

Kristin Shrader-Frechette, Biographical Sketch

Kristin Shrader-Frechette has held senior professorships at the University of California and the University of Florida. She is now O'Neill Family Professor, Department of Biological Sciences and Department of Philosophy, at the University of Notre Dame, where she directs the Center for Environmental Justice and Children's Health. She studied physics at Xavier University and graduated summa cum laude, with an undergraduate major in mathematics from Edgecliff College, Xavier University. She received her Ph.D. in philosophy of science from the University of Notre Dame and also did postdoctoral work for 2, 1, and 2 years, respectively, in biology, economics, and hydrogeology. She has held Woodrow Wilson, National Science Foundation, and Carnegie Fellowships in philosophy of science and has held offices/served on committees in the US National Academy of Sciences, the Risk Assessment and Policy Association, the American Philosophical Association, the Philosophy of Science Association, the Society for Philosophy and Technology, and the International Society for Environmental Ethics. Shrader-Frechette has been a member of many boards and committees of the International Commission on Radiological Protection, US Environmental Protection Agency, National Council on Radiation Protection and Measurement, and the US National Academy of Sciences, including its Board on Environmental Studies and Toxicology, its Committee on Risk Characterization, and its Committee on Zinc-Cadmium-Sulfide Dispersions.

In 2004 Shrader-Frechette became only the third American to win the World Technology Award in Ethics. Earlier a Harvard professor won for work in biomedical ethics, and a Princeton professor won for work in development ethics. She won for her work in public-health and environmental ethics. In 2007, *Catholic Digest* named her one of 12 "Heroes for the US and the World" because of her pro-bono environmental-justice (EJ) work with minority and poor communities. In 2011, Tufts University gave her the Jean Mayer Global Citizenship Award for her pro-bono public-health and EJ Work.

Associate Editor of *BioScience* until 2002, Shrader-Frechette is Editor-in-Chief of the Oxford University Press monograph series on Environmental Ethics and Science Policy and spent two terms on the US EPA Science Advisory Board. She also serves on the editorial boards of 23 professional journals. Past-President of the Society for Philosophy and Technology, the Risk Assessment and Policy Association, and the International Society for Environmental Ethics, Shrader-Frechette was the first woman president of all three international organizations (SPT, RAPA, ISEE). She has served as Principal Investigator (PI) for grants from the US National Science Foundation, National Endowment for the Humanities, and Department of Energy. NSF has funded her research for 28 years. Recently she finished research as PI on a \$224,000 NSF grant on ethical/policy issues associated with worker exposure to ionizing radiation. Currently she is a member of the project team for a \$ 3-million NSF grant, "Global Linkages of Biology, Environment, Society," and she is now finishing work as PI on another NSF grant, one examining methodological problems in epidemiological statistics.

Most of Shrader-Frechette's research analyzes mathematical, biological, or ethical problems in risk assessment, public health, or environmental justice--especially those related to radiological, ecological, and energy-related risks. An enthusiastic teacher as well as a researcher, she also has won the annual university-wide award for "Outstanding Teacher." Shrader-Frechette has published more than 380 articles and 17 books/monographs: *Nuclear Power and Public Policy* (1980, 1983); *Environmental Ethics* (1981, 1991); *Four Methodological Assumptions in Cost-Benefit Analysis* (1983); *Science Policy, Ethics, and Economic Methodology* (1984); *Risk Analysis and Scientific Method* (1985); *Nuclear Energy and Ethics* (1991); *Risk and Rationality* (1991); *Policy for Land: Law and Ethics* (1992); *Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste* (1993); *Method in Ecology* (1993); *The Ethics of Scientific Research* (1994), *Technology and Human Values* (1996), *Environmental Justice: Creating Equality, Reclaiming Democracy* (2002), *Taking Action, Saving Lives: Our Duties to Protect Environmental and Public Health* (2007), *What Will Work: Fighting Climate Change with Renewable Energy, Not Nuclear Power* (2011), and *Tainted: How Philosophy of Science Can Expose Bad Science* (2014). Her theoretical essays have appeared in philosophical journals such as *Ethics*, *Journal of Philosophy*, *Philosophy of Science*, and *Synthese*, as well as in science journals such as *Science*, *BioScience*, *Health Physics*, *Conservation Biology*, *Quarterly Review of Biology*, *OIKOS*, and *Trends in Ecology and Evolution*. She has also published in more applied journals such as *Environmental Professional*, *Modern Energy Review*, *Energy Policy Studies*, *IEEE Spectrum*, *IEEE Technology and Society*, *Environmental Ethics*, and *Journal of Business Ethics*. Her books and articles have been translated into 13 languages--Chinese, Czech, Dutch, French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Russian, and Spanish. Shrader-Frechette is currently working on two new volumes: *Risks of Risk Assessment* and *Human Rights*.

