CURRICULUM VITAE

AUDEEN W. FENTIMAN

1. EDUCATION

1982	Ph.D.	The Ohio State University	Nuclear Engineering
1977	M.S.	The Ohio State University	Nuclear Engineering
1974	M.A.	West Virginia University	Mathematics
1972	B.S.	Glenville State College	Mathematics (minor, physics)

2. PROFESSIONAL EXPERIENCE

2016-2017 **Interim Head, School of Engineering Education**

2015-present **Crowley Family Professor of Engineering Education,** School of Engineering Education, Purdue University

2013-2015 **Purdue System Coordinator**, Office of the President, Purdue University (50% appointment)

2011-2013 **Assistant Director for Strategic Planning and Regional Campuses**, Office of the President, Purdue University (50% appointment)

2006-2017 **Associate Dean for Graduate Education and Interdisciplinary Programs,** College of Engineering, Purdue University (50% appointment)

2006-2015 **Professor**, Nuclear Engineering, Purdue University (courtesy appointment beginning Fall 2015)

2006-2015 **Professor**, Engineering Education (courtesy appointment) (tenure home as of Fall 2015)

2007-present **Professor,** Construction Engineering Management (courtesy appointment)

2007-present **Professor**, Environmental and Ecological Engineering (courtesy appointment)

2004-2006 **Director, Nuclear Reactor Laboratory**, The Ohio State University
2003 – Interim Director

2001-2006 **Chair, Nuclear Engineering Program**, The Ohio State University

1999-2001 **Associate Dean for Outreach and Special Programs,** College of Engineering, The Ohio State University (50% appointment), responsible for College Communications, Women in Engineering Program, Minority Engineering Program, Alumni Affairs, special events, distance education, and other new or innovative programs.

1998-2001 **Director, Environmental Science Graduate Program,** an interdisciplinary program involving over 80 faculty from more than 20 departments across the University. As Director, established core curriculum, seminar series, full-time administrative assistant position, Fay Fellowship endowment.

1996-2006 **Associate Professor**, Department of Civil and Environmental Engineering and Geodetic Science

1990-1996 **Assistant Professor**, Department of Civil and Environmental Engineering and Engineering Graphics, The Ohio State University.

1991-2006 **Graduate Faculty**, Nuclear Engineering, The Ohio State University.

1991-2006 **Graduate Faculty**, Environmental Science, The Ohio State University.

1989-1990 **Senior Specialist**, Technology Department, EG&G Mound Applied Technologies, Department of Energy's Mound Laboratory. Planned and conducted survey of all (120) buildings on site to determine what chemical, radioactive, and mixed wastes were generated -- and how. Documented results and recommended waste minimization projects.

1979-1989 **Battelle Memorial Institute, Columbus, Ohio**. Held various positions with increasing responsibility as indicated below:

1987-89 **Associate Department Manager**, Ordnance Systems and Technology. Shared line management responsibility for 38 people. Managed ordnance test facility.

1985-87 **Senior Engineer**, Office of Nuclear Waste Isolation (ONWI). One of five members of the Systems Engineering Department tasked with overall technical planning and integration of a program to design and license a high-level nuclear waste repository in salt. Responsible for 15 - 20 concurrent projects on performance allocation and performance assessment.

1984-85 **Associate Section Manager**, Nuclear Systems. Managed 6-person group conducting research in the areas of nuclear fuel cycle and radiation

technology. Technical coordinator for program to provide technical assistance to DOE in evaluation of security and safeguards programs at nuclear facilities.

1981-84 **Principal Research Scientist,** Nuclear Systems. Wrote proposals for and managed series of classified experimental programs designed to measure releases of radioactive material resulting from sabotage of high-level nuclear waste shipments.

1979-81 **Research Scientist**, Nuclear Systems. Research areas included nuclear facility safety, criticality safety, reactor vessel embrittlement, decommissioning strategies, review of existing and proposed regulations on nuclear waste.

1977-1979 **Research Associate**, National Regulatory Research Institute, The Ohio State University. Part of the team that established the Institute.

1976-1977 **Research Assistant**, Nuclear Engineering Department, The Ohio State University.

1974-1976 **High School Mathematics Teacher**, St. Marys High School, St. Marys, West Virginia.

