60 MeV
submitted for publication im Jahresbericht der Université Catholique de Louvain (Cyclone, Rapport d'Active 1999)
61. **Brede, H. J.; Hecker, O.; Hollnagel, R.:**
An Absorbed Dose to Water Calorimeter for Collimated Radiation Fields
Nucl. Instrum. Meth. A **455** (2000) 721 - 732
60. **Böhm, J.; Alberts, W.G.; Swinth, K.L. Soares, G.; McDonald, J.C.; Thompson, I.M.G.; Kramer, H.M.:**
ISO Recommended Reference Radiations for the Calibration and Proficiency Testing of Dosimeters and Dose Rate Meters Used in Radiation Protection
Radiat. Prot. Dosim. **85** (1999) 87 - 105

59. **Brede, H. J.; Gisbertz, A.; Köhler, I.; Pitt, E. and Scharmann A.:**
Improvement of Response of CR-39 Nuclear Track Detectors in Fast Neutron Dosimetry
Radiat. Prot. Dosim. **85** (1999) 113 - 116
58. **Reitz, G.; Strauch, K.; Beaujean R.; Kopp, J.; Luszik-Bhadra, M.; Heinrich, W.:**
Dosimetric Mapping Inside Biorack on Shuttle Missions STS76, STS81 and STS84
Biorack on Spacehab, SP-1222 (1999) Noordwijk, The Netherlands, 161 - 169
57. **Golnik, N.; Brede, H.J.; Schrewe, U.J.; Zielczynski, M.:**
Photon Kerma Determination using a High-Pressure Graphite Ionisation Chamber in Mixed Fields of Neutrons of Energy 44 and 66 MeV
Radiat. Prot. Dosim. **88** (2000) 135-142
56. **Hartmann, G.H.; Brede, H.J.; Fukumara, A.; Hecker, O.; Hiraoka, T.; Jakob, C.; Jäkel, O.; Krießbach, A.; Schardt, D.:**
Results of a Small Scale Dosimetry Comparison with Carbon-12 Ions at GSI Darmstadt
Proc. of the Intern. Week on Hadrontherapy, Advances in Hadrontherapy, U. Amaldi, B. Larson and Y. Lemoigne (Eds.), Elsevier Science B.V., International Congress Series 1144, 1997, 346-350
55. **Schuhmacher, H.; Schrewe, U.J.; Chadwick, M.B., DeLuca, P.M.:**
Kinetic Energy Released in Matter by Neutron-Induced Reactions: Evaluated and Experimental Data
Tagungsband der 3rd International Conference on Accelerator Driven Transmutation Technologies and Applications (7.-11. Juni in Prag) 1999 (auf cd bei Herrn Schuhmacher oder als Ausdruck bei Frau Heise erhältlich)
54. **Brede, H.J.; Greif, K.-D.; Hecker, O.; Binns, P.J.; Langen, K.; Jones, D.T.L.; Schreuder, A.N.; Heese, H.; Kluge, H.:**
Water Calorimetry and Ionisation Chamber Dosimetry in Collimated Photon, Proton, and Neutron Beams of Various Energies
XXX PTCOG Meeting, Book of Abstracts (ed. M. Goitein), Massachusetts General Hospital, Boston, USA, 1999, p. 24 (paper not published)
53. **Lindborg, L.; Kyllönen, J.-E.; Beck, P.; Bottolier-Depois J.-F.; Gerdung, S.; Grillmaier, R.E.; Schrewe, U.J.:**
The Use of TEPC for Reference Dosimetry
Radiat. Prot. Dosim. **86** (1999) 285-288
52. **Brede, H.J.; Hecker, O.; Heese, J.; Kluge, H.; Morgenstern, H.:**
Water Calorimetry and Ionisation Dosimetry in the HMI-Proton Therapy Beam
submitted for publication in HMI-report xy (not published)
51. **Michel, R.; Neumann, S.; Schuhmacher, H.; Brede, H.J.; Dangendorf, V.; Nolte, R.; Meulders, J.-P.:**
Measurement of Cross Sections for Residual Nuclide Production by Activation with Medium-Energy Neutrons
Beitrag zum Jahresbericht der Université Catholique de Louvain (Cyclone, Rapport d'Activite 1998)