Widely requested as a lecturer by university, government, and industrial groups in the Americas, Europe, China, India, Africa, and Russia, Shrader-Frechette has been invited to address the National Academies of Science in three countries. She has served as an advisor to numerous governments and international organizations, including the United Nations and the World Health Organization. She and her husband Maurice, a mathematician/computer scientist, have two children, Danielle and Eric, both National Merit Scholarship winners, both recent honors graduates of Princeton. Danielle is a 2012 Northwestern University law graduate, practicing law in Los Angeles, and Eric is a University of California MD/PhD. who is practicing neurology in California. The family spends free time canoeing, scuba diving, hiking, and doing volunteer work.

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KRISTIN SHRADER-FRECHETTE

Curriculum Vitae

Department of Philosophy and
 Department of Biological Sciences
 100 Malloy Hall
 University of Notre Dame
 Notre Dame, IN 46556-5639

Personal: husband: Maurice Shrader-Frechette, PhD (math)
 children: Eric and Danielle
 hobbies: scuba diving, hiking, ice skating, piano

HIGHER EDUCATION

Xavier University		1966	physics
Edgecliff College, Xavier University	BA (<u>summa cum laude</u>)	1967	mathematics
University of Notre Dame	PhD	1972	philosophy, philosophy of science
University of Florida, U of South Florida	Post-doc (3-year)	1991	biological sciences

EMPLOYMENT HISTORY

Edgecliff College	Philosophy	1971-73	Assistant Professor
U. of Louisville	Philosophy, Natural Sciences	1973-82	Professor
U. of California, Santa Barbara	Philosophy of Science, Environ. Studies	1982-84	Professor
U. of Florida	Philosophy, Natural Sciences	1984-87	Professor
U. of South Florida	Philosophy, Environ. Sciences	1987-98	Distinguished Research Professor
U. of Notre Dame	Philosophy, Biological Sciences	1998-	O'Neill Family Professor

HONORS, AWARDS

Woodrow Wilson National Fellowship		1967-1968
National Science Foundation Fellowship		1968-1971
Carnegie Foundation Fellowship in Philosophy of Science		1971
NDEA Fellowship in Philosophy of Mathematics (declined)		1967-1971
NDEA Fellowship in Philosophy of Science (declined)		1967-1971
Davidson Award, Outstanding Faculty Member, University of Louisville		1977
Kentucky's "Outstanding Young Woman" for 1977		1977
Visiting Philosopher, Council on Philosophical Studies		1980
NEH-NSF "Interdisciplinary Incentive Award"		1982
NSF "Scholar's Award in Philosophy of Science"		1982
US National Academy of Sciences-National Research Council Delegate, Int. Union of Hist. & Phil. of Science		1987
Visiting Philosopher, Council on Philosophical Studies		1987
Chair, Int. Geosphere-Biosphere Program, Int. Union of Hist. & Phi. of Science, Int. Conf. of Scientific Unions (ICSU)		1988-1991
1988 Mead-Swing Lecturer, Oberlin College		1989
1990 GTE Distinguished Lecturer, Michigan Technological University		1990
Chair, Science and Ethics Committee, International Conference of Scientific Unions (ICSU)		1990-1996
1991 Astra Lecturer, McGill University		1991
1991 GTE Distinguished Lecturer, Penn State University; Iowa State University		1991
1992 GTE Distinguished Lecturer, University of Virginia		1992
1993 Spencer Leavitt Lecturer, Union College		1993
1993 John XXIII Lecturer, University of the Pacific		1993
US National Research Council-National Academy of Sciences, Board on Environ. Studies & Toxicology		1993-1996
US National Research Council-National Acad. Sciences, Oversight Com., Envir. Monitor. & Assmt Program (EMAP)		1993-1996
Blue Ribbon Panel, US DOE Performance Evaluation of US Nuclear Facilities		1994-1996
US National Research Council-National Academy of Sciences, Committee on Risk Characterization		1994-1996
US National Research Council-National Academy of Sciences, Evaluation Comm., Zinc-Cadmium-Sulfide		1995-1996
Blue Ribbon Panel, US DOE Performance Evaluation of Sites for Mixed Nuclear Waste		1994-1997
President, Risk Assessment and Policy Association (RAPA)		1997-1999
US National Research Council-National Academy of Sciences, Committee on Ecosystems Services		2002-2003
President, International Society for Environmental Ethics (ISEE)		2000-2003
Catholic Digest Award, one of 12 "Heroes for the US and the World"		2007
US Environmental Protection Agency, Science Advisory Board		2003-2009
Kempelman Lecturer, Hebrew University, Jerusalem		2009
Golden Lecturer, Yale University		2009
Jean Mayer Global Citizenship Award, Tufts University		2011
Member, Ethics Community, US National Academy of Engineering		2012-present
Distinguished Simon Stevin Fellow, Dutch universities		2013
Hausser Lecturer, Montana State University		2014
2016 Nature of Knowledge Lecturer, University of Edinburgh, Scotland		2016
Mysler Lecturer, St. Catherine University, St. Paul, Minnesota		2016

