

**DAVID M. HAMBY, Ph.D.**

Professor

School of Nuclear Science and Engineering

Oregon State University

E112 Radiation Center

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david.hamby@oregonstate.edu

**EDUCATION**

**Ph.D. – University of North Carolina**, Department of Environmental Science and Engineering, Chapel Hill, NC; January 1989. Dissertation: "Measurement of Radial Ionization Probability in Microscopic Volumes for 2.90 and 3.79 MeV Alpha Particles"; D.J. Crawford-Brown, Advisor

**M.S. – University of North Carolina**, Department of Environmental Science and Engineering, Chapel Hill, NC; June 1986. Thesis: "A Microdosimetric System for use in the Measurement of Specific Energy Distributions for 15 MeV Electrons in Water"; D.J. Crawford-Brown, Advisor

**B.S. – Mercer University**, Department of Physics (w/ honors), Macon, GA; June 1984.

**PROFESSIONAL EXPERIENCE**

- 09/04 – present Professor, School of Nuclear Science and Engineering, College of Engineering, Oregon State University, Corvallis.
- 01/06 – present Clinical Professor, Department of Radiation Medicine, School of Medicine, Oregon Health and Science University, Portland.
- 09/12 – present Professor, Adjunct Faculty, Environmental and Occupational Health and Safety, College of Public Health and Human Sciences, Oregon State University, Corvallis.
- 05/16 – 08/17 Graduate Faculty, School of Medicine, Oregon Health and Science University, Portland.
- 07/05 – 08/12 Graduate Faculty, Department of Public Health, College of Health and Human Sciences, Oregon State University, Corvallis.
- 09/11 – 12/11 Lecturer, Radiologic Technology Program, Linn-Benton Community College, Albany.

## David M. Hamby

- 12/06 – 06/09 Graduate Faculty, School of Electrical Engineering and Computer Sciences, Oregon State University, Corvallis.
- 09/03 – 06/08 Lecturer, Radiologic Technology Program, Linn-Benton Community College, Albany.
- 12/99 – 08/04 Associate Professor, Department of Nuclear Engineering and Radiation Health Physics, College of Engineering, Oregon State University, Corvallis.
- 12/99 – 08/03 Adjunct Associate Professor, Department of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor.
- 05/95 – 09/99 Faculty Appointee, Environmental Assessment Division, Argonne National Laboratory, Argonne, Illinois.
- 07/94 – 12/99 Assistant Professor, Department of Environmental and Industrial Health, School of Public Health, University of Michigan, Ann Arbor.
- 01/89 – 07/94 Principal Research Scientist, Waste Management and Environmental Technology Department, Savannah River Technology Center, Westinghouse Savannah River Company, Aiken, SC.

### PATENTS

Hamby, D.M.; Farsoni, A.T.; Cazalas, E. Skin Contamination Dosimeter. Assignee: The State of Oregon Acting by and through the State Board of Higher Education on Behalf of Oregon State University. **Patent #7,964,848**. Awarded: June 21, 2011.

Farsoni, A.T.; Hamby, D.M. Simultaneous Beta and Gamma Spectroscopy. Assignee: The State of Oregon Acting by and through the State Board of Higher Education on Behalf of Oregon State University. **Patent #7,683,334**. Awarded: March 23, 2010.

### GRANTS/CONTRACTS AWARDED

U.S. Nuclear Regulatory Commission. “Maintenance and Development of the VARSKIN 5 Computer Code”. \$498,925. (5 yr). October 2015.

National Nuclear Security Administration. US Department of Energy. “Consortium for Verification Technology”. \$1,000,307 (w/ A.T. Farsoni, PI) (5 yrs). October 2014.

U.S. Nuclear Regulatory Commission. “Accuracy Improvements to VARSKIN Beta Dose Calculations”. \$662,616. (5 yr). March 2011.

U.S. Nuclear Regulatory Commission. “Contemporary Building Shielding Factors Research for Level III PRA” (w/ E. Dickson). \$11,743. (1 yr). September 2011.

## David M. Hamby

Oregon State University. Distance Education Program Development Grant. "Digitized Instrumentation Lab for Distance Students" (w/ D. Vasquez). \$8,220 (3 months). July 2009.

National Nuclear Security Administration. US Department of Energy. "Actively-Shielded Radioxenon Phoswich Detection System". \$1,100,000 (w/ A.T. Farsoni, PI) (3 yrs). July 2009.

National Academy for Nuclear Training. INPO Fellowships. \$50,000. (1 yr). September 2008.

U.S. Department of Defense. Defense Threat Reduction Agency. "The Presentation of Uncertainty for CBRNE Decision-Making". \$952,487 (w/ J.A. Edwards, PI). (3 yrs). July 2008.

U.S. Nuclear Regulatory Commission. "Improving the Photon Dosimetry Model for VARSKIN". \$553,701. (2 yrs). May 2008.

National Academy for Nuclear Training. INPO Fellowships. \$50,000. (1 yr). September 2007.

National Nuclear Security Administration. US Department of Energy. "A Multi-Layer Phoswich Radioxenon Detection System". \$1,254,787 (3 yrs). May 2006.

Nuclear Engineering Education Research Grant Program. US Department of Energy. "Enhancing State-of-the-Art Beta Detection and Dosimetry". \$358,170. (3 yrs). July 2005.

National Academy for Nuclear Training. INPO Fellowships. \$42,000. (1 yr). September 2003.

Nuclear Engineering Education Research Grant Program. US Department of Energy. "Advanced Beta Dosimetry Techniques". \$337,553. (3 yrs). June 2002.

National Academy for Nuclear Training. INPO Fellowships. \$42,000. (1 yr). September 2002.

Westinghouse Savannah River Company. Savannah River Technology Center. "Probabilistic Dose Estimates for Environmental Dosimetry at the Savannah River Site". \$31,637. August 2001 - March 2003.

National Academy for Nuclear Training. INPO Fellowships. \$42,000. (1 yr). September 2001.

National Institutes of Health. Centers for Disease Control and Prevention. "Atmospheric I-131 Dose Estimates: Comparative Uncertainties". \$377,482 (4 yrs). August 1999.

UM. Phoenix Grant. "Neutron Activation Analysis to Trace the Fate of Iron in Processed Foods: A Feasibility Study". \$5,775 (1 yr). January 1999.

UM. Office of the Vice President for Research and the Horace Rackham Graduate School Spring/Summer Research Grant. Environmental Fate and Transport Modeling of Radiocesium. \$3,000 (1 yr). April 1998.

## David M. Hamby

UM. Undergraduate Research Opportunity Program and the Office of the Vice President for Research. "Uptake and Retention Kinetics in Bluegill Following Acute Dosing of Radiocesium in Aqueous and Organic Forms". \$2,800 (1 yr). February 1998.