50. **Nolte, R.; Dangendorf, V.; Kuhfuß, M. Meulders, J.-P.; Schuhmacher, H.:**
Comparison of Methods for Fluence Measurements in High-Energy Neutron Beams
Beitrag zum Jahresbericht der Université Catholique de Louvain (Cyclone, Rapport d'Activite 1998)
49. **Rimpler, A.; Alberts, W.G.:**
Orts- und Personendosimetrie an CASTOR-Behältern
Dosimetrie externer Strahlung. Aktuelle Entwicklungen, Tagungsbericht.
PTB-Bericht DOS-31 (1999), p.14-1 to 14-10 (in German)
48. **Alberts, W.G.; Rimpler, A.:**
*Strahlungsfelder und Expositionsbedingungen an Arbeitsplätzen:
Neutronenstrahlung*
Dosimetrie externer Strahlung: Aktuelle Entwicklungen. Tagungsbericht.
PTB-Bericht DOS-31 (1999), p. 7-1 to 7-10 (in German)
47. **Titt, U.; Dangendorf, V.; Schuhmacher, H.:**
*Digital imaging of charged particle track structures with a low pressure optical time
projection chamber*
Nuclear Physics B (Proc. Suppl.) **78** (1999) 444-448
46. **Frankenberg, D.; Brede, H.J.; Schrewe, U.J.; Steinmetz, Ch.;**
Frankenberg-Schwager, M.; Kasten, G.; Pralle, E.:
*Induction of DNA double-strand breaks by ^1H and ^4He ions in primary human skin
fibroblasts in the LET range of 8 to 124 keV/ μm*
Radiat. Res. **151** (1999) 540-549
45. **Alberts, W.G.:**
Measurements of Operational Quantities for Neutrons
ICRU NEWS December 1998, S-9-10
44. **Alevra, A.V.:**
Neutron Spectrometry
Radioprotection **34** (1999) 305-333
43. **Luszk-Bhadra, M.; Matzke, M.; Schuhmacher, H.:**
*Development of Personal Neutron Dosemeters at the PTB and First Measurements
in the Space Station MIR*
Radiat. Meas. **33** (2001) 305-312
42. **Schnürer, M.; Nolte, R.; Schlegel, T.; Kalachnikov, M.P.; Nickels, P.V.;**
Ambrosi, P.; Sandner, W.:
On the distribution of hot electrons produced in short-pulse laser-plasma interaction
J. Phys. B: At. Mol. Opt. Phys. **30** (1997) 4653-4661
41. **Kurochkin, I.A.; Wiegel, B.; Siebert, B.R.L.:**
*Study of the Radiation Environment Caused by Galactic Cosmic Rays at Flight
Altitudes, at the Summit of the Zugspitze and at PTB Braunschweig*
Radiat. Prot. Dosim. **83** (1999) 281-291
40. **Schuhmacher, H.; Brede, H.J.; Dangendorf, V.; Kuhfuß, M.; Meulders, J.P.;**
Newhauser, W.D.; Nolte, R.:
Quasi-monoenergetic Neutron Beams with Energies from 25 MeV to 70 MeV
Nucl. Instrum. Meth. **A421** (1999) 284-295