GRADUATE COURSES TAUGHT

Philosophy of Science	Ethics and Economic Methods	Environmental Justice	Ethics
Methods of Philosophy	Philosophy of the Social Sciences	Environmental Risk Assessment	Risk and Consent
Analytic Philosophy	Philosophy of the Natural Sciences	Duties to Future Generations	Environmental Ethics
Science and Values			Analytic Epistemology

UNDERGRADUATE COURSES TAUGHT

Mathematical Logic	Environmental Science	Biomedical Ethics & Public Health	Science and Values
Philosophy of Science	Philosophy of Economics	Public Health Risk Assessment	Social Philosophy
Introduction to Logic	Philosophy of Ecology	Contemporary Ethical Issues	Epistemology
Critical Thinking	Science, Technology, and Values	Environmental Ethics	Policy Analysis
Cost-Benefit Analysis	Ethics of Scientific Research		Ethics and Risk

EDITORIAL WORK

Editor-in-Chief,	Oxford University Press series, "Environmental Ethics and Science Policy," 1988-present		
Editorial Board,	<u>Accountability in Research</u> , 2004-present		
"	<u>Biological Theory</u> , 2004-present		
"	<u>BioScience</u> , Associate Editor, 1994-2002		
"	<u>Business Ethics Quarterly</u> , 2002-present		
"	<u>Eco Spheres</u> , Norwegian Folkets Brevskole, 1993-present		
"	<u>Encyclopedia of the Philosophy of Science</u> , 1996-present		
"	<u>Environmental Ethics</u> , 1981-present		
"	<u>Environmental Values</u> , 1995-present		
"	<u>Ethics and the Environment</u> , 1995-present		
"	<u>Europäische Akademie</u> , 1999-present		
"	<u>Global Health Perspectives</u> , 2012-present		
"	<u>Humanities and Technology</u> , 1980-present		
"	<u>Journal of Agricultural and Environmental Ethics</u> , 1986-present		
"	<u>Journal of Applied Philosophy</u> , 2008-present		<u>Journal of Law and Public Policy</u> , 1987-present
"	<u>Organization and Environment</u> , 1995-present		<u>Philosophy and Technology</u> , 1986-present
"	<u>Philosophy of Science</u> , 2009-present		<u>Poiesis and Praxis</u> , 1999-present
"	<u>Public Affairs Quarterly</u> , 1987-present		<u>Research in Philosophy & Technology</u> , 1982-1986
"	<u>Ralph Bunche Journal of Public Affairs</u> , 2013-present		<u>Risk, Regulation, and Policy</u> , 2009-present
"	<u>Risk: Issues in Health and Safety</u> , 1991-present		<u>Studies in Religion & the Social Order</u> , 1991-present
"	<u>Social Science Research Network</u> , 2009-present		
"	<u>Synthese: An International Journal in Logic, Epistemology, and Philosophy of Science</u> , 1993-present		
Advisory Board,	<u>American Philosophical Association Newsletter on Feminism and Philosophy</u> , 1992-present		
"	Institute for Hydrology and Water Quality, 1995-present		
"	"Integration, Environmental Assessment, and Environmental Indicators," EPA, 1992-present		
"	International Society for Environmental Ethics, 1995-present		
"	National Council on Science and the Environment, 2011-present		
"	Ontario Society for Environmental Ethics, 1994-present		
"	Planet Central TV Cable Network (environmental issues), 1993-present		
"	Technology, Risk, and Society: An International Series in Risk Analysis, 1983-present		
"	"Vision for 2100," PBS TV series on the environment, 1993-present		
Article Referee,	<u>Biology and Philosophy</u> , 1993-present		
"	<u>Behavioral Science</u> , 1975-present		
"	<u>British Journal for the Philosophy of Science</u> , 2007-present		
"	<u>Bulletin of the Ecological Society of America</u> , 1995-present		
"	<u>Conservation Biology</u> , 1993-present		
"	<u>Economics and Philosophy</u> , 1992-present		
"	<u>Energy Policy Studies</u> , 1984-present		
"	<u>Environment International</u> , 1985-present		
"	<u>Environmental Health</u> , 2012-present		
"	<u>Environmental Health Perspectives</u> , 2005-present		
"	<u>Environmental Management</u> , 1985-present		
"	<u>Environmental Professional</u> , 1995-present		
"	<u>Environmental Science and Technology</u> , 1996-present		
"	<u>Ethics</u> , 1987-present		

EDITORIAL WORK (continued)