Sprint PCS. "Spectral Analysis and Power Density Assessment Near Sprint PCS Transmission Towers". \$13,390 (10 mos.). March 1997.

United States Civilian Research and Development Foundation, National Science Foundation. "Radiological Characterization in the Vicinity of Lake Issyk-Kul, Republic of Kyrgyzstan". \$50,000 (2.5 yrs). February 1997.

NATO Assistant Secretary General for Scientific and Environmental Affairs. Radiation Levels in the Vicinity of Lake Issyk-Kul, Kyrgyzstan. \$18,600 (3 yrs). October 1996.

Department of Energy, Office of Environmental Management. "Study of Field Methods and Worker Risks for Processing Alternatives to Support Guiding Principles for FUSRAP Waste Materials". \$130,000 (J.E. Martin, PI) (3 yrs). April 1996.

UM. Dean of the School of Public Health and the Office of the Vice President for Research. "A High-Sensitivity Gamma Spectroscopy System". \$7,990 (1 yr). July 1995.

UM. Phoenix Grant. "Design of an Ultra-Low-Background Gamma Spectroscopy System". \$6,000 (1 yr). December 1994.

### BOOK CHAPTERS

Caffrey, J.A.; Hamby, D.M. Space Dosimetry. Measurement, Instrumentation, and Sensors Handbook. 2<sup>nd</sup> Edition. J.G. Webster and H. Erin (eds). CRC Press. Taylor & Francis Group. 74:1-16. Boca Raton, FL; 2014.

Whicker, F.W.; Garten, C.T.; Hamby, D.M.; Higley, K.A.; Hinton, T.G.; Kaplan, D.I.; Rowan, D.J.; Schreckhise, R.G. Cesium-137 in the Environment: Radioecology and Approaches to Assessment and Management. National Council on Radiation Protection and Measurements. NCRP Report No. 154. Bethesda, MD; November 2006.

Hamby, D.M.; Tynybekov, A.K. Uranium, Thorium, and Potassium in Soils along the Shore of Lake Issyk-Kyol in the Kyrgyz Republic. Environmental Monitoring. G.Bruce Wiersma (ed). CRC Press. New York. pg. 371-378; March 2004.

### MANUSCRIPTS IN PREPARATION

O'Doherty, J.; Hippelainen, E.; Mangini, C.; Hamby, D.; Boozer, D.; Singh, N. Radiation dosimetry of nasally administered PET agents using Monte Carlo simulations. *submitted to Physica Medica*; August 2019.

## David M. Hamby

### PEER-REVIEWED PUBLICATIONS

Deyhle, R.T.; Wong, C.P.; Martin, S.A.; McDougall, M.Q.; Olson, D.A.; Branscum, A.J.; Menn, S.A.; Iwaniec, U.T.; Hamby, D.M.; Turner, R.T. Maintenance of Near Normal Bone Mass and Architecture in Lethally Irradiated Female Mice Following Adoptive Transfer with as Few as 750 Purified Hematopoietic Stem Cells. *Radiation Research*. 191(5):413-427; May 2019.

Hamby, D.M.; Mangini, C.D. VARSKIN 6: A computer code for skin contamination dosimetry. Office of Nuclear Regulatory Research. Nuclear Regulatory Commission. Washington, DC: Report No. NUREG/CR-6918, Rev. 3. November 2018.

Anspach, L.J.; Hamby, D.M. Performance of the VARSKIN 5 (v5.3) electron dosimetry model. *Rad. Prot. Dosimetry*. 181(2):111-119; October 2018.

Mangini, C.D.; Hamby, D.M. Scaling parameters for hot-particle beta dosimetry. *Rad. Prot. Dosimetry*. 172(4): 356-366; December 2016.

Dickson, E.D.; Hamby, D.M. Building protection- and building-shielding factors for environmental exposure to radionuclides and monoenergetic photon emissions. *J. Radiol. Prot.* 36(3):579; July 2016.

Dickson, E.D.; Hamby, D.M.; Eckerman, K.F. Contaminant deposition building shielding factors for US residential structures. *J. Radiol. Prot.* 35(2): 317-341; April 2015.

Xiao, W.; Farsoni, A.T.; Yang, H; Hamby, D.M. Model-based pulse convolution method for NaI(Tl) detectors. *Nuclear Instruments and Methods in Physics Research - Section A*. 769: 5-8. 2015.

Dickson, E.D.; Hamby, D.M. Cloud immersion building shielding factors for U.S. residential structures. *J. Radiol. Prot.* 34(4): 853-871; 2014.

Allen, P.M.; Edwards, J.A.; Snyder, F.J.; Makinson, K.A.; Hamby, D.M. The effect of cognitive load on decision making with graphically displayed uncertainty. *Risk Analysis*. 34(8): 1495-1505. 2014.

Xiao, W.; Farsoni, A.T.; Yang, H; Hamby, D.M. A new pulse model for NaI(Tl) detection systems. *Nuclear Instruments and Methods in Physics Research - Section A*. 763: 170-173; November 2014.

Dickson, E.D.; Hamby, D.M. Experimental shielding evaluation of the radiation protection provided by the structurally significant components of residential structures. *J. Radiol. Prot.* 34(1): 201-221; 2014.

Caffrey, J.A.; Hamby, D.M. Space Radiation Dosimetry: Overview and Recent Developments. *Recent Patents on Space Technology*. 3(2): 3-12; 2013.

## David M. Hamby

Hamby, D.M.; Lodwick, C.J.; Palmer, T.S.; Reese, S.R.; Higley, K.A.; Caffrey, J.; Sherbini, S.; Saba, M.; Bush-Goddard, S.P. The New VARSKIN 4 Photon Skin Dosimetry Model. *Radiation Protection Dosimetry*. 154(3): 356-63; October 2012.

Edwards, J.A.; Snyder, F.J.; Allen, P.M.; Makinson, K.A.; Hamby, D.M. Decision Making for Risk Management: A Comparison of Graphical Methods for Presenting Quantitative Uncertainty. *Risk Analysis*. 32(12): 2055-70; December 2012.

Makinson, K.A.; Edwards, J.A.; Hamby, D.M. A Review of Contemporary Methods for the Presentation of Scientific Uncertainty. *Health Physics*. 103(6): 714-731; 2012.

Caffrey, J.A.; Hamby, D.M. A Review of Instruments and Methods for Dosimetry in Space. *Advances in Space Research*. 47(4): 563-574; 2011.

Farsoni, A.T.; Hamby, D.M. A system for simultaneous beta and gamma spectroscopy. *Nuclear Instruments and Methods in Physics Research - Section A*. 578: 528-536; 2007.