1973 summer **Legislative Assistant**, Congressman John Slack, Washington, D.C

3. AWARDS AND HONORS IN TEACHING & RESEARCH

2013 American Nuclear Society, Presidential Citation (strategic planning)
2012 Fellow, American Nuclear Society
2011 American Nuclear Society, Presidential Citation (public policy)
2010 Fellow, American Council on Education
2010 Outstanding Teacher Award, School of Nuclear Engineering, Purdue
2010 GEM Executive Committee Member of the Year
2009 Outstanding Teacher Award, School of Nuclear Engineering, Purdue
2006 Inducted into Mortar Board, Barbara Cook Chapter
2005 Distinguished Alumna, Ohio State University College of Engineering
2002 Sharon Keillor Award, Outstanding Woman Engineering Educator in North America (ASEE)
2001 Fellow, American Association for the Advancement of Science
2000 Outstanding Engineering Educator, Central Ohio Society of Professional Engineers
2002 Boyer Award for Excellence in Teaching Innovation (OSU College of Engr.)
1999 Boyer Award for Excellence in Teaching Innovation

1984 Elected to Sigma Xi
1982 Battelle Fellow
1980 Elected to Phi Kappa Phi

4. MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Association for the Advancement of Science
American Nuclear Society
American Society for Engineering Education
Health Physics Society
Society for Risk Analysis
Sigma Xi

SECTION A. TEACHING EXPERIENCE

1. Courses Taught and Evaluated

Year	Semester	Course No.	Name of Course	Hours	Rating
2017	Fall	ENE 690	Research Seminar		ongoing
2017	Fall	ENE 695	Succeeding as a Professor	3	ongoing
2016	Fall	ENE 695	Succeeding as a Professor	3	4.8/5.0
2015	Fall	NUCL 480/ NUCL 580	Essential Communications Skills for Engineers	3	4.8/5.0
2015	Spring	ENE 695	Succeeding as a Professor	3	4.9/5.0
2014	Fall	NUCL 480/ NUCL 597W	Essential Communications Skills for Engineers	3	4.8/5.0
2013	Fall	NUCL 480/ NUCL 597W	Essential Communications Skills for Engineers	3	4.7/5.0
2012	Fall	NUCL 480/ NUCL 597W	Essential Communications Skills for Engineers	3	4.6/5.0
2011	Fall	NUCL 497W/ NUCL 597W	Essential Communications Skills for Engineers	3	4.6/5.0
2010	Spring	NCUL 503	Radioactive Waste Mgmt	3	4.8/5.0
2009	Fall	NUCL 497W/ 597W	Essential Communications Skills for Engineers	3	4.8/5.0 4.8/5.0
2008	Fall	NUCL497W/ 597W	Essential Communications Skills for Engineers	2	5.0/5.0 4.7/5.0
2008	Spring	NUCL 497W/ 597W	Essential Communications Skills for Engineers	1	4.6/5.0 4.7/5.0
2007	Fall	NUCL 497W/ 597W	Essential Communications Skills for Engineers	2	4.9/5.0 4.8/5.0
2007	Spring	NUCL 503	Radioactive Waste Mgmt	3	5.0/5.0
2006	Fall	NUCL 497W/	Essential Communications	2	4.6/5.0

		597W	Skills for Engineers		
2005	WI	CE 720	Envi. Engr. Risk Assessment	3	not rated
2004	AU	NE 776	Nuclear Fuel Cycle	3	5.0/5.0
2004	AU	NE/CE 771	Radioactive Waste Mgmt.	3	4.8/5.0
2004	WI	CE 720	Envi. Engr. Risk Assessment	3	5.0/5.0
2003	AU	NE 776	Nuclear Fuel Cycle	3	not rated
2003	AU	NE/CE 771	Radioactive Waste Mgmt.	3	not rated
2003	SP	CE 511	Intro to Environmental Engr.	3	4.9/5.0
2003	WI	CE 720	Envi. Engr. Risk Assessment	3	4.5/5.0
2002	AU	NE 776	Nuclear Fuel Cycle	3	4.8/5.0
2002	AU	NE/CE 771	Radioactive Waste Mgmt.	3	4.7/5.0

2. Other Teaching Contributions

- 2015 – extended the content of the Purdue Prospective Faculty Workshop to a 3-credit course (ENE 695) entitled “Succeeding as an Engineering Professor” and offered the course for the first time. The course is part of the graduate certificate in Teaching and Learning Engineering, which I helped to propose and which was approved by the Commission for Higher Education in November of 2015.
- 2009 – worked with the Minority Engineering Program Director to develop a new 1-credit course for freshman or sophomore underrepresented minority students in engineering entitled “Preparing for Success” (now ENGR 103) to inform students about graduate school and discuss actions that would help the student prepare to be a competitive candidate for graduate school and fellowships.
- 2006-07 - Led the Nuclear Engineering faculty effort to develop a new course entitled “Essential Communications Skills for Engineers”, a combined undergraduate and graduate course developed in response to results of surveys of alumni, employers, and students for ABET. Taught the course until transferring tenure home to Engineering Education.
- 2002 – developed and taught CE 511, Introduction to Environmental Engineering, because the department needed an introductory course with broad content to satisfy ABET requirements for accreditation of the Environmental Engineering Program. (Prepared a complete set of PowerPoint lectures, supplemental materials, homework assignments, etc. and handed course off to a junior faculty member in 2004.)
- 2002 – Co-authored, with Jim Saling, the textbook entitled Radioactive Waste Management for NE 771.
- 2002 – Revived NE 776, Nuclear Fuel Cycle, which had not been taught since before 1990.