39. **Chadwick, M.B.; Barschall, H.H.; Caswell, R.S.; DeLuca, P.M.; Hale, G.M.; Jones, D.T.L.; MacFarlane, R.E.; Meulders, J.P.; Schuhmacher, H.; Schrewe, U.J.; Wambersie, A.; Young, P.G.:**
A Consistent Set of Neutron Kerma Coefficients from Thermal to 150 MeV for Biologically Important Materials
Medical Physics **26** (1999) 974-991
38. **Luszik-Bhadra, M.; Matzke, M.; Otto, T.; Reitz, G.; Schuhmacher, H.:**
Personal Neutron Dosimetry in the Space Station MIR and the Space Shuttle
Radiat. Meas. **31** (1999) 425-430
37. **Beck, P.; Bartlett, D.; O'Brien, K.; Schrewe, U.J.:**
In-flight Validation and Routine Measurements
Radiat. Prot. Dosim. **86** (1999) 303-308 (reprint not available)
36. **Schrewe, U.J.; Alberts, W.G.; Alevra, A.V.; Ferrari, A.; Otto, T.; Silari, M.:**
Calibration Problems, Calibration Procedures and Reference Fields for Dosimetry at Flight Altitudes
Radiat. Prot. Dosim. **86** (1999) 289-295
35. **Tornow, W.; Carman, T.S.; Chen, Q.; Gibbs, W.R.; Gibson, B.F.; Gonzáles Trotter, D.E.; Howell, C.R.; Hussein, A.H.; Mertens, G.; Moore, C.F.; Morris, C.; Obst, A.; Pasyuk, E.; Roper, C.D.; Salinas, F.; Schmidt, D.; Setze, H.R.; Slaus, I.; Sterbenz, S.; Tang, H.; Walter, R.L.; Whiteley, C.R.; Witala, H.; Zhou, Z.:**
Scattering Length Measurements from Radioactive Pion Capture and Neutron-Deuteron Breakup
Nucl. Phys. A **631** (1998) 421-425
34. **Alberts, W.G.:**
Radiation Protection Quantities and Units
Dosimetry for Radiobiology, Leiden (The Netherlands), 10 - 15 May 1998, Nuclear Science and Technology Series, eds. J. Zoetelief, J.J. Broerse, EUR 19607, 2000, p. 162-165
33. **Ségur, P.; Brede, H.J.; Zoetelief, J.; Schmitz, Th.; Grillmaier, R.E.; Bordy, J.M.; Morstin, K.; Sabol, J.:**
The Use of Microdosimetric Methods for the Determination of Dose Equivalent Quantities and of Basic Data for Dosimetry (Final report)
EUR-report, 16769, Vol. 1, 1997, p. 467-531, ISBN 02-827-7983-1
32. **Alberts, W.G.:**
Active Neutron Personal Dosimetry - Concepts and Recent Approaches
Radiat. Prot. Dosim. **85** (1999) 21-26
31. **Matzke, M.; d'Errico, F.; Hecker, O.; Luszik-Bhadra, M.:**
Energy and Directional Distribution of Neutrons
Radiat. Prot. Dosim. **85** (1999) 93-97
30. **Luszik-Bhadra, M.; Matzke, M.; Dietz, E.; Guldbakke, S.; Hecker, O.; Sosaat, W.; Wiegel, B.:**
An Active Personal Dosemeter / Spectrometer for Neutrons
Radiat. Prot. Dosim. **84** (1999) 375-380

29. **Wolle, B.; Bätzner, R.; Baloui, T.; Gonda, G.; Klein, H.; Wiegel, B.; Wittstock, J.:**
Special Absorber Neutron Detector Moderator Assembly: A New Detector System for Flux Measurements of Collimated 2.5 MeV Neutrons
Rev. Scient. Instrum. **70** (1999) 1194-1196
28. **Nolte, R.; Behrens, R.; Schnürer, M.; Rouse, A.; Ambrosi, P.:**
A TLD-Based Few-Channel Spectrometer for X-Ray Fields with High Fluence Rates
Radiat. Prot. Dosim. **84** (1999) 367-370
27. **Wiegel, B.; Siebert, B.R.L.; Guldbakke, S.; Wittstock, J.:**
Accelerator Based Neutron Fields for the Mock Up of Workplace Spectra - First Experimental Results and Comparisons with Calculations
Nucl. Instrum. Meth. A **422** (1999) 474-478
26. **Schrewe, U.J.:**
Radiation Exposure Monitoring in Civil Aircraft
Nucl. Instrum. Meth. A **422** (1999) 621-625
25. **Schumann, M.; Käppler, F.; Böttger, R.; Schölermann, H.:**
Coulomb Excitation of ^{180}Ta
Phys. Rev. C **58** (1998) 1790-1797
24. **d'Errico, F.; Nath, R.; Tana, L.; Curzio, G.; Alberts, W.G.:**
In-phantom dosimetry and spectrometry of photoneutrons from an 18 MV linear accelerator
Med. Phys. **25** (9) (1998) 1717-1724
23. **Alberts, W.G.; Ambrosi, P.; Buchholz, G.; Hecker, O.; Urbach, G.:**
Vergleichsmessungen von Personendosimetern im Jahre 1996
PTB-Mitteilungen **108** (1998) 303-305
22. **Newhauser, W.D.; Ross, M.A.; Hsu, H.H.:**
A Primer on Solving Dosimetry Problems with LAHET
Report NPTC-98-01, Massachusetts General Hospital, Boston (1998)
21. **Behrens, R.; Nolte, R.; Ambrosi, P.:**
ComputerAided Optimisation of X-Ray Fluorescence Equipment
Radiat. Prot. Dosim. **81** (1999) 19-24
20. **Harvey, J.R.; Tanner, R.J.; Alberts, W.G.; Bartlett, D.T.; Piesch, E.K.A.; Schraube, H.:**
The Contribution of EURADOS and CENDOS to Etched Track Neutron Dosimetry: The Current Status in Europe
Radiat. Prot. Dosim. **77** (1998) 267-304
19. **Titt, U.; Breskin, A.; Chechik, R.; Dangendorf, V.; Schmidt-Böcking, H.; Schuhmacher, H.:**
A Time Projection Chamber with optical readout for charged particle track structure imaging
Nucl. Instrum. Meth. A **416** (1998) 85-99