Harvey, R.P.; Hamby, D.M.; Palmer, T.S. Uncertainty of the thyroid dose conversion factor for inhalation intakes of  $^{131}\text{I}$  and its parametric uncertainty. *Radiation Protection Dosimetry*. 118(3): 296-306; 2006.

Hamby, D.M. Book review: Physics of Radiology 2<sup>nd</sup> edition. A.B. Wolbarst. *Health Physics*. 90(2): 181; 2006.

Tavakoli-Farsoni, A.; Hamby, D.M. MCNP analysis of a multilayer phoswich detector for beta particle dosimetry and spectroscopy. *Nuclear Instruments and Methods in Physics Research - Section A*. 555(1-2): 225-230; 2005.

Harvey, R.P.; Hamby, D.M.; Palmer, T.S. A modified ICRP 66 iodine gas uptake model and its parametric uncertainty. *Health Physics*. 87(5): 490-506; 2004.

Kriss, A.A.; Hamby, D.M. Beta spectroscopy with a large-area avalanche photodiode module and a plastic scintillator. *Nuclear Instruments and Methods in Physics Research - Section A*. 525(3): 553-559; June 2004.

Simpkins, A.A.; Hamby, D.M. Uncertainty in transport factors used to calculate historical dose from  $^{131}\text{I}$  releases at the SRS. *Health Physics*. 85(2): 194-203; 2003.

Harvey, R.P.; Hamby, D.M.; Benke, R.R. Age-specific uncertainty of the  $^{131}\text{I}$  dose conversion factor. *Health Physics*. 84(3): 334-343; 2003.

Weber, A.H.; Buckley, R.L.; Parker, M.J.; Harvey, R.P.; Hamby, D.M. The creation of an historical meteorological database for environmental dose assessment. *Environmental Monitoring and Assessment*. 83(3): 255-281. 2003.

## David M. Hamby

Hamby, D.M. Book review: Principles of Radiological Health and Safety. J.E. Martin. *Health Physics*. 84(5): 668. 2003.

Hamby, D.M. Book review: Practical Applications of Radioactivity and Nuclear Radiations. C.G. Lowenthal and P.L. Avery. *Health Physics*. 82(5): 749-750. 2002.

Harvey, R.P.; Hamby, D.M. Age-specific uncertainty in particulate deposition for 1  $\mu\text{m}$  AMAD particles using the ICRP 66 lung model. *Health Physics*. 82(6): 807-816; 2002.

Hamby, D.M. The Gaussian atmospheric transport model and its sensitivity to the joint frequency distribution and parametric variability. *Health Physics*. 82(1): 64-73; 2002.

Hamby, D.M.; Tynybekov, A.K. Uranium, thorium, and potassium in soils along the shore of Lake Issyk-Kyol in the Kyrghyz Republic. *Environmental Monitoring and Assessment*. 73(2): 101-108; 2002.

Hamby, D.M. Book review: Waste is a Terrible Thing to Mind: Risk, Radiation, and Distrust of Government. J. Weingart. *The Science of the Total Environment*. 285(1): 261; 2002.

Harvey, R.P.; Hamby, D.M. Uncertainty in particulate deposition for 1  $\mu\text{m}$  AMAD particles in an adult lung model. *Radiation Protection Dosimetry*. 95(3): 239-247; 2001.

Hamby, D.M.; Palmer, T.S. Analysis of an internal kinetic model for free and bound tritium. *Health Physics*. 81(4): 426-437; 2001.

Hamby, D.M. Book review: Radiation Dosimetry, Instrumentation and Methods. G. Shani. *Health Physics*. 81(4): 470; 2001.

Nedveckaite, T.; Motiejunas, S.; Kucinskas, V.; Mazeika, J.; Filistovic, V.; Jusciene, D.; Maceika, E.; Morkeliunas, L.; Hamby, D.M. Environmental releases of radioactivity and the incidence of thyroid disease at the Ignalina nuclear power plant. *Health Physics*. 79(6): 666-674; 2000.

Simpkins, A.A.; Marx, D.R.; Hamby, D.M. Ingestion pathway model developed for use with an acute atmospheric dose model – AXAIRQ. *Health Physics*. 79(3):266-273; 2000.

Garten, C.T.; Hamby, D.M.; Schreckhise, R.G. Radiocesium discharges and subsequent environmental transport at the major U.S. weapons production facilities. *The Science of the Total Environment*. 255(1-3): 55-73; 2000.

Breeden, W.F.; Hamby, D.M.; Carey, J.E.; Eckerman, K.F.; McPherson, D.W.; Knapp, F.F. In vivo biodistribution of  $^{125}\text{I}$ PIP and internal dosimetry of  $^{123}\text{I}$ PIP radioiodinated agents selective to the muscarinic acetylcholinergic receptor complex. *Medical Physics*. 27(4):778-786; 2000.

Hamby, D.M.; Tynybekov, A.K. A screening assessment of external radiation levels on the shore of Lake Issyk-Kyol in the Kyrghyz Republic. *Health Physics*. 77(4):427-430; 1999.

## David M. Hamby

Hamby, D.M. Uncertainty of the tritium dose conversion factor. *Health Physics*. 77(3):291-297; 1999.

Hamby, D.M.; Benke, R.R. Uncertainty of the iodine-131 ingestion dose conversion factor. *Radiation Protection Dosimetry*. 82(4):245-256; 1999.

Hamby, D.M. Book review: Environmental Radiochemical Analysis. G.W.A. Newton (ed.). *The Science of the Total Environment*. 243/244: 356; 1999.

Hamby, D.M.; Zometsky, J.R. A method for in situ depth profiles of alpha and beta contaminants in soil using scintillators and fiber optic light guides. *Radiation Protection Management*. 15(5):26-32; 1998.

Kock, A.; Hamby, D.M. Variation in environmental tritium dose estimates due to meteorological data averaging and uncertainties in pathway model parameters. *Environmental Monitoring and Assessment*. 53:321-335; 1998.

Hamby, D.M.; Simpkins, A.A. Three-parameter model for estimating atmospheric tritium dose at the Savannah River Site. *Health Physics*. 75:269-277; 1998.

Bush, S.P.; Hamby, D.M. Initial investigations into developing a wall-less proportional counter for use in radiologically contaminated soils. *Radiation Protection Management*. 15(2):43-47; 1998.

Famiano, M.A.; Hamby, D.M. Demonstration of a time-integrating microdosimeter. *Nuclear Instruments and Methods in Physics Research - Section A*. 389(3):479-490; 1997.

Ng, K.L.; Hamby, D.M. Fundamentals for establishing a risk communication program. *Health Physics*. 73:473-482; 1997.