- 2001 - Developed and implemented Introduction to Engineering Course for high school seniors – (adopted in 3 high schools)
- 1998 - Developed and began teaching CE 720, Environmental Engineering Risk Assessment, in response to interest in such a course from several disciplines. Students from 7 different departments in 3 different colleges have taken the course.
- 1998 – led college-wide team of faculty and staff in developing, piloting, assessing, and winning faculty approval for a new freshman engineering course sequence. Sequence (or its honors version) is now required of all incoming engineering students. Since full implementation of this course, retention through graduation is up from ~40% to ~60%.

3. **Student Counseling**

- Graduate Committee, Engineering Education, 2017-18
- Graduate Committee, Nuclear Engineering, 2008-09
- Advisor, Nuclear Engineering Graduate Organization – 2009-10
- Advisor, American Nuclear Society Student Branch 1991-99, 2001-04
- Graduate Studies Committee, Nuclear Engineering – 1991-2006
- Graduate Studies Committee, Environmental Engineering – 1998-2006
- Graduate Studies Committee, Environmental Science – 1995-98

SECTION B. RESEARCH, SCHOLARSHIP

1. Publications

a. Archival Journals

1. Smith, D.A., D. Holt, and A.W. Fentiman, "A Conceptual Model for Determining the Level of Impact from a Radiological Dispersal Event", Journal of Emergency Management, accepted Feb. 2010.

2. Smith, M.A., I.L. Larsen, and A.W. Fentiman, "Fate of ^{60}Co at a Sludge Land Application Site, Journal of Environmental Radioactivity, Vol. 99, Oct. 2008, pp 1611-1616.

3. Smith, S.E., X. Sun, C.A. Ford, A.W. Fentiman, "MCNP Simulation of Neutron Energy Spectra for a TN-32 Dry Shielded Container", Annals of Nuclear Energy, Vol. 35, 2008, pp 1296-1300.

4. Aldemir, T, D.W. Miller, M. Stovsky, J. Kirchenbaum, P. Bucci, L.A. Mangan, A.W. Fentiman, and S.A. Arndt, “Methodologies for the Probabilistic Risk Assessment of Digital Reactor Protection and Control Systems”, Nuclear Technology, Vol.159, Aug. 2007, pp 167-191.

5. Fentiman, A.W., “Effects of the Shape of the Radiation Dose-Response Curve on Public Acceptance of Radiation and Nuclear Energy”, Pierce Law Review, Vol. 1., No. 1/2, Fall 2002, pp 31-37.

6. Miller, P., J. Bausser, and A.W. Fentiman, “Responding to Technical Writing in an Introductory Engineering Class: The Role of Genre and Discipline”, Technical Communication Quarterly, Vol. 7, No. 4, Fall 1998, pp 443-461.

7. Blue, T.E., M.S. Jarzemba, and A.W. Fentiman, "Steady-State Response of a Charcoal Bed to Radon in Flowing Air with Water Vapor", Health Physics, Vol.68, No. 6, pp 809-816, June 1995.

8. Fentiman, A.W. and J.T. Demel, "Teaching Students to Document a Design Project and Present the Results", Journal of Engineering Education, Vol. 84, No. 4, pp. 329-333, October 1995.

9. Croft, F.M., F.D. Meyers, and A.W. Fentiman, “An Algorithm for Evaluating Team Projects”, Engineering Design Graphics Journal, Vol. 59, No. 3, pp.18-20, Autumn 1995.

10. Mancl, K.M., J.E. Heimlich, A.W. Fentiman, and R.N. Christensen, "General Public Awareness of Sources of Radiation in Their Environment", Ohio Journal of Science, Vol. 94, No. 5, pp. 134-137, December 1994.

11. Fentiman, A.W., "Elements of a Course in Radioactive Waste Management", Nuclear Technology, Vol. 105, No. 3, pp.441-446, March 1994.

12. Fentiman, A.W., R.R. Britton, and F.D. Meyers, "The First Two Years - Are Engineering Students Learning the Skills They Need?". Engineering Design Graphics Journal, Vol. 58, No. 2, pp. 30-37, Spring 1994.

13. Britton, R.R., A.W. Fentiman, and F.D. Meyers, “Are We Preparing Engineering Students with the Right Skills in Engineering Graphics and Computer Training? A Survey”, Engineering Design Graphics Journal, Vol. 58, No. 2, pp. 22-29, Spring 1994.

b. Books and Chapters

1. Saling, J.H. and A.W. Fentiman, Radioactive Waste Management, Taylor and Francis, NY, NY, 2002.

2. Fentiman, A.W., "Transportation of Radioactive Materials", chapter in Environmentally Conscious Materials Handling, edited by Myer Kutz, Wiley, 2009.