18. **Bähr, C.; Böttger, R.; Klein, H.; v. Neumann-Cosel, P.; Richter, A.; Schmidt, D.; Schweda, K.; Strauch, S.:**
Calculation of Neutron Response Functions in Complex Geometries with the MCNP Code
Nucl. Instrum. Meth. A **411** (1998) 430-436
17. **Schumann, M.; Käppeler, F.; Böttger, R.; Schölermann, H.:**
Survival of ^{180}Ta at s-Process Temperatures
Nucl. Phys. A **621** (1997) 274c-277c
16. **Ciobanu, M.; Alevra, A.V.:**
Low-Power Analogue Processor for Bonner Sphere Spectrometers
Proc. of the IRPA Regional Symposium, Radiation Protection in Neighbouring Countries of Central Europe, Ed. J. Sabol, Prague, 1997, 506-509
15. **Alevra, A.V.; Klein, H.; Knauf, K.; Wittstock, J.; Wolber, G.:**
Neutron Spectrometry and Dosimetry in the Environment and at Workplaces
Proc. of the IRPA Regional Symposium, Radiation Protection in Neighbouring Countries of Central Europe, Ed. J. Sabol, Prague, 1997, 214-218
14. **Beck, P.; Ambrosi, P.; O'Brien, K.; Duftschmid, K.E.; Felsberger, E.; Großkopf, A.; Hornung, K.; Kerschbaumer, S.; Kindl, P.; Körpert, K.; Schmitzer, Ch.; Schrewe, U.; Winkler, N.; Winter, M.:**
Active Air Crew Dose Assessment and TEPC Reference Investigations
Proc. of the IRPA Regional Symposium, Radiation Protection in Neighbouring Countries of Central Europe, Ed. J. Sabol, Prague, 1997, 76-79
13. **Böttger, R.; Schölermann, H.:**
Precision Measurements of the Q-Values for (p,n) Reactions on ^{37}Cl and ^{59}Co
Nucl. Phys. A **642** (1998) 419-427
12. **Böttger, R.; Brede, H.J.; Fretwurst, E.; Hecker, O.; Lindström, G.; Schlegel, D.; Schölermann, H.; Schmidt, R.; Schulz, T.; Wunstorf, R.:**
Radiation Damage Studies of High-Resistivity Silicon Detectors at Various Neutron Energies
to be submitted for publication in Nucl. Instrum. Meth. (not published)
11. **Golnik, N.; Brede, H.J.; Guldbakke, S.:**
H(10) Response of the REM-2 Recombination Chamber in Monoenergetic Neutron Fields*
Radiat. Prot. Dosim. **74** (1997) 139-144
10. **Schuhmacher, H.; Brede, H.J.; Dangendorf, V.; Kuhfuß, M.; Meulders, J.P.; Newhauser, W.D.; Nolte, R.; Schrewe, U.J.:**
Quasi-Monoenergetic Reference Neutron Radiation Fields with Energies from 25 MeV to 70 MeV
Nuclear Data for Science and Technology, G. Reffo, A. Ventura, C. Grandi (Eds.), Conf. Series of the Italian Physical Society, Bologna, 1997, p. 388-392, ISBN 88-7794-114-6