Simpkins, A.A.; Hamby, D.M. Predicted versus measured tritium oxide concentrations at the Savannah River Site. *Health Physics*. 72:179-185; 1997.

Hamby, D.M. Remediation techniques supporting environmental restoration activities. *The Science of the Total Environment*. 191(3):203-224; 1996.

Hyman, T.C.; Hamby, D.M. Parameter uncertainty and sensitivity in an aqueous dose model. *Environmental Monitoring and Assessment*. 38:51-65; 1995.

Hamby, D.M. A comparison of sensitivity analysis techniques. *Health Physics*. 68:195-204; 1995.

Hamby, D.M. A review of techniques for parameter sensitivity analysis of environmental models. *Environmental Monitoring and Assessment*. 32:135-154; 1994.



## David M. Hamby

Hamby, D.M.; Bauer, L.R. The vegetable-to-air concentration ratio in a specific activity atmospheric tritium model. *Health Physics*. 66:339-342; 1994.

Hamby, D.M. A probabilistic estimation of atmospheric tritium dose. *Health Physics*. 65:33-40; 1993.

Hamby, D.M.; Addis, R.P.; Beals, D.M.; Boni, A.L.; Cadieux, J.R.; Carlton, W.H.; Dunn, D.L.; Hall, G.; Hayes, D.W.; Heffner, J.D.; Lorenz, R.; Kantello, M.V.; Taylor, R.W. Environmental monitoring and dose assessment following the December 1991 K-Reactor aqueous tritium release. *Health Physics*. 65:25-32; 1993.

Hamby, D.M. A methodology for estimating the radiological consequence of an acute aqueous release. *Health Physics*. 62:567-570; 1992.

O'Kula, K.R.; Olson, R.L.; Hamby, D.M. Consequences of tritium release to water pathways from postulated accidents in a DOE production reactor. *Fusion Technology*. 21:659-667; 1992.

Hamby, D.M. Site-specific parameter values for the Nuclear Regulatory Commission's food pathway dose model. *Health Physics*. 62:136-143; 1992.

Bauer, L.R.; Hamby, D.M. Relative sensitivities of existing and novel model parameters in atmospheric tritium dose estimates. *Radiation Protection Dosimetry*. 37:253-260; 1991.

### UNIVERSITY SERVICE

09/15 – 08/16 College of Engineering Faculty Status Committee

09/15 – 08/16 Chair, Promotion and Tenure Committee, School of NSE

06/15 – 08/16 Director of Graduate Programs, School of NSE

09/11 – 03/15 College of Engineering Curriculum Council

09/11 – 10/14 Chair, Departmental Curriculum Committee

09/12 – 12/12 College of Engineering, Search Committee, Associate Dean for Academic & Student Affairs

06/10 – 09/11 College of Engineering Graduate Council

06/10 – 09/11 Chair, Departmental Graduate Committee

09/09 – 09/11 College of Engineering Research Council

09/07 – 01/09 College of Engineering Graduate Council

## David M. Hamby

09/05 – 01/09 Chair, Departmental Graduate Committee

09/07 – 01/09 Chair, Departmental Promotion and Tenure Committee

09/00 – 09/03 Chair, Departmental Graduate Committee

### **VOLUNTEER COMMUNITY SERVICE**

08/09 – 12/15 Reserve Deputy Sheriff, Benton County Sheriff's Office, Corvallis, OR

03/15 2014 Volunteer of the Year, Benton County Sheriff's Office, Corvallis, OR

07/13 – 06/15 Board of Directors, Leadership Corvallis, Corvallis, OR.

10/11 – 09/14 Law Enforcement Firearms Instructor, National Rifle Association Certified

06/12 2011 Hans Neukomm Leadership Award, Leadership Corvallis, Corvallis, OR

01/07 – 12/10 Corvallis City Councilor, Ward 8 (2007-08; President 2009-10)

01/07 – 12/10 Member, Urban Services Committee, City of Corvallis  
(Chair, Sept 1, 2007 – Dec 31, 2007; Chair, Sept 1, 2008 – Dec 31, 2008; Chair,  
May 1, 2009 – Aug 31, 2009; Chair, Sept 1, 2010 – Dec 31, 2010)

01/07 – 12/10 Member, Budget Commission, City of Corvallis

07/04 – 06/07 State of Oregon, Board of Radiologic Technology  
(Vice-Chair, July 1, 2004 – June 30, 2007)

10/04 – 12/06 Member, Planning Commission, City of Corvallis

07/04 – 12/06 Member, Watershed Management Advisory Commission, City of Corvallis  
(Chair, July 1, 2005 – Dec 31, 2006)

02/03 – 12/06 Member, Airport Advisory Commission, City of Corvallis  
(Chair, July 1, 2005 – Dec 31, 2006)

### **PROFESSIONAL COMMITTEES, AFFILIATIONS, AWARDS**

2009 - present Editorial Board for *Journal of Environmental Protection Science*

2000 - present Member, Cascade Chapter of the Health Physics Society

1999 - present Editorial Advisory Board for *Environmental Monitoring and Assessment*

1996 - present Associate Editor for *Health Physics*

## David M. Hamby

- 1985 - present Member, National Health Physics Society.
- 2000 - 2014 Reviewer, U.S. Civilian Research and Development Foundation, International Science and Technology Centers.
- 2003 - 2009 Member, Oregon State University, Reactor Operations Committee
- 1996 - 2006 Member, National Council on Radiation Protection and Measurement (NCRP) scientific subcommittee on "Cesium in the Environment" (SC#64-23).
- 2000 - 2004 Reviewer, American Institute of Biological Sciences, U.S. Army Medical Research and Material Command - and - Military Operational Medicine to the Office of Naval Research
- 2000 - 2004 Member, ANSI N13.60, Standards for Late Phase Protection Actions in Post-Nuclear Accidents.
- 2000 - 2002 Member, ATSDR Expert Panel for Environmental Tritium. Atlanta, GA.
- 1999 - 2000 Member, EPA/ORD Selection Committee for the STAR Graduate Environmental Study Fellowships; Health Risk Assessment Specialization
- 1994 - 2000 Member, Great Lakes Chapter of the Health Physics Society
- 1997 - 1999 Board of Directors, Health Physics Society Great Lakes Chapter
- 1995 - 1999 Member, University of Michigan, Radiation Policy Committee
- 1994 - 1999 Faculty Advisor for the University of Michigan Student Chapter of the Health Physics Society
- 1990 - 1999 Member, DOE/ORISE Health Physics Fellowship Selection Committee and University Participation Panel
- 1987 - 1999 Member, Radiation Research Society
- 1998 Expert in Radiological Health for the International Atomic Energy Agency (IAEA). Lithuania.
- 1997 Fulbright Scholar Award, Environmental Health. Bishkek, Kyrgyzstan.
- 1996 Consultant, National Academy of Science, Environmental Management Technology subcommittee on the DOE/EM decision-making process.