3. Fentiman, A.W., "Radioactive Waste Management: Storage, Transport, Disposal", chapter in Encyclopedia of Sustainability Science and Technology, edited by Robert A. Meyers, Springer Science+Business Media, LLC 2011.

c. Editor Reviewed Articles

1. Fentiman, A.W., "Providing Information to the Public: A Case Study from Ohio", Nuclear News, Vol. 41, No. 1, January 1998, pp 30-32. (on low-level waste)

2. Fentiman, A.W., B.K. Hajek, K.M. Mancl, J.E. Heimlich, and R.N. Christensen, "Low-Level Radioactive Waste: Information Available to Ohio Citizens", Ohio's Challenge, October 1995.

3. Fentiman, A.W. Review of "Hostages of Each Other, The Transformation of Nuclear Safety Since Three Mile Island" by Joseph V. Rees, Ecological Engineering, Vol. 5, No. 4, December 1995, pp 541-543.

d. Refereed Proceedings

1. Fentiman, A.W., J. Beagle, P. Dunston, S. Fisher, "Establishing Pathways to the Professoriate for Underrepresented Minority Students", American Society for Engineering Education 2017 Annual Conference Proceedings, Columbus, Ohio, June 2017.

2. Ortega-Alvarez, J.D., R. Streveler, A. Fentiman, H. Agarwal, S. Biswas, B. Coventry, A. Hassan, M. McNamara, S. Paul, "From Graduate Students to Faculty: Portraits of Balance in the professional Development Plans of Engineering Graduate Students", American Society for Engineering Education 2017 Annual Conference Proceedings, Columbus, Ohio, June 2017.

3. Van Kleeck, M., J. Willit, M. Williamson, A. Fentiman, "Experiments in Anodic Film Effects During Electrorefining of Scrap U-10Mo Fuels in Support of Modeling Efforts", GLOBAL 2013: International Fuel Cycle Conference, Salt Lake City, September 2013.

4. Van Kleeck, M., J. Figueroa, R. Blaskovitz, J. Willit, M. Williamson, A. Fentiman, "Investigation and Modeling of Anodic Behavior During Electrorefining of U-10Mo Fuels for Uranium Recovery", International Pyroprocesing Research Conference, Fontana, Wisconsin, August 2012.

5. Van Kleeck, M., J. Figueroa, R. Blaskovitz, M. Williamson, A. Fentiman, "A Model for Recovering Uranium from Scrap Monolithic Uranium Molybdenum", American Nuclear Society Summer Meeting, Chicago, June 2012.

6. Fentiman, A.W., "Supporting Graduate Students: A Catalog of Opportunities", American Society for Engineering Education 2004 Annual Conference Proceedings, June 2004.

7. Freuler, R, J. Demel, and A.W. Fentiman, "Building a Successful Fundamentals of Engineering for Honors Program", American Society for Engineering Education 2004 Annual Conference Proceedings, June 2004.

8. Fentiman, A.W., "Preparing Versatile Engineers for the Nuclear Industry", American Society for Engineering Education 2003 Annual Conference Proceedings, June 2003.

9. Fentiman, A.W., "Convincing Students that Writing Is Important", American Society for Engineering Education 2003 Annual Conference Proceedings, June 2003.

10. Hajek, B.K. and A.W. Fentiman, "Recruiting Graduate Students Through an Introductory Nuclear Science and Engineering Course and a Newly Implemented Undergraduate Minor Program", American Society for Engineering Education 2003 Annual Conference Proceedings, June 2003.

11. Fentiman, A.W. and L.M. Abrams, "An Integrated Program to Recruit and Retain Women Engineering Students", American Society for Engineering Education 2002 Annual Conference Proceedings, June 2002.

12. Fentiman, A.W. and M.M. McGee, "Components of a Year-Long Bridge Program for Minority Engineering Students", American Society for Engineering Education 2002 Annual Conference Proceedings, June 2002.

13. Fentiman, A.W., A. Herzog, J. Merrill, L. Ramstad, and F. Schneider, "Introduction to Engineering at Walnut Hills High School", American Society for Engineering Education 2002 Annual Conference Proceedings, June 2002.

14. Fentiman, A.W. and A. Mendlein, "Introduction to Engineering at Walnut Hills High School: The Students' Perspective", American Society for Engineering Education 2002 Annual Conference Proceedings, June 2002.

15. Fentiman, A.W., J.T. Demel, R.J. Freuler, R.J. Gustafson, and J.A. Merrill, "Developing and Implementing a First Year Program for 1000 Students", American Society for Engineering Education 2001 Annual Conference Proceedings, June 2001.

16. Freuler, R.J., A.W. Fentiman, J.T. Demel, J.A. Merrill, and R.J. Gustafson, "Developing and Implementing Hands-on Laboratory Exercises and Design Projects for First Year Engineering Students", American Society for Engineering Education 2001 Annual Conference Proceedings, June 2001.

17. Gustafson, R.J., J.A. Merrill, A.W. Fentiman, R.J. Freuler, and J.T. Demel, "Developing and Implementing a Facilities Plan for a Freshman Engineering Course Sequence", American Society for Engineering Education 2001 Annual Conference Proceedings, June 2001.