Article Referee (contd.)	<u>Hypatia</u> , 1988-present	
"	<u>Journal of the American Public Health Association</u> , 2007-present	
"	<u>Journal of Business Ethics</u> , 1983-present	
"	<u>Journal of Medical Ethics</u> , 2008-present	
"	<u>Newsletter on Philosophy and Technology</u> , 1995-present	
"	<u>Philosophy and Economics</u> , 1992-present	
"	<u>Philosophy of Science</u> , 1977-present	
"	<u>Risk Analysis</u> , 1985-present	
"	<u>Science</u> , 1982-present	
"	<u>Science, Technology, and Human Values</u> , 1980-present	
"	<u>Society and Natural Resources</u> , 1989-present	
"	<u>Synthese</u> , 1984-present	
Book Referee,	Ave Maria Press, 2005-present	Cambridge University Press, 1991-present
"	Kluwer Academic Publishers, 1988-present	Macmillan Publishers, 1984-present
"	MIT Press, 1981-present	Oxford University Press, 1987-present
"	Prentice-Hall, 1984-present	Reidel (Kluwer) Press, 1981-present
"	Rowman and Littlefield, 1991-present	Temple University Press, 1992-present
"	University of Arizona Press, 1991-present	University of California Press, 1984-present
"	University of Georgia Press, 1994-present	University Press of Kansas, 1992-present
"	Yale University Press, 1994-present	
Panelist, Referee,	EPA, Atmospheric Research and Exposure Assessment, 1992-present	
"	National Endowment for the Humanities, 1979-present	
"	National Science Foundation, 1980-present	
Program Committee,	1981 American Philosophical Association meeting	
"	1986, 1998, 1996, 2004, 2006 Philosophy of Science Association meeting, Program Committee	
"	1995 Chair, Science Ethics Committee, 10th Congress of Logic, Methodology, Philosophy of Science	
"	1997 Chair, Program Committee, Risk Assessment and Policy Association Meeting	
"	1998 Chair, World Congress of Philosophy, Section on Philosophy and Technology	

MEMBERSHIPS

American Philosophical Association; Advisory Committee on Ethics, 1989-1992
 Daughters of the American Revolution
 Humanities and Technology Association; Board, 1980-1990
 International Society for Environmental Ethics; Nominating Committee 1992-present, President, 2000-2003
 Phi Beta Kappa
 Philosophy of Science Association; Nominating Committee, 1981-1982; Program Committee, 1986, 1998, Editorial Board, 2009-present
 Risk Assessment and Policy Association, 1994-present; President, 1995-1998
 Society for Philosophy and Technology; Vice-President-President-Elect, 1983-1985; President, 1985-1987
 US National Academy of Sciences-National Research Council, Board on Environmental Studies and Toxicology, 1993-1996
 US National Academy of Sciences-National Research Council, Comm. on EPA Environmental Monitoring & Assessment Program, 1993-95
 US National Academy of Sciences-National Research Council, Committee on Risk Characterization, 1994-1996
 US National Academy of Sciences-National Research Council, Committee to Evaluate Zinc-Cadmium-Sulfide, 1995-1997

SELECTED GRANTS

2005-2010 Project Team, National Science Foundation (NSF), "Global Linkages of Biology, Environment, Society"
 2007-2009 Principal Investigator (PI), NSF, SES-0724781, "Three Methodological Rules in Risk Assessment"
 2000-2003 PI, NSF, SES-98-10611, "Nuclear Technology, Ethics, and Worker Radiation Risk"
 1996-1999 PI, NSF, SBR-9512133, "Values and Ecological Risk Assessment"
 1992-1995 PI, NSF, SBE-91-12661, "Environmental Ethics, Uncertainty, and Preservation Policy"
 1992-1993 PI, NSF, DIR-91-12445, "Laws & Explanation in Community Ecology"
 1992 PI, US Department of Energy and Nevada NWPO, Grant DE-FG08-85-NV10461, "Risk Assessment, Expert Judgment, and Impacts of a Yucca Mountain Repository"
 1991-1992 PI, US Dept. of Energy and Nevada NWPO, 685873, 9.3.7, 4-C, "Expert Judgment in Assessing Radwaste Risks"
 1988-1991 PI, NSF, BBS-86-159533, Normative Concepts in Ecology, Consequences for Policy
 1987 Recipient, NSF and National Research Council, Travel Grant, "8th International Congress on Logic, Methodology, and Philosophy of Science," Moscow, USSR
 1984-1987 PI, NSF, Grant ISP-82-09517, "Ethical Issues in Siting Radioactive Waste Facilities"
 1982-1983 PI, NSF, SES-82-05112, "4 Methodological Assumptions in Risk-Cost-Benefit Analysis"
 1981 Recipient, NSF Travel Grant, "German-American Colloquium, Philosophy & Technology"
 1980-1981 PI, University of Louisville, Research Grant, "Public Policy and Radioactive Waste" 1979
 PI, University of Louisville, Research Grant, "Nuclear Policy"
 1977-1978 PI, University of Louisville, Research Grant, "Conceptual Difficulties in High- Energy Physics"
 1976-1977 Project Team Member, Environmental Protection Agency, Grant R-804848-01, "Ohio River Basin Energy Study"
 1974-1975 PI, Kentucky Humanities Council, "Should Nuclear Power Plants Be Built in Environs of Louisville?"