9. **Newhauser, W.D.; Brede, H.J.; Dangendorf, V.; Mannhart, W.; Meulders, J.P.; Schrewe, U.J.; Schuhmacher, H.:**
Measurement of the ^{238}U Fission Cross Section at 34-MeV, 46-MeV and 61-MeV Neutron Energies
Nuclear Data for Science and Technology, G. Reffo, A. Ventura, C. Grandi (Eds.),
Conf. Series of the Italian Physical Society, Bologna, 1997, p. 1236-1238,
ISBN 88-7794-114-6
8. **Schrewe, U.J.; Newhauser, W.D.; Brede, H.J.; DeLuca, P.M., Jr.:**
Neutron Kerma Factor Measurements in the Energy Range of 5 MeV to 66 MeV
Nuclear Data for Science and Technology, G. Reffo, A. Ventura, C. Grandi (Eds.),
Conf. Series of the Italian Physical Society, Bologna, 1997, p. 1643-1645,
ISBN 88-7794-114-6
7. **Fischer, U.; Freiesleben, H.; Klein, H.; Mannhart, W.; Richter, D.; Schmidt, D.; Seidel, K.; Tagesen, S.; Tsige-Tamirat, H.; Unholzer, S.; Vonach, H.; Wu, Y.:**
Application of Improved Neutron Cross-Section Data for Fe-56 to an Integral Fusion Neutronics Experiment
Nuclear Data for Science and Technology, G. Reffo, A. Ventura, C. Grandi (Eds.),
Conf. Series of the Italian Physical Society, Bologna, 1997, p. 1137-1139,
ISBN 88-7794-114-6
6. **Schmidt, D.; Mannhart, W.; Siebert, B.R.L.:**
Measurement of Elastic, Inelastic and Double-Differential Neutron Scattering Cross Sections on V, Cr and Pb at Energies between 8 MeV and 15 MeV
Nuclear Data for Science and Technology, G. Reffo, A. Ventura, C. Grandi (Eds.),
Conf. Series of the Italian Physical Society, Bologna, 1997, Vol. 59, p. 407-409,
ISBN 88-7794-114-6
5. **Mannhart, W.; Schmidt, D.; Smith, D.L.:**
Measurement of the $^{52}\text{Cr}(n,p)^{52}\text{V}$, $^{52}\text{Cr}(n,2n)^{51}\text{Cr}$, $^{51}\text{V}(n,p)^{51}\text{Ti}$ and $^{51}\text{V}(n,\alpha)^{48}\text{Sc}$ Cross Sections between 7.9 and 14.4 MeV
Nuclear Data for Science and Technology, G. Reffo, A. Ventura, C. Grandi (Eds.),
Conf. Series of the Italian Physical Society, Bologna, 1997, Vol. 59, p. 505-507,
ISBN 88-7794-114-6
4. **Schmidt, D.:**
Comparison of Different Methods to Correct Differential Neutron Scattering Cross Sections
Nucl. Instrum. Meth. A **390** (1997) 336-344
3. **Novotny, T.; Büermann, L.; Guldbakke, S.; Klein, H.:**
Response of NE213 Liquid Scintillation Detectors to High-Energy Photons ($7\text{ MeV} < E_\gamma < 20\text{ MeV}$)
Nucl. Instrum. Meth. A **400** (1997) 356-366
2. **d'Errico, F.; Weiss, M.; Luszik-Bhadra, M.; Matzke, M.; Bernardi, L.; Cecchi, A.:**
A CR-39 Track Image Analyser for Neutron Spectrometry
Radiat. Meas. **28** (1997) 823-830