18. Merrill, J.A., R.J. Freuler, R.J. Gustafson, A.W. Fentiman, and J.T. Demel, "Assessment of a Freshman Program: Introduction to Engineering at The Ohio State University", American Society for Engineering Education 2001 Annual Conference Proceedings, June 2001.

19. Fortkamp, J.C., and Fentiman, A.W. "Model of the Radiation Environment at an Interim Spent Fuel Storage Facility", Transactions of the American Nuclear Society, June 1999.

20. Fentiman, A.W., Jennings, A.A., "Software Applications in Solid and Hazardous Waste", American Society for Engineering Education 1998 Annual Conference Proceedings, June 1998.

21. Fentiman, A.W., "Improving Engineering Students' Writing Through Collaboration Between Writing Centers and Engineering Faculty", American Society for Engineering Education 1998 Annual Conference Proceedings, June 1998.

22. Meyers, F.D., Fentiman, A.W., Demel, J.T., "Assessment of the Quality of Preparation of Recent Engineering Graduates in Core Engineering Skills",

American Society for Engineering Education 1998 Annual Conference Proceedings, June 1998.

23. Smith, M.A., Fentiman, A.W., and Larsen, I.L., "Investigations of Co-60 at a Sludge Land-Application Site", American Nuclear Society Transactions, June 1997.

24. Leet, T.A., and Fentiman, A.W. , "Enriched Uranium in Soils: An Analysis of Effects on Risk", American Nuclear Society Transactions, June 1997.

25. Winters, R.V. and Fentiman, A.W., "Computer Program to Evaluate Volume Reduction Effects of Waste Treatments", American Nuclear Society Transactions, June 1997.

26. Fentiman, A.W., "Helping Legislators Deal with Technical Issues: An Engineer's Role", American Society for Engineering Education 1997 Annual Conference Proceedings, June 1997.

27. Fentiman, A.W., Hajek, B.K., Mancl, K.M., Heimlich, J.E., and Christensen, R.N., University Faculty as a Resource for State Legislatures Considering Nuclear Waste Issues", Proceedings of Waste Management '96, March 1996.

28. Fentiman, A.W., Demel, J.T., Boyd, R. Pugsley, K., and Dutta, P. "Helping Students Learn to Organize and Manage a Design Project" American Society for Engineering Education 1996 Annual Conference Proceedings, June 1996

29. Fentiman, A.W, K.M. Mancl, B.K. Hajek, J.E. Heimlich, and R.N. Christensen, "Ohio's Statewide Low-Level Radioactive Waste Education Program: Phase II - Outreach", Proceedings of Waste Management '95, March, 1995.

30. Henkel, J.A., A.W. Fentiman, and T.E. Blue, "The Time-Dependent Response of a Charcoal Bed to Radon and Water Vapor in Flowing Air", American Nuclear Society Transactions, June 1995.

31. Fentiman, A.W. and J.T. Demel, "Incorporating Documentation into a Design Project", American Society for Engineering Education 1995 Annual Conference Proceedings, June 1995.

32. Demel, J.T. and A.W. Fentiman, "Team Learning in the Engineering Design Graphics Classroom", American Society for Engineering Education 1995 Annual Conference Proceedings, June 1995.

33. Fentiman, A.W., R.N. Christensen, B.K. Hajek, J.E. Heimlich, and K.M. Mancl, "Environmental Engineering Education for the Public", American Society for Engineering Education 1995 Annual Conference Proceedings, June 1995.

34. Fentiman, A.W. and R.R. Britton, "A Workshop to Improve Retention of Women Engineering Students", American Society for Engineering Education 1995 Annual Conference Proceedings, June 1995.

35. Fentiman, A.W. and J.T. Demel, "Teaching Students to Document a Design Project and Present the Results", American Society for Engineering Education 1995 Annual Conference Proceedings, June 1995.

36. Fentiman, A.W., R.N. Christensen, K.M. Mancl, J.E. Heimlich, and B.K. Hajek, "Ohio's Statewide Low-Level Radioactive Waste Education Program: A New Partnership", Waste Management '94, March 1994.

37. Fentiman, A.W., "Role of the University in Solving the Nuclear Waste Problem", American Nuclear Society Transactions, June 1994.

38. Fentiman, A.W. and M.E. Jorat, "Investigation of Low-Level Radioactive Waste Volume Reduction Options at a University", American Nuclear Society Transactions, June 1994.

39. Blue, T.E., M.S. Jarzemba, A.W. Fentiman, and J.E. Denison, "Radon Removal From Flowing Air by a Water Scrubber", American Nuclear Society Transactions, November 1994.

40. Fentiman, A.W., R.R. Britton, and F.D. Meyers, "The First Two Years - Are Engineering Students Learning the Skills They Need?", ASEE Annual Conference Proceedings, June 1993.

41. Jarzemba, M.S., A.W. Fentiman, T.E. Blue, and R.N. Christensen, "Predicting the Efficiency of Activated Charcoal for Filtering Radon", American Nuclear Society Transactions, November 1993.