REFEREED PUBLICATIONS

(1A) BOOKS BEING DRAFTED

Radiation Protection and EthicsRisks of Risk AssessmentHow to Lie with Science

(1B) BOOKS, PUBLISHED

- (1) Tainted: How Philosophy of Science Can Expose Bad Science (New York: Oxford University Press, 2014); available at Oxford Scholarship Online at www.oup.com/uk/oso
- (2) What Will Work: Fighting Climate Change with Renewable Energy, Not Nuclear Power (New York: Oxford University Press, 2011); available at Oxford Scholarship Online at www.oup.com/uk/oso
- (3) Taking Action, Saving Lives: Our Duties to Protect Environment and Public Health (New York: Oxford University Press, 2007); available at Oxford Scholarship Online at www.oup.com/uk/oso
- (4) Environmental Justice: Creating Equality, Reclaiming Democracy (New York: Oxford University Press, 2002), 269 pp.; available at Oxford Scholarship Online at www.oup.com/uk/oso; Italian translation forthcoming.
- (5) Technology and Human Values, coedited with Laura Westra (Savage, MD: Rowman and Littlefield, 1997), 472 pp.
- (6) The Ethics of Scientific Research (Savage, MD: Rowman and Littlefield, 1994), 243 pp.
- (7) Method in Ecology: Strategies for Conservation Problems, coauthored with biologist Earl D. McCoy (Cambridge: Cambridge University Press, 1993), 328 pp.⁴
- (8) Burying Uncertainty: Risk and the Case Against Geological Disposal of Nuclear Waste (Berkeley: University of California Press, 1993), 346 pp.⁶ Available at www.netlibrary.com.
- (9) Policy for Land: Law and Ethics, coauthored with political scientist Lynton K. Caldwell (Savage, MD: Rowman and Littlefield, 1993), 333 pp.
- (10) Expert Judgment in Assessing Radwaste Risks (Carson City, Nevada: Nuclear Waste Project Office/US Department of Energy, 1992), 225 pp.⁶
- (11) Risk and Rationality (Berkeley: University of California Press, 1991), 312 pp. Available at www.netlibrary.com. Italian edition, Valutare il rischio: Strategie e metodi di un approccio razionale, translated by C. Poli and F. Bizzotto (Milano: Guerini & Associati, 1993), pp. 297. Japanese edition, Risuku to Goorise, translated by Tsuyoshi Matsuda (Kyoto: Showado, 2007).
- (12) Nuclear Energy and Ethics, edited volume (Geneva: World Council of Churches, 1991), 233 pp.
- (13) Risk Analysis and Scientific Method: Methodological and Ethical Problems with Evaluating Societal Hazards (Boston: Kluwer, 1985), 232 pp.²
- (14) Science Policy, Ethics, and Economic Methodology: Some Problems with Technology Assessment and Environmental-Impact Analysis (Boston: Kluwer, 1984), 321 pp. (Italian translation is forthcoming).
- (15) Four Methodological Assumptions in Risk-Cost-Benefit Analysis (Springfield, Virginia: National Technical Information Service, 1983), 242 pp.²
- (16) Environmental Ethics (Pacific Grove, California: Boxwood Press, 1981); second edition 1991, 358 pp.; Japanese translation: Koyo Shobo (Tokyo: the English Agency, 1992). Korean translation, by Il Bang Kim, to be published by Myung Jin Dang.
- (17) Nuclear Power and Public Policy: Social and Ethical Problems with Fission Technology (Boston: Kluwer, 1980); second edition, (1983). Spanish Translation: Politica y energia nuclear: Problemas eticos y sociales de la tecnologia de fision, trans. J.L. Rey-Barreau (Madrid: Alianza Editorial, 1983), 176 pp.

1 This list excludes several essays on teaching philosophy and a number of book reviews and review articles.
 2 This work was done, in part, thanks to National Science Foundation Grant SES82-05112.
 3 This work was done, in part, thanks to National Science Foundation Grant ISP-82-09517.
 4 This work was done under National Science Foundation Grant Number BBS-8619533.
 5 This work was done under US Department of Energy Grant Number DE-FG08-85-NV10461.