## David M. Hamby

- 1994 Panelist, Centers for Disease Control and Prevention (CDC). Environmental Radiological Dose Reconstruction in the US and the former Soviet Union, Atlanta, GA.
- 1989 - 1994 Member, Savannah River Chapter of the Health Physics Society
- 1992 Member, ANSI/ANS-8.23 Writing Group, Nuclear Criticality Accident Emergency Planning & Response
- 1992 Invited Panelist, EPA/ORP Workshop on Mathematical Modeling - Meteorological Models, Bethesda, MD.
- 1985 - 1989 Member, North Carolina Chapter of the Health Physics Society
- 1984 - 1989 Department of Energy/ORAU Health Physics Fellow

### **DIDACTIC COURSES OFFERED**

- 2018 - 2019 Sabbatical year
- 2015 - 2018 NSE 235: Nuclear and Radiation Physics II (Oregon State)
- 2009 - 2018 NSE 590: Internal Dosimetry (Oregon State)
- 2015 - 2017 NSE 531: Radiophysics (Oregon State)
- 2015 - 2017 MP 531: Radiophysics (OHSU)
- 2016 - 2017 MP 535: Radiation Shielding & External Dosimetry (OHSU)
- 2016 - 2017 MP 536: Radiation Detection & Measurement (OHSU)
- 2011 - 2015 NE/RHP 407/507: Occupational Experience (Oregon State)
- 2010 - 2015 NE/RHP 236: Radiation Detection and Instrumentation (Oregon State)
- 2012 - 2013 RHP 536: Advanced Radiation Detection and Measurement (Oregon State)
- 2009 - 2012 NE/RHP 435/535: Radiation Shielding & External Dosimetry (Oregon State)
- 2011 DI 141: Radiation Biology (LBCC)
- 2005 - 2009 NE/RHP 536: Advanced Radiation Detection and Measurement (Oregon State)
- 2004 - 2008 DI 141: Radiation Biology (LBCC)

## David M. Hamby

2004 - 2008	DI 140: Radiation Protection (LBCC)
2003 - 2008	NE/RHP 236: Radiation Detection and Instrumentation (Oregon State)
2001 - 2008	NE/RHP 490/590: Radiation Dosimetry (Oregon State)
2001 - 2008	NE/RHP 235: Nuclear and Radiation Physics II (Oregon State)
2003 - 2007	DI 120: Radiation Production and Characteristics (LBCC)
2001 - 2003	NE/RHP 585: Environmental Aspects of Nuclear Systems (Oregon State)
2000 - 2003	RHP 483/583: Radiation Biology (Oregon State)
1999 - 2002	RHP 592: Radiological Risk Evaluation (Oregon State)
1999	EHS 581: Principles of Radiological Health (Univ of Michigan)
1997 - 1999	EHS 693: Health Physics Instrumentation: Theory and Practice (Univ of Michigan)
1994 - 1999	EHS 679: Radiological Risk Evaluation (Univ of Michigan)
1994 - 1999	EHS 672: Environmental Radiological Assessment (Univ of Michigan)

### REVIEWER FOR THE FOLLOWING SCIENTIFIC JOURNALS

- Health Physics  
(Associate Editor since 1996)
- Journal of Environmental Protection Science  
(Editorial Board since 2009)
- Radiation Research
- Journal of Environmental Radioactivity
- Nuclear Instruments and Methods (Sec. A)
- Journal of Aerosol Science
- J. of Statistical Computation and Simulation
- Toxicological and Environmental Chemistry
- Air, Soil and Water Research
- Env. Monitoring and Assessment  
(Editorial Advisory Board since 1999)
- Radiation Measurements
- Ecological Modeling
- Nuclear Safety
- Environmental Pollution
- The Science of the Total Environment
- Env. Science and Technology
- Am. Assoc. of Pharmaceutical Scientists
- Nuclear Science and Engineering

## David M. Hamby

- Environmental Engineering Science
- Journal of Radiological Protection
- Radiation Physics and Chemistry
- IEEE Transactions on Nuclear Science
- European Journal of Physics

### OTHER PUBLICATIONS AND PRESENTATIONS

Boozer, D.L.; Hamby, D.M. Development of a Deterministic Eye Dosimetry Model. The 4<sup>th</sup> Annual RAMP User's Meeting. US Nuclear Regulatory Commission and the Canadian Nuclear Safety Commission. Ottawa, ONT. October 31, 2018.

Anspach, A.L.; McDaniel, N.S.; Hamby, D.M. Eye Dosimetry Using VARSKIN. The 4<sup>th</sup> Annual RAMP User's Meeting. US Nuclear Regulatory Commission and the Canadian Nuclear Safety Commission. Ottawa, ONT. October 31, 2018.

Hamby, D.M.; Boozer, D.L. A Model for Neutron Skin Dosimetry. The 4<sup>th</sup> Annual RAMP User's Meeting. US Nuclear Regulatory Commission and the Canadian Nuclear Safety Commission. Ottawa, ONT. October 30, 2018.

Anspach, L.J.; Hamby, D.M. Uncertainty and Sensitivity in VARSKIN Methodology. The 4<sup>th</sup> Annual RAMP User's Meeting. US Nuclear Regulatory Commission and the Canadian Nuclear Safety Commission. Ottawa, ONT. October 30, 2018.

Hamby, D.M. VARSKIN Limitations. The 4<sup>th</sup> Annual RAMP User's Meeting. US Nuclear Regulatory Commission and the Canadian Nuclear Safety Commission. Ottawa, ONT. October 29, 2018.

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**GRADUATE RESEARCH DIRECTED**

**In Progress**

Anspach, L. "A Neutron Dosimetry Model for Shallow Skin Dose". Master's Thesis

Youngblood, E. undecided. Master's Thesis.

Squillante, J. "Continuous QA/QC Operations in VARSKIN". Master's Thesis.

Boozer, D. "A Deterministic Eye Dosimetry Model". **Doctoral Dissertation.**

**Completed**

Anspach, L. "Uncertainty/Sensitivity of VARSKIN Dosimetry Models". Undergraduate Research. June 2018.

Trakowski, I. "Eye Lens Doses from Oblique Sources". Master's Thesis. June 2018.

Herrera, J. "Human Eye Dosimetry: Air Gap Analysis by Shield Placement and Photon Energy". Master's Thesis. May 2018.