42. Felsher, H.D. and A.W. Fentiman, "Validation of KENO V.a for the Portsmouth Gaseous Diffusion Plant", American Nuclear Society Transactions, June 1992.

43. Fentiman, A.W., "Radioactive Waste Management Courses - What Is Being Taught", American Nuclear Society Transactions, November 1992.

44. Fentiman, A.W., "A Strategy for Managing Mixed Waste at a Plant Site", American Nuclear Society Transactions, November 1991.

45. Fentiman, A.W. and R.D. Myser, "Integrating Nuclear Science into the Pre-College Curriculum", American Nuclear Society Transactions, November 1991.

e. Non-refereed proceedings

1. Fentiman, A.W., T. Jevremovic, C. Choi, M. Lopez de Bertodano, "Developing a Communications Course for Engineers", Conference on Nuclear Training and Education, February 4-7, 2007.

2. Fentiman, A.W., Miller, P.B., Bausser, J., "Collaboration Between Engineering Faculty and an English Department Writing Center", Proceedings of the Workshop on Engineering Writing and Professional Communications Centers, June 23-25, 1997.

3. Fentiman, A.W. and M.E. Jorat, "Using Graphics to Communicate with a Non-Technical Audience", Proceedings of the ASEE Engineering Design Graphics Division, November 1993.

4. Britton, R.R., A.W. Fentiman, and F.D. Meyers, "A Comparison of Importance Versus Preparation in Engineering Graphics and Computer Training", Proceedings of ASEE Engineering Design Graphics Division Conference, December 1992.

f. Other

1. Fentiman, A.W. et al, "Radiation Education Resources for Ohio", a set of 39 fact sheets on radiation and low-level waste, 1993-1996.

2. Graduate Research Program

a. M.S. Degrees Completed

Date Student Name, Field of Study, Thesis Topic

2012 Lenka Kollar, Nuclear Engineering, "Proliferation Resistance Assessment of Various Methods of Spent Nuclear Fuel Storage and Disposal"

2011 Melissa Van Kleeck, Nuclear Engineering, "A Model for Recovery of Scrap Monolithic Uranium Molybdenum Fuel by Electrorefining"

2011 Thomas Adams, Nuclear Engineering, “A Study of Palladium Thin-Films for Radioisotope Storage on Betavoltaic Power Source Designs”

2007 Chad Cramer, Nuclear Engineering, “Developing an Aspen Plus Model of the Front End of a Used Nuclear Fuel Reprocessing Facility Using the UREX+1a Process”.

2007 Sylena Smith, Nuclear Engineering, MCNP Simulation of Neutron Energy Spectra for a TN-32 Dry Storage Cask”.

2006 Christopher Wakefield, Nuclear Engineering, exact title of thesis unavailable.

2004 Matthew Milazzo, Nuclear Engineering and Public Policy, “Determining the Vector Priorities of Options for Nuclear Power in Supporting the Energy Requirements of Personal Transportation Vehicles in the U.S.”

2004 Douglas Osborn, Nuclear Engineering, “Case Studies On The Risk Based Analysis Of Transporting Spent Nuclear Fuel Using The Railroad System”.

1999 Shann Coleman, Nuclear Engineering and Civil (Environmental Engineering), “A Risk Based Analysis of Transporting High-Level Radioactive Waste in Ohio.”

1999 Shannon Dettmer, Environmental Science, non-thesis option.

1998 Kevin Vought, Nuclear Engineering and Civil (Environmental) Engineering “Modification of the Reactive Transport Laplace Transform Inversion Code (RELAP)”.

1998 Pamela Longmire, Nuclear Engineering, “Nonparametric Statistical Methods Applied to the Final Status Decommissioning Survey of Fort St. Vrain’s Pre-stressed Concrete Reactor Vessel”.

1997 Michael Smith, Nuclear Engineering and Environmental Science, “Investigation of Radionuclides at a Sludge Land-Application Site”.

1997 Gregory Bowen, Environmental Science, “Development of a Methodology for Characterizing Nuisance Odors”.

1996 David Opdycke, Environmental Science, “The Effect of Factual Information on Risk Perceptions of Low-Level Radioactive Waste”.

1996 Robert Winters, Nuclear Engineering, “The Impact of Selected Waste Minimization Techniques on Waste Volumes Produced from Decontamination and Decommissioning of Nuclear Power Plants”.

1996 Timothy Leet, Nuclear Engineering, “Enriched Uranium in Environmental Soils: An Analysis of the Effect of Uranium Enrichment on Human Health Risk”.

1995 Alvin Liau, Nuclear Engineering and Environmental Science, “Fiber Optic Components in Radiation Environments”.

1995 Michael Catalan, Nuclear Engineering and Mechanical Engineering, “Design of a Radiation Shielded CCD Camera Assembly”.