REFEREED PUBLICATIONS, continued

(2) REFEREED ARTICLES PUBLISHED¹

2019, incomplete

- (18) "Environmental Injustice and Flawed Technology Assessment: The Case of Native Americans and Nuclear Injustice," in Oxford Handbook on Philosophy and Technology, ed Shannon Vallor, in press.
- (19) "How Regulatory Science Minimizes Threats," with B. Abt, Global Health Perspectives 2, no. 1 (2019), in press.
- (20) "Ethical Energy Choices," Oxford Handbook in Environmental Ethics, ed. Allen Thompson and Steve Gardner, Oxford University Press, 2019, pp. 391-403.

2018

- (21) "Human Rights against Serious Harm by Polluters Versus Protecting 'Susceptible; Populations'," American Journal of Bioethics 18, no.3 (2018):29-41.
- (22) "Economic Growth, Human Development, and Welfare," with A. M. Amexquita, Simon Caney, et al. in Social Progress for the 21st Century, vol. 1, ed. Olivier Bouen, Marc Fleurbaey, et al, of the International Panel on Social Progress IPSP (Cambridge: Cambridge University Press, 2018), 141-186.
- (23) "Normative Philosophy of Science: Responding to Special-Interest Science," Axiomathes: Epistemologia 28, no. 6 (2018): 679-693; DOI: [10.1007/s10516-018-9402-6](https://doi.org/10.1007/s10516-018-9402-6)
- (24) "Using Computer Models to Mischaracterize Situations of Bayesian Uncertainty about Serious Threats: Scientific and Ethical Problems," in Information, Communication, and Automation-Technology Ethics, ed. Spyros Tzafestas (Hauppauge, New York: Nova Science Publishers), Ch. 9.
- (25) "Reliability of Air-Pollution Data Sets in Health-Risk Screening: The Case of Ozone and Chronic Obstructive Lung Disease," Journal of Community and Preventive Medicine 1, no.3 (2018): in press.

2017

- (26) "How Some Scientists and Engineers Contribute to Environmental Injustice," US National Academy of Engineering: The Bridge 47, no. 1 (2017): 36-44.
- (27) "Pesticides, Neurodevelopmental Disagreement, and Bradford Hill's Guidelines," with Christopher ChoGlueck, Accountability in Research 24, no. 1 (2017):30-42; <http://dx.doi.org/10.1080/08989621.2016.1203786>
- (28) "Ethical Energy Choices," Oxford Handbook in Environmental Ethics, ed. Allen Thompson and Steve Gardner, Oxford University Press, 2017, pp. 391-403.
- (29) "Mischaracterizing Uncertainty in Environmental Health Sciences," Diametros 53 (September 2017): 96-124 doi: [10.13153/diam.53.0.1103](https://doi.org/10.13153/diam.53.0.1103)
- (30) "Review of Martin Peterson, *The Ethics of Technology: A Geometric Analysis of Five Moral Principles*," Notre Dame Philosophical Reviews (October 2017); <http://ndpr.nd.edu/news/the-ethics-of-technology-a-geometric-analysis-of-five-moral-principles/>.

REFEREED PUBLICATIONS, continued

(2) REFEREED ARTICLES PUBLISHED¹

2016

- (31) "Biased Dismissal of Epigenetic Evidence for 'Clean-Diesel' Carcinogenicity and Genotoxicity," with Catherine McQuestion, Austin J of Genetics and Genomic Research 3, no 1 (2016); 1019; ISSN : 2471-030X
- (32) " 'Special-Interest Science' Harms Diesel-Polluted Communities Like East Los Angeles," with Catherine McQuestion, *Journal of Community Medicine and Public-Health Care* 2016, 3: 016; <http://heraldopenaccess.us/fulltext/Community-Medicine-&Public-Health-Care/Special-Interest-Science-Harms-Diesel-Polluted-Communities-Like-East-Los-Angeles.pdf>
- (33) "Uncertainty Analysis, Nuclear Waste, and Million-Predictions," in Sven Ove Hansson and Gertrude Hirsch Hardorn, eds., The Argumentative Turn in Policy Analysis (New York: Springer, 2016), pp. 291-304.
- (35) "La objetividad y los deberes profesionales con respecto a la Ciencia y la Tecnología," (Objectivity and Professional Duties regarding Science and Technology), *Factotum: Revista de Filosofía* 16, no. 2 (2016), 1989-9082