1. **Lusik-Bhadra, M.; Dietz, E.; d'Errico, F.; Guldbakke, S.; Matzke, M.:**
*Neutron Spectrometry with CR-39 Track Detectors and Silicon Diodes Using
Unfolding Techniques*
Radiat. Meas. **28** (1997) 473-478

II. PTB reports

Reprints are available upon request from:

*Physikalisch-Technische Bundesanstalt
department 6.4 "Ion Accelerators and
Reference Radiation Fields"
or department 6.5 "Neutron Radiation"
Bundesallee 100
D-38116 Braunschweig
Germany*

or to be
ordered at: *Wirtschaftsverlag NW
Verlag für neue Wissenschaft GmbH
Bürgermeister-Smidt-Str. 74 - 76
D-27568 Bremerhaven
Germany*

PTB-N-56

D. Schmidt, W. Mannhart

*Determination of Differential Elastic and Inelastic and Double-differential Neutron
Scattering Cross Sections of ^{93}Nb at Energies between 7.10 MeV and 14.10 MeV
März 2007*

PTB-N-55

D. Schmidt, W. Mannhart and S. Khurana

*Determination of Neutron Scattering Cross Sections of ^9Be at Energies between 7.10 MeV
and 9.97 MeV
März 2007*

PTB-N-54

G. Laczkó

*Investigation of the Radial Ionization Distribution of Heavy Ions with an Optical Particle
Track Chamber and Monte-Carlo Simulations
Januar 2007*

PTB-N-53

W. Mannhart, D. Schmidt

*Measurement of Neutron Activation Cross Sections in the Energy Range from 8 MeV to
15 MeV
Januar 2007*

PTB-N-52

D. Schmidt, W. Mannhart

*Determination of Differential Elastic and Inelastic and Double-differential Neutron
Scattering Cross Sections of Elemental Copper at Energies between 6.95 MeV and 14.18 MeV
Dezember 2006*

PTB-N-51

D. Schmidt, W. Mannhart, S. Khurana

*Determination of Differential Elastic and Double-Differential Neutron Cross Sections of
Elemental Tungsten at Energies between 7.19 MeV and 14.10 MeV
Juli 2006*

PTB-N-50

D. Schmidt, W. Mannhart, X. Ruan

Determination of Differential Elastic and Inelastic and Double-Differential Neutron Scattering Cross Sections of Elemental Titanium at Energies between 7.93 MeV and 14.72 MeV

Juni 2006

PTB-N-49

H. Schuhmacher, D. Bartlett, T. Bolognese-Milsztajn, M. Boschung, M. Coeck, G. Curzio, F. d'Errico, A. Fiechtner, J.-E. Kyllönen, V. Lacoste, L. Lindborg, M. Luszik-Bhadra, M. Reginatto, R. Tanner, F. Vanhavere:

Evaluation of Individual Dosimetry in Mixed Neutron and Photon Radiation Fields

März 2006

PTB-N-48

D. Schmidt, W. Mannhart:

Determination of Double-differential Neutron Cross Sections of Elemental Chromium in the Energy Range from 8 MeV to 14 MeV Using a DD Neutron Source

September 2005

PTB-N-47

R. Böttger, H. Friedrich, H. Janßen:

The PTB Thermal Neutron Reference Field at GeNF

August 2004

PTB-N-46

D. Schmidt, W. Mannhart, R. Xichao, V. Avrigeanu:

Determination of Double-Differential Neutron Emission Cross Sections of ^{51}V in the Energy Range from 8 MeV to 14 MeV using a DD Neutron Source

August 2004

PTB-N-45

H.J. Brede:

Darstellung der Wasserenergiedosis im kollimierten, gemischten Neutronen-Photonenfeld der PTB

Juli 2004

PTB-DOS-45

P. Ambrosi (Hrsg), U. Ankerhold, R. Behrens, K. Helmstädter, H. Schuhmacher, F. Wissmann, A. Zimbal:

Einheitliche Dosis-Messgrößen durch die Umsetzung der Richtlinie 96/29/EURATO - Auswirkung auf die Darstellung und Weitergabe der Einheit Sievert für die Messgrößen, auf die Messtechnik und die Bauartprüfungen -