1994 Jonathan Fortkamp, Nuclear Engineering, “An Analytical Model for a Low-Level Uranium Detector for Soil Analysis”

1994 Harry Felsher, Nuclear Engineering, non-thesis option.

1994 Jeff Henkel, Nuclear Engineering, “The Time-Dependent Behavior of Radon and Water Vapor Mixture Flowing in a Packed Charcoal Bed”.

1993 Matt Jorat, Nuclear Engineering, “Investigation of Volume Reduction Options for Low-Level Radioactive Waste”.

b. Ph.D. Degrees Completed

Date Student Name, Field of Study, Thesis Topic

2014 Melissa Rose, Nuclear Engineering, ““Investigation and Modeling of Uranium Polarization for the Electrorefining of Scrap U-Mo Foils”

2006 David Smith, Environmental Engineering, “An Integrated Approach to Evaluating the Environmental Impact Following a Radiological Dispersal Event”.

2002 Andrew Karam, Environmental Engineering, “Changes in Background Cosmic Radiation Dose during the History of Life on Earth”.

1999 Jonathan Fortkamp, Nuclear Engineering, “Characterization of the Radiation Environment for a Large Area Interim Spent Nuclear Fuel Storage Facility”.

3. Research Grants and Contracts

a. Funded (Previous)

Source	Dates	Description	Amount	Co-PIs
Battelle	1990-93	Criticality safety studies	$62,000	PI
Fernald	1991-94	Radon capture and retention	$43,500	Co-PI T. Blue
Mound Lab	1992-94	Waste minimization studies	$23,000	PI
Mound Lab	1994-95	Waste process planning	$10,000	PI
Midwest Low Level Waste Compact	1992-93	LLW Education Program-Phase I	$274,700	PI
Midwest Compact	1993-95	LLW Education Program – Phase II	$333,100	PI
Midwest Compact	1995	LLW Education Program – Phase III	$141.900	PI
NSF	1993-96	Workshop to improve retention of women engineering students	$96,400	PI
Fernald	1994	Envi. health and safety audit	$17,000	PI
Fernald	1994-95	Review risk assessment work plan	$11,200	PI
Fernald	1995	Detection of uranium in soils	$ 8,900	PI
General Motors	1995-99	Summer Engineering Experience for Women	$100,000	PI
NSF	1995-97	Gateway Engineering Education Coalition – student professional development	$56,900	PI

Source	Dates	Description	Amount	Co-PIs
NSF	1995-97	Gateway – educational methodology		

		- teams	$55,400	PI
NSF	1996-97	Gateway – OSU Writing Center	$12,500	PI
NSF	1999-2000	Planning grant – recruiting women engineering students	$30,000	PI
Public Utilities Commission	2000-01	Risk assessment for transporting HLW in Ohio	$98,000	PI
NSF	2001-04	Science fellows supporting teachers in the classroom	$1,167,700	Co-PI
USEC	2003-04	Explore alternatives for characterization of deposits	$58,600	PI
USEC	2003-04	Alternatives to remove deposits	$58,600	PI
GE	2002-07	Math Excellence – K-12	$500,000	PI
NSF	2003-05	Bridges to engineering education	$100,000	PI
DOE	2004-05	Innovations in nuclear infrastructure and education	$150,000	PI
Ohio Emer. Mgmt. Agency	2003-05	Dosimeter calibration	$164,700	PI
NRC	2004-06	Instrumentation and control, PRA	$1,471,000	PI
DOE	2005-07	Partnership program with HBCU	$375,000	Co-PI
DOE	2007-08	GNEP Readiness – education	$20,000	Co-PI
NRC	2008-2011	Faculty Development Grant	$165,000	PI
DOE	2010-2013	DOE Fellowship host ($ this year)	$ 70,000	PI
NRC	2010-2013	NRC Fellowship	$395,200	PI

NRC	2010-2011	NRC Curriculum	$ 40,122	Co-PI
ENGR 2020	2010	Entrepreneurship in Courses	$ 3,000	PI
ANL	2011-2014	Support for Van Kleeck Research	$188,855	PI
NSF	2009-2015	REACH Scholars Program	$573,597	Co-PI
ANL	2011-2014	Support for Van Kleeck Research	$188,855	PI

b. Funded (active)

Source	Dates	Description	Amount	Co-PIs
NSF	2012-2017	PIRE: Nuclear Energy Systems And Materials under Extreme Conditions	$2,328,366	Co-PI
NRC	2014-2018	Nuclear Engineering and Health Physics Fellowship	$391,620	PI
NRC	2014-2017	Nuclear Engineering and Health Physics Scholarship	$194,400	PI
Purdue	2016-2018	Pathways to Increased Diversity For Graduate School and the Professoriate	$150,000	PI
NSF	2017-2020	EAGER: Impact of Engineering Education	$300,000	PI