2015

- (36) "Flawed Science Delays Smelter Cleanup and Worsens Health," with M. Spear and R. Thomas, Accountability in Research 22, no. 1 (2015): 41-60; doi: 10.1080/08989621.2014.939746.
- (37) "State-Variable and Representativeness Errors Conceal 'Clean Diesel' Harm: Methodologically Fallacious ACES Research," Journal of Environment and Health Sciences 1, no. 3 (2015); doi: 10.15436/2378-6841.15.019.
- (38) "Resolving Scientific Controversy over Smelter Risks and Neurodegenerative Effects of Metals," with R. Thomas, AIMS Environmental Science 2, no. 1 (2015): 42-72; doi: 10.3934/environsci.2015.1.42 .
- (39) "Flawed Scientific-Evidence Standards and Diesel Regulations, with A. Pusateri, Accountability in Research, 22, no. 3 (2015): 162-191.
- (40) "Wearing Glaucon's Ring, Stopping Invisible Pollution Harms: Epigenetic Toxins, Child Malprogramming, Disease-Dysfunction," in XXIII World Congress of Philosophy Philosophy as Inquiry and Way of Life, ed. Konstantine Boudouris,
- (41) Costas Dimitracopoulos and Evangelos Protopapadakis, keynote paper for "Technology and Environment" (Bowling Green, Ohio: Philosophy and Documentation Center, 2015), pp. 281-286.
- (42) "Taking Action on Developmental Toxicity: Scientists; Duties to Protect Children," in Environmental Hazards and Neurodevelopment, ed. C. Croft (Waretown, NJ: Apple Academic Press, 2015), pp. 307-338.
- (43) "Ethical Energy Choices," chapter 34, in Oxford Handbook on Environmental Ethics, edited S. Gardner and A. Thompson (New York: Oxford University Press, 2015).³
- (44) "Distributive Justice, Participative Justice, and the Principle of *Prima Facie* Political Equality," in Steve Vanderheiden (ed.), Environmental Justice (Farnham, Surrey UK: Ashgate, 2015), in press.
- (45) "Biomass Incineration: Scientifically and Ethically Indefensible," in Ethics of Climate Governance, ed. Catriona McKinnon and Aaron Maltese (London: Rowman and Littlefield, 2015), PP. 155-173.
- (46) "Special-Interest Science and Flawed Statistical Inference in Pharmacology," in B. Osimani, Uncertainty in Pharmacology (New York: Springer, 2015).
- (47) "Rights to Know and the Fukushima, Chernobyl and Three Mile Island Accidents," in Nuclear Ethics, ed. S. Roesser and B. Taebi (New York: Cambridge University Press, 2015), pp. 53-66.

REFEREED PUBLICATIONS, continued

(2) REFEREED ARTICLES PUBLISHED¹

2014

- (48) "Ostanobntb Jekologzhchesknn Vrel..." ("Taking Action to Stop Pollution Harm to Children and Future Generations"), translated into Russian by Galina Belkina Frolova, Chelovek: Russian Academy of Sciences, no. 3 (2014); also reprinted in New Results in the Human Sciences (Moscow: URSS Publishers, 2014), pp. 250-258.
- (49) "Managing Biomass Risks: Flawed Science, Flawed Ethics, and Flawed Regulations," Ethics and Risk Management, ed. L. Svedin (Charlottesville, NC: Information Age Publishing, 2014).
- (50) "Liberation Science and the Option for the Poor," in The Preferential Option for the Poor, Beyond Theology, ed. D. Groody and G. Gutierrez (Notre Dame: University of Notre Dame Press, 2014), pp. 120-148.
- (51) "Ethical Scapegoating: How Polluters Blame the Victims of their Environmental Injustice," published in English and in Chinese, Green Thought and Environmental Politics, ed. by Morgan Chih-Tung Huang and Ruey-Chyi Hwang (Beijing: ASIAWORLD, 2014).
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 3 This work was done, in part, thanks to National Science Foundation Grant ISP-82-09517.
 4 This work was done under National Science Foundation Grant Number BBS-8619533.
 5 This work was done under US Department of Energy Grant Number DE-FG08-85-NV10461.
 6 This work was done under US Department of Energy Grant Number 685873, 9.3.7, 4C.
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4 This work was done under National Science Foundation Grant Number BBS-8619533.

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6 This work was done under US Department of Energy Grant Number 685873, 9.3.7, 4C.

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1 This list excludes several essays on teaching philosophy and a number of book reviews and review articles.

2 This work was done, in part, thanks to National Science Foundation Grant SES82-05112.

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4 This work was done under National Science Foundation Grant Number BBS-8619533.

5 This work was done under US Department of Energy Grant Number DE-FG08-85-NV10461.

6 This work was done under US Department of Energy Grant Number 685873, 9.3.7, 4C.

7 This work was done, in part, thanks to National Science Foundation Grant SES-98-10611.

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7 This work was done, in part, thanks to National Science Foundation Grant SES-98-10611.

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- (356) "The Conceptual Risks of Risk Assessment," in A. Flores (ed.), Ethics and Risk Management in Engineering (Lanham, MD: University Press of America, 1989): 73-90. Reprinted from IEEE Technology and Society.²
- (357) "Ecological Theories and Ethical Imperatives," in Scientists and Their Responsibility, ed. W.R. Shea and B. Sitter (Canton, MA: Watson, 1989), pp. 73-104.³
- (358) "Helping Science Serve Society," in Hoe Toonaangevend is de Universiteit? ed. H. de Ward (Groningen: University of Groningen, The Netherlands, 1989), pp. 75-89.