Wehmann, N. "Locating and Quantifying Contamination Deposited by Radiation Puncture Wounds". Master's Thesis. January 2018.

McDaniel, N.S. "Efficacy of VARSKIN for Eye Dosimetry". Undergraduate Research. October 2017.

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Deyhle, R. "Adoptive Transfer of Purified Hematopoietic Stem Cells Protects Against Bone Loss Following Lethal Radiation". Master's Thesis. September 2017.

Alhussan, A. "Low-Dose Ionizing Radiation Solid Cancer Risk in Adults: Radiation Hormesis Study Design". Master's Thesis. September 2017.

Chan, A. "Redefining Nuclear: Exploring Stigma, Climate Change, and the Adoption of Nuclear Power in Southeast Asia". Honors College Thesis. August 2017.

Caffrey, J. "Radiation Shielding for Space Nuclear Propulsion". **Doctoral Dissertation**. January 2017.

Tai, L. "Use of CR-39 for Nuclear Criticality Accident Dosimetry and High Neutron Dose Monitoring". Master's Thesis. October 2016.

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Alkhudhiri, B. "Utilization of a Triple-Layer Phoswich Detector for Beta Spectral Stripping". Master's Thesis. December 2013.

Tang, M. "Progress in the Development of a Portable Phoswich-Style Skin Contamination Dosimeter". Master's Thesis. July 2013.

Spackman, D. "Design and Analysis of Radiation Shielding Eyewear". Master's Thesis. June 2013.

Dickson, E. "Experimental Shielding Evaluation of the Radiation Protection Provided by Residential Structures". **Doctoral Dissertation**. May 2013.

Mangini, C. "Beta-Particle Backscatter Factors and Energy-Absorption Scaling Factors for Use with Dose-Point Kernels". **Doctoral Dissertation**. December 2012.

Dorrell, N. "Retrospective Thermal Neutron Dosimetry Using Lithium-Ion Mobile Telephone Batteries". Master's Thesis. June 2011.

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Fowler, A. "Skin Depth Dose Response of an Ionization Chamber and a Thermo-luminescent Dosimeter System using Low Energy X-rays". Master's Thesis. December 2010.

Thu, K. "Skin Depth Dose Distribution Measurement and Analysis Using Radiochemical Dosimeter". Master's Thesis. September 2010.

Kaiser, K. "Performance Validation of a Prototype Skin Contamination Detector via Use of Very Thin Thermoluminescent Dosimetry". Master's Thesis. June 2010.

Vasquez, D. "The Design, Use and Implementation of Digital Radiation Detection and Measurement Equipment for the Purpose of Distance Instruction". Master's Thesis. March 2010.

Cazalas, E. "Design, Construction, and Analysis of a Skin Contamination Dosimeter". Master's Thesis. November 2009.

Makinson, K. "Tissue Weighting Factors for Radiation Protection: Derivation and Parametric Analysis". Master's Thesis. July 2009.

Frey, W. "Neutron Spectroscopy with Liquid Scintillators". **Doctoral Dissertation**. June 2009.

Elliott, A. "Radioxenon Generation Using HEU". Master's Thesis. June 2008.

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Jones, S. "An Investigation of the Light Capture Properties of the XEPHWICH, a Phoswich Radiation Detection System". Master's Thesis. June 2008.

Hay, T. "Creation of an Emergency Response Laboratory at Oregon State University". Master's Thesis. June 2008.

Newman, E. "A Comparison Between Deterministic and Simulated Models of Tungsten Based Medical Transport Pigs". Master's Thesis. June 2007.

Farsoni, A.T. "Simultaneous Beta/Gamma Digital Spectroscopy". **Doctoral Dissertation**. December 2006.

Gambone, K. "Neutron and Gamma Dose Mapping of a TRIGA-based Neutron Radiography Facility". Master's Thesis. June 2006.

Kaye, W. "Kaye Calculations: Software to Educate Nuclear Scientists and Engineers". Honors College Thesis. June 2006.

Junell, S. "Analysis of MAPCHECK Quality Assurance in Intensity Modulated Radiation Therapy". Honors College Thesis. June 2006.

Lopez, A.U. "Determination of Phoswich Detector Response Using MCNP Analysis to Enhance Radioxenon Measurement". Master's Thesis. April 2006.

Frey, W. "Investigation into the Effects of Subsurface Ice Deposits on the Shielding of Fast Spectrum Nuclear Reactors Using Martian Regolith". Master's Thesis. December 2005.

Kriss, A.A. "A Beta Dosimeter and Spectrometer Utilizing Plastic Scintillator Volumes and a Large Area Avalanche Photodiode". **Doctoral Dissertation**. June 2004.

Mallory, S. "Shielding Design of a Diagnostic X-ray Teaching Facility". Master's Thesis. December 2003.

Rock, M.K. "Characterization of a 70% Efficiency High Purity Germanium Detector". Master's Thesis. June 2003.

Harvey, R.P., "The ICRP 66 Lung Model and the Behavior of Gases Iodine", **Doctoral Dissertation**. April 2003.

Miklos, J.A., "Unique Specification of Beta-Particle Sources", **Doctoral Dissertation**. April 2002.

Carlson, C.A., "The Role of the Retinoblastoma Protein in UV-Induced Apoptosis", **Doctoral Dissertation**. March 2002.

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Bush, S.A., "Beta Spectroscopy Using Deconvolution and Spectral Stripping Techniques with a Triple Layer Phoswich Detector", **Doctoral Dissertation**, April 2000.

Yan, C., "Effect of NaI Crystal Thickness on Image Quality of a Dual-Head Scintillation Camera", Master's Thesis, May 1999.

Hakimi, R., "Competitive Binding of Plutonium and Americium with Bone Mineral and Novel Chelating Agents", Master's Thesis, April 1999.

Harcek, B.G., "A Comparison of Leukemia Risk from Strontium-90 in Milk and Mortality Rates in the State of Michigan", Master's Thesis, July 1998.

Marx, D.R., "Development of an Ingestion Pathway Model for AXAIRQ, an Atmospheric Dose Model used at the Savannah River Site for Prospective Accident Assessment", Master's Thesis, June 1998.

Sadowski, K., "Spectral Analysis and Power Density Assessment Near PCS Transmission Towers", Master's Thesis, April 1998.

Breeden, W.K., "In Vivo Biodistributions of [125I]PIP and Internal Dosimetry of [123I]PIP Radioiodinated Agents Selective to the Muscarinic Acetylcholinergic Receptor Complex", Master's Thesis, November 1997.

Nagle, C.C., "Characterization of Hot Particles Using Gas-Filled Detectors", Master's Thesis, August 1997.