SECTION C. Other Evidence of Professional Recognition

a. Selected Professional Society Leadership

American Nuclear Society

- Chair, Planning Committee – 2013 - 2014
- Chair, President's Special Committee on Used Nuclear Fuel Management Options 2010-2011
- Chair, Local Sections Committee – 2008 – 2010
- Chair, Public Policy Committee – 2008 - 2011
- Vice-Chair, Chair Elect, Local Sections Committee - 2007
- Vice-Chair, Chair Elect, Public Policy Committee - 2007

Member, President's Special Committee on Future Federal Investment in Nuclear Education – 2006-07
Member, Board of Directors, 2003-2006, 2010-2011
Chair, National Planning Committee 2001-2004
Vice-Chair, National Planning Committee 2000-2001
Member, President's Task Force on Strategic Planning – 2000
Chair, Southwest Ohio Section, 1991
Executive Committee – Ohio Section – 2004-present
Advisor, OSU Student Branch, 1991-1999, 2001-2004

American Society for Engineering Education
Chair, Nuclear and Radiological Engineering Division, 2002
Program Chair, Nuclear and Radiological Engineering Division, 2001
Chair, Environmental Engineering Division, 2000
Program Chair, Environmental Engineering Division, 1999
Moderator and organizer of numerous sessions

Sigma Xi
Chair, Central Ohio Section, 2002

b. Selected Institutional and Professional Service

Program Co-Chair, ASEE IL-IN Section Conference, Purdue, April 7, 2018
Interim Chair, Engineering Education Graduate Committee – Jan-Aug 2018
Member, Search Committee for Chancellor, Purdue Fort Wayne – 2017
Reviewer, National Defense Science and Engineering Graduate Fellowship applications – 2017
Chair, Search Committee for Executive Director of Engineering Professional Education at Purdue University – 2016

Member, LWRS RD&D Working Group, a committee of a dozen industry leaders and faculty members advising the Nuclear Energy Division of the US Department of Energy on the research, development, and demonstration agenda for DOE-NE over the next decade – Sept 2015 – March 2016
Purdue Business Intelligence Strategic Priorities Committee – 2014-present
Member, Interdisciplinary Graduate Program Executive Committee, Purdue University - 2014-present
Participant, National Academies Keck Futures Initiative – Conference on the Future of Advanced Nuclear Technologies, November 14-17, 2013, Beckman Center, Irvine, California.
General Chair, Conference on Nuclear Training and Education (CONTE) – 2013
Testimony before Nuclear Regulatory Commission – on Operator Licensing Exam

Process, Washington, DC, November 27, 2012
Member, College of Engineering Strategic Growth Committee – 2011-2017
Chair, Nuclear Engineering Department Heads Organization, 2010-11
Member, Independent Review Team formed by NEI and INPO to recommend improvements for Initial Licensing exam process for NRC licensing of reactor operators – 2010-11
Testimony before Blue Ribbon Commission on America's Nuclear Future, Washington DC – on high level radioactive waste management, November 2010
Member, National Nuclear Accrediting Board (accredits training programs at civilian nuclear power plants in the US) – 2003 – 2010
Member, Board of Directors, Nuclear Energy Institute – 2008 - 2011
Member, Strategic Advisory Committee, Idaho National Laboratory Division of National and Homeland Security – 2008 – 2011
Chair, Nuclear Nonproliferation Steering Committee, Idaho National Laboratory – 2006-2008
Member, Educational Advisory Committee, Idaho National Laboratory, 2006-2010
Member, University of Tennessee Nuclear Engineering Advisory Board – 2008-2014
Member, Penn State Mechanical and Nuclear Engineering Industrial and Professional Advisory Committee – 1990-1996, 2008-2014
GEM Executive Committee, Vice- President for University Strategy and Policy – 2007 - 2013
Reviewer, National Science Foundation Graduate Research Fellowship applications, 2007-2010
Member, Editorial Board, ASCE Journal of Energy Engineering – 2007-2010
Search Committee for Dean of the Graduate School – 2008
Member – College of Engineering Financial Resources Allocation Committee – 2005
Reviewer – EPA Fellowship applications – 2005
Member ASEE Sharon Keillor Award Committee 2003- 2005, Chair 2005
Battelle Endowment for Technology and Human Affairs - OSU proposal review committee, 2003 – 2006
Search Committee for Dean of the College of Engineering – 2003-2004
Reviewer – Nuclear Technology – 2003-present
American Nuclear Society Task Force on Nuclear Workforce – 2002 – 2004
Member, Mechanical Engineering Department Executive Committee – 2001 – 2006
Member, Civil Engineering Department Executive Committee – 2001 - 2003
Council on Academic Excellence for Women, Ohio State University, 1999-2000
OSU Environmental Policy Initiative - Executive Committee (founding member) – 1998-1999
International Nuclear Societies Council – Task Group on Public Acceptance – 1997-98
College of Engineering Task Force on Core Curriculum, 1996-1999
Reviewer, Engineering Design Graphics Journal, 1993-2002
University Radiation Safety Committee, 1992-1996

c. Security Clearances

Previously held: DOE “Q”
Previously held: DOD Top Secret