1 This list excludes several essays on teaching philosophy and a number of book reviews and review articles.

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7 This work was done, in part, thanks to National Science Foundation Grant SES-98-10611.

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1 This list excludes several essays on teaching philosophy and a number of book reviews and review articles.

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7 This work was done, in part, thanks to National Science Foundation Grant SES-98-10611.

(2) REFEREED ARTICLES PUBLISHED

1987, continued

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BOOK REVIEWS

Professor Shrader-Frechette has written a great many book reviews in philosophical journals, such as Synthese and Ethics, as well as in other scholarly periodicals. Her reviews in the latter category have appeared in Agriculture and Human Values, Ecology Law Quarterly, Environmental Ethics, Environmental Management, Environmental Review, Environment International, Journal of the American Chemical Society, Landscape Architecture, The Public Historian, Quarterly Review of Biology, Risk Analysis, Social Indicators Research, Technology and Culture, and related journals. Her reviews also have appeared in popular journals such as America, Bulletin of the Atomic Scientists, Environment, and Sierra.

REFEREED AND INVITED PAPERS

Professor Shrader-Frechette has presented numerous papers throughout the United States, Canada, Europe, Africa and Asia. Some of these were refereed and given at professional meetings (e.g., of the American Association for the Advancement of Science, the American Philosophical Association, the Ecological Society of America, and the Philosophy of Science Association). Others were invited presentations for special colloquia (e.g., the Boston Colloquium for the Philosophy of Science, the Pittsburgh Colloquium for the Philosophy of Science, and the Pugwash Conference), or invited presentations for professional meetings (e.g., the 1982-1983 APA meeting in Berkeley, and the 1983-1984 APA meeting in Boston). Some of the institutions from which she has received speaking invitations include: Academy for Technology Assessment (Braden-Wurttemberg, Germany); University of A Coruna (Spain); U of Alabama; U of Alaska; U of Alberta; American Association for the Advancement of Science; U of Arizona; Arizona State U; College of the Atlantic; University of Bahia (Brazil); Baker U; Ball State U; Baylor U; Battelle National Labs; U of Bergen (Norway); Boston U; Brown U; U of British Columbia; Bryn Mawr; U of California, Berkeley; U of California, San Diego; U of California, Santa Barbara; Cambridge U (UK); Carleton U (Canada), Case Western Reserve U; U of Chicago; U of Cincinnati; Clark U; Clemson U; U of Colorado, Boulder; Cornell U; U of Maria-Curie-Sklodowska (Poland); Dalhousie U (Nova Scotia); Dartmouth College; U of Delaware; Delft U of Technology; Denison U; Econometrica, Milan, Italy; Emory U; Environmental Research Labs, EPA; Evergreen College; U of Florida; Florida State U; Franklin Pierce Law Center; George Mason U; Georgetown U; U of Georgia; Georgia Institute of Technology; Georgia State U; Georgetown U; U of Gothenburg (Sweden); U of Groningen (Netherlands); U of Guelph (Ontario); Harvard U; Hastings Center; U of Hawaii; Hebrew U (Israel); U of Hokkaido (Japan); U of Houston; U of Idaho; Indiana U; International Executive Forum (San Diego); Iowa State U; James Madison U; Jewish Theological Seminary, New York; Johns Hopkins University; U of Kentucky; Kobe U, Japan; Konrad Lorenz Institute (Milan); Lafayette College; London School of Economics; U of Maryland; Massachusetts Institute of Technology; McGill U; Miami U; U of Michigan; Michigan State U; U of Minnesota; U of Milan (Italy); U of Minnesota, U of Missouri; U of Montana; Moscow State U (USSR); National Conference of Catholic Bishops; U of Nevada, Las Vegas; U of Nevada, Reno; U of New England; U of New Hampshire; U of New Mexico; State U of New York; New York Academy of Sciences; North Carolina State U; U of North Carolina, Chapel Hill; U of North Texas; Northwestern U; U of Notre Dame; Nova Scotia Agricultural College; Oak Ridge National Labs; Oberlin College; US Office of Personnel Management; Ohio State U; U of Oregon; Oregon State U; U of Oslo (Norway); U of Ottawa (Canada); U of Padua (Italy); Penn State U; U of Pittsburgh; Princeton U; Purdue U; Resources for the Future; Rice University; U of Richmond; U of San Francisco; Santa Clara University; Sarah Lawrence College; U of South Carolina; Southern Illinois U; Swedish Institute for Future Studies (Stockholm); the Swedish Risk Academy (Stockholm); Swiss Academy of Sciences