Nestle, D.R., "Comparison of Cesium Retention Kinetics in Bluegill (*Lepomis macrochirus*) Following Acute and Chronic Dosing", Master's Thesis, July 1997.

Busby, B., "Refined Simulation of a Novel Method for Mixed Beta/Gamma Field Dosimetry Using Pulsed Laser Heating of LiF Thermoluminescent Materials", Master's Thesis (co-chair with K. Kearfott, Nuclear Engineering and Radiological Sciences), July 1997.

Zometsky, J., "Radiological Assessment of In-Situ Soils Using Plastic Scintillators and Fiber Optics", Master's Thesis, June 1997.

Bush, S., "Development of a Screened Cathode Gas Flow Proportional Counter for In-Situ Determination of Radioactive Contamination in Soil", Master's Thesis, February 1997.

Kock, A., "Variations in Environmental Tritium Doses Due to Meteorological Data Averaging and Uncertainties in Pathway Model Parameters", Master's Thesis, May 1996.

Famiano, M.A., "Time-Specific Measurements of Energy Deposition from Radiation Fields in Simulated Sub-Micron Tissue Volumes", Master's Thesis, April 1996.

Kim, N., "Establishing a Risk Communication Program", Master's Report, December 1995.

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Hyman, T.C., "An Uncertainty and Sensitivity Analysis of Exposure Pathways for Aqueous Releases of Radioactive Materials", Master's Thesis, April 1993.

### ADDITIONAL THESIS AND DISSERTATION COMMITTEES

"Pine Tree Dosimetry: Development of Geometric and Compositionally Specific Sectional Models for Organ Dose Assessment" (C. Condon, PhD, 2019).

"Designing a Spent Nuclear Fuel Imaging System Utilizing Transmission Radiography and Emission Tomography" (N. Economy, MS, 2018).

"A Cosmic-Ray Muon Tomography System for Safeguarding Dry Storage Casks" (C. Liao, PhD, 2018).

"SCALE 6 (TRITON) Simulations of Fission Product Gamma Line Emissions and their Comparison to Plutonium and Uranium Measurements" (T. Sanchez, MS, 2017).

"Real Time Temporal Spectroscopy for Characterizing Special Nuclear Material" (M. Mannino, MS, 2017).

"A CZT-Si Radiation Detector for Unattended Radioxenon Monitoring" (A.M. Alhawsawi, PhD, 2017).

"Integrated Spatial and Temporal Stochastic Model in Radiation Biology: Design, Implementation, and Application" (R. Liu, PhD, 2017).

"Photophysics of Organic Semiconductors at the Nanoscale" (R.R. Grollman, PhD, 2017).

"Pulse Shape Discrimination between Photoelectric and Compton Events in a Metal Loaded Plastic Scintillator" (H.R. Gadey, MS, 2017).

"A Two-element CZT-based Radioxenon Detection System for Nuclear Weapon Test Monitoring" (L. Ranjbar, PhD, 2016).

"A Direction-Sensitive Radiation Detector for Low-Altitude, UAV-based Radiological Source Search" (E.M. Becker, PhD, 2015).

"The MiniSpec: A Low-Cost, Compact, FPGA-Based Gamma Spectrometer for Mobile Applications" (E.M. Becker, MS, 2013).

"Dissolution of Uranium Dioxide Microspheres in Carbonate and Hydrogen Peroxide Solutions" (T.G. Adams, MS, 2013).

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“Real-time Radioxenon Measurement Using a Compton-suppressed Well-type Phoswich Detector for Nuclear Explosion Monitoring” (**B. Alemayehu, PhD, 2013**).

“Does-Effects Relationships in Non-Human Biota: Development of Field Sampling, Dosimetric and Analytic Techniques Through a Case Study of the Aquatic Snail *Campeloma decisum* at Chalk River Laboratories” (**E.B. Ruedig, PhD, 2013**).

“Site Specific Reference Person Parameters and Derived Concentration Standards for the Savannah River Site” (D.K. Stone, MS, 2013).

“Characterization of Fission Product Transport in a Gen. IV Gas-Cooled Fast Reactor Plant Utilizing Vented Fuel” (W. Deason, MS, 2013).

“Establishment of Concentration Ratios for Riparian and Shrub Steppe Areas of the Eastern Washington Columbia Basin” (J. Napier, MS, 2012).

“GIS Analysis of Nitrate in Oregon Domestic Wells: Capturing Exposure through Innovative Drinking Water Policy” (**B. Hoppe, PhD, Public Health, 2012**).

“Foliar Interception and Uptake of  $^{36}\text{Cl}$  by Crops” (**D. Bytwerk, PhD, 2011**).

“Study of Compton Suppression Capability in a Triple-Layer Phoswich Detector” (A. Alhawsawi, MS, 2011)

“Radiation Damage on Uranium and its Backing (Ti and Al) Irradiated with 132 MeV Xe” (**S. Sadi, PhD, 2011**).

“Radiative Heat Transfer in a Combustion System; Gas Models, Particulate Interactions, and Parallelization.” (**M. Cleveland, PhD, 2011**).

“MCNP5 Modeling the Oregon State TRIGA Reactor for Skyshine Dose Estimation” (K. Sarmast, MS, 2010).

“Comparison of Eye Plaque Dosimetry Using Deterministic and Monte Carlo Methods” (J. Bristol, MS, 2010).

“Evaluating the Surface Protection and Decontamination Efficiency of DeconGel-1101 Toward  $^{137}\text{Cs}$  Spilled on Biological, Salt-Covered, Rusty, Wet and Solid Painted Surfaces” (K. Hanley, MS, 2010).

“Preliminary Investigation of X-Ray CT Imaging of BANG Polymer Gel Dosimeter” (C. Sath, MS, 2009).

“Dose to the Female Breasts from Nuclear Medicine and Diagnostic Radiology” (A. Patel, MS, 2008).

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“A Study of Residual Cesium-137 Contamination in Southwestern Utah Soil Following the Nuclear Weapons Tests at the Nevada Test Site in the 1950’s and 1960’s” (R.B. Bentley, MS, 2008).

“Simulated Antineutrino Signatures of Nuclear Reactors for Nonproliferation Applications” (A. Misner, PhD, 2008).

“Spectroscopic Investigation and Radiometric Measurement of Beach Sediment Samples Collected from Pondicherry to Porto-Novo, Tamilnadu, India”, Annamalai University, Annamalai Nagar, Tamilnadu, India (E. Manikandan, PhD, 2006).

“Radiation Health and Safety of a Radioisotope Powered Micro Fuel Cell” (K. Maloy, MS, 2006).

“Determining the Bioavailability of Soil Associated Radium Using In Vitro Methodology” (K. Tack, MS, 2006).