Dezember 2003

PTB-N-44

D. Schmidt, W. Mannhart:

Differential Cross Sections of Neutron Scattering on ^{14}N at Energies between 7.89 MeV and 13.85 MeV

April 2003

PTB-N-43

Schmidt, D.; Mannhart, W.:

Differential Cross Sections of Neutron Scattering on Elemental Silicon at Energies between 7.89 and 13.85 MeV

October 2001

PTB-N-42

Schmidt, D.; Böttger, R.:

Absolute Determination of Neutron Detection Efficiencies of NE213 Detectors using a ^{252}Cf Source in Time-of-Flight Measurements

July 2001

PTB-N-41

Neumann, S.; Guldbakke, S.; Matzke, M.; Sosaat, W.:

Photon Spectrometry in Monoenergetic Neutron Fields

June 2001

PTB-N-40

Schmidt, D.; Siebert, B. R. L.:

Fast Neutron Spectrometry and Monte Carlo Simulation - The Codes SINENA and STREUER

May 2000

PTB-N-39

Alberts, W.G.; Arend, E.; Barelaud, B.; Curzio, G.; Decossas, J.L.; d'Errico, F.; Fiechtner, A.; Grillmaier, R.; Meulders, J.P.; Ménard, S.; Roos, H.; Schuhmacher, H.; Thévenin, J.C.; Wernli, C.; Wimmer, S.:

Advanced Methods of Active Neutron Dosimetry for Individual Monitoring and Radiation Field Analysis (ANDO)

October 1999

PTB-N-38

Schmidt, D.; Mannhart, W.; Siebert, B.R.L.:

Determination of Double-differential Neutron Cross Sections of Elemental Lead in the Energy Range from 8 MeV to 14 MeV Using a DD Neutron Source

June 1999

PTB-N-37

Dietz, E.; Guldbakke, S.; Schlegel, D.:

Comparison of 24.5 keV Neutron Fluence Measurements at PTB

January 1999

PTB-DOS-32

Büermann, L.; Kramer, H.-M.; Guldbakke, S.

Calibration of Personal and Area Dosimeters in High-Energy Photon Fields

January 1999

PTB-N-36

Schmidt, D.; Mannhart, W.; Zhou, C.:

Differential Cross Section of Neutron Scattering on ^{51}V at Energies between 8.0 MeV and 14.4 MeV

December 1998

PTB-N-35

Schmidt, D.; Klein, H.:

Precise Time-of-Flight Spectrometry of Fast Neutrons - Principles, Methods and Results

September 1998

PTB-N-34

Kluge, H.:

Irradiation Facility with Radioactive Reference Neutron Sources: Basic Principles

June 1998

PTB-N-33

Schmidt, D.; Klein, H.; Xia, H.:

Time Interval Measurements and Deadtime Corrections in Coincidence Experiments

April 1998

PTB-N-32

Alberts, W.G.; Schuhmacher, H.:

Advanced Methods of Active Neutron Dosimetry for Individual Monitoring and Radiation Field Analysis

February 1998

PTB-N-31

Schmidt, D.; Mannhart, W.:

Differential Cross Sections of Neutron Scattering on Elemental Chromium at Energies between 8.0 MeV and 14.8 MeV

January 1998

PTB-N-30

Jahr, R.:

Neutronenphysik in der PTB - Ein Rückblick

December 1997

III. PTB Laboratory reports

Reprints are available upon request from:

*Physikalisch-Technische Bundesanstalt
department 6.4 "Ion Accelerators and Reference Radiation Fields"
or
department 6.5 "Neutron Radiation" Bundesallee 100
D-38116 Braunschweig
Germany*

PTB-642-05-2

D. Schlegel
Target User's Manual
April 2005

PTB-6.42-05-1

Hildebrand, A.; Park, H.; Khurana, S.; Nolte, R.; Schmidt, D.:
*Experimental Determination of the Response Matrix of a BC501 Scintillation Detector using
a Wide Neutron Spectrum: A Status Report*
April 2005