“Post-Accident Radiocesium Uptake in Eastern Oregon Wheat Crops: A preliminary Estimate Using a Modified “PATHWAY” Model” (J. Palotay, MS, 2005).

“Evidence-Based Safe Patient Handling: A Proposed Conceptual Model for Knowledge Transfer and Executive-Level Decision-Making” (D. Fell-Carlson, MS, 2005).

“Characterizing the Neutron Spectra in Various Irradiation Facilities within the Oregon State University TRIGA® Reactor” (E. Ashbaker, MS, 2005).

“Assessing and Evaluating the Energy and Angular Dependence of the Self-Indicating Instant Radiation Alert Dosimeter” (A. Bak, MS, 2005).

“Assessing and Evaluating the Self-Indicating Instant Radiation Alert Dosimeter (SIRAD) for Gamma and Neutron Response” (M. Stewart, MS, 2005).

“Health Risk Assessment and Distribution of Bioavailable Metals and Butyltin Compounds in Willamette River at a Portland Harbor, Oregon Superfund Site” (O. Krissanakriangkrai, PhD, 2004).

“Implementation of Radiation Film Dosimetry System to be Used for the Verification of a 3-D Electron Pencil-Beam Algorithm on a Radiation Treatment Planning System” (Q. Jones, MS, 2004).

“Determining Cross Sections for Potential Medical Radioisotopes” (J.Coleman, MS, 2003).

“The Ability of the Field Instrument for Detecting Low Energy Radiation in Detecting Hot Particle Contamination in Reference to New Technology Involving Positioning System and Data Logging” (C. Marianno, PhD, 2000).

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"Production of Industrial and Medical Radioisotopes in Accelerator Production of Tritium (APT)" (**K. Tiyaun, PhD, 2000**).

"Removal of Fecal Coliform Bacteria by Zebra Mussels" (**P. Klangsin, PhD, 2000**).

"The Development of a Personal Direct-Reading Instrument Employing a Surface-Acoustic Wave Microsensor Array for Measuring Organic Vapor Exposures" (**J. Park, PhD, 2000**).

"Multipathway Exposure and Risk Assessment from Air Pollution Sources" (**Y. Huang, PhD, 1999**).

"Scattered Electron Beams Shaped by a Multileaf Collimator" (**J. Moran, PhD, 1999**).

"Determination of a Maximum Drinking Water Level (MDWL), Maximum Allowable Level (MAL), and a Short-Term Exposure Limit (STEL), for 11-Aminoundecanoic Acid, an Indirect Additive to Drinking Water" (N. Sachs, MS, 1999).

"Assessing the Atmospheric Transport and Wet Deposition of Mercury to Lake Michigan: Identifying the Relative Importance of Local and Regional Anthropogenic Sources" (**M. Landis, PhD, 1998**).

"Is a Functional Mismatch Repair Phenotype Required for p53 Induction?" (S. Clarke, MS, 1998).

"Estimating Metal Emissions from a Cement Manufacturing Facility Burning Liquid Hazardous Waste Using Soil Monitoring and Deposition Predictions" (D. Ward, MS, 1997).

"External Exposure to the General Public, in Hospitals, Resulting from Patients Who Have Received a Therapeutic Dose of I-131: An Evaluation of the Impact of 10CFR20" (G. Matcek, MS, 1997).

"Radiation-Induced Apoptosis in Conjunction with EGFR Kinase Inhibition in MDA-MB-468 Human Mammary Carcinoma Cells" (C. Carlson, MS, 1997).

"A Method to Correct Bonner Sphere Spectrometer Counting Losses in Pulsed Neutron Fields" (E. Semones, MS, 1997).

"Development and Utilization of a Method for Performing In-Situ Gamma-Ray Spectroscopy of an Operating Commercial Nuclear Power Plant Site Grounds in the Presence of a Varying Background Radiation Field" (R. Simonsen, MS, 1996)

"The Radiological Health Significance of Activated Pharmaceuticals and Food Products in Airport Passenger Luggage from Thermal Neutron Activation Machines" (K. Coble, MS, 1996)



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"Assessment of In-Vivo SPRINT II Measurements and Reduced Sacrifice Methods as Alternatives to Determining the Biodistribution in Rats of Carbon-11 Labeled Radiopharmaceuticals" (M. Wrobel, PhD, 1996)

"A Literature and Current Procedure Review of Thorium Soil Extractions" (R. Porter, MS, 1996)

"Radiation Dose to Physicians from Fluoroscopy During Cardiac Catheterization Procedures" (K. Foether, MS, 1996)

"Investigation of Potential Contamination of Sewage Sludge at the Donald C. Cook Nuclear Power Plant" (S. Ritts, MS, 1996)

"Environmental Fate of I-131 Released to the Ann Arbor Sewer System" (F. Fenner, MS, 1996)

"Neutron Radiation Fields Outside Shielding at the Fermilab Tevatron" (M. Torres, PhD, 1996)

"The Radiological Significance of X-Ray Beam Equalization on Mammographic Imaging" (R. Morton, MS, 1995)

"Comparison of Neutron Activation Analysis and Inductively-Coupled Plasma - Mass Spectrometry for the Determination of Metals in Lechate" (J. Eggart, MS, 1995)

"Operational Strategy for Soil Concentration Predictions of Strontium/Yttrium-90 and Cesium-137 in Surface Soil at the West Valley Fuel Reprocessing Site" (J. Myers, MS, 1995)

"In-Vivo Quantification of Human Gallbladder Activity Using Triple-Head SPECT with Intrinsic Attenuation and Dual-Energy-Window Scatter Correction: A Phatom Study" (V. Gates, MS, 1995)

"Surface Contamination Detection and Measurement: An Inter-Laboratory Comparison Study" (A. Keebler, MS, 1995)

"Pathway Analysis of a Pool Water Release from the Ford Nuclear Reactor at the University of Michigan" (M. Carpentier, MS, 1994)

"The Dosimetry of a Low-Dose Cs-137 Irradiation Device" (B. Hanes, MS, 1994)

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Carlton, W.H.; Hamby, D.M. Radiological impact of PAR pond drawdown from liquid effluent pathways. National Technical Information Service. Washington, DC: Report No. DE92017933XSP; 1991.

O’Kula, K.R.; Olsen, R.L.; Hamby, D.M. Consequences of tritium release to water pathways from postulated accidents in a DOE production reactor. National Technical Information Service. Washington, DC: Report No. DE92009820XSP; 1991.

Hamby, D.M.; Parker, M.J. Gaussian dispersion and dosimetric modeling sensitivity to area-specific 1982-86 meteorological data collected at the Savannah River Site. National Technical Information Service. Washington, DC: Report No. DE92016896XSP; 1991.

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