PTB-6.42-03-3

Lusik-Bhadra, M.; Wendt, W.; Weierganz, M.:
*Entwicklung und Aufbau eines serienreifen elektronischen Personendosimeters zur
Ermittlung der äußeren Strahlenexposition in gemischten Photonen- und Neutronenfeldern*
Juni 2003

PTB-6.42-03-2

Tittelmeier, K.; Barrenscheen, H.-J.:
Stabilisierung von Szintillationsdetektoren
September 2003

PTB-6.42-03-01

Knauf, K.; Alevra, A.V.; Wittstock, J.; Wolber, G.; Kübler, W.; Sold, A.; Rademer, T.;
Pfister, G.:
*Neutron Spectrometry and Neutron and Photon Dosimetry at the Cyclotron of the German
Cancer Research Center I*
May 2003

PTB-6.41-02-04

Schlegel, D.; Guldbakke, S.:
*Neutron Fluence Measurements with a Recoil Proton Telescope
Determination of Neutron Fluence*
July 2002

PTB-6.42-02-1

Matzke, M.:

*Computational Work with Response Functions:
The RESTRAW Program System*

May 2002

PTB-6.41-02-03

Schlegel, D.; Guldbakke, S.:

*Neutron Fluence Measurements with a Recoil Proton Proportional Counter
Determination of Neutron Fluence*

February 2002

PTB-6.41-02-2

Böttger, R.:

Energy Calibration of the PTB VdG Accelerator

March 2002

PTB-6.41-02-01

Schlegel, D.; Guldbakke, S.:

*Key Comparison of Neutron Fluence Measurements in Monoenergetic Neutron Fields -
Determination of Neutron Fluence and Monitor Calibration Factors*

January 2002

PTB-6.42-00-2

Ciobanu, M.I.:

*Model BSS-AP2 - Analog Processor for Bonner Sphere Spectrometers
Operating and Service Manual*

September 2000

PTB-6.42-00-1

Alevra, A. V. and V.D. Plostinaru:

*Characterisation of the INPE Bonner Sphere Spectrometer by Comparison with the PTB
System*

February 2000

PTB-6.31-99-2

Schrewe, U. J.:

*ACREM - Air Crew Radiation Exposure Monitoring
Summary of Results from Calibrations and TEPC Measurements*

October 1999

PTB-6.42-99-1

Kluge, H.; Hecker, O.:

*Bestrahlungsvorrichtung mit radioaktiven Referenzneutronenquellen; Verfahren und
Rechenprogramme zur Ermittlung des Fluenzansprechvermögens von Neutronenmonitoren*

July 1999

PTB-6.31-99-1

Schrewe, U. J.:

*ACREM - Air Crew Radiation Exposure Monitoring
Results from the In-flight Measurement Program of the PTB: Summary of the Radiation
Monitoring Data*

August 1999

PTB-6.32-99-1

Titt, U:

Entwicklung einer optisch ausgelesenen Teilchensporkammer für dosimetrische und mikrodosimetrische Anwendungen

June 1999

PTB-6.42-98-1

Knauf, K.; Weyrauch, M.; Simon, F.; Kaldune, N.:

SPHERE A Program Package for Calculating the Neutron Response of Spherical Proton Recoil Proportional Counters

December 1998

PTB-6.41-98-2

Guldbakke, S.; Dietz, E.; Schlegel, D.:

Properties of the ${}^7\text{Li}(p,n){}^7\text{Be}$ Neutron Source for Investigation of Fissile Material in Nuclear Waste

November 1998

PTB-6.32-98-1

Schuhmacher, H.:

Bestimmung der Neutronenfluss mit dem Rückstoßprotonen-Teleskop PRT2

August 1998

PTB-6.41-1998-1

Schlegel, D.:

Target User's Manual

April 1998

PTB-6.42-1997-2

Knauf, K.; Heimann, C.; Kaldune, N.; Novotny, T.; Wittstock, J.:

Spectrometry in a Mixed Neutron-Photon Field - a Field Experiment within the Framework of the AHE-Project using a Liquid Scintillation Counter and Spherical Proton Recoil Proportional Counters

November 1997

PTB-6.42-1997-1

Schmidt, D.; Chenwei, Z.:

Long-term Stability of a Neutron Detector.

October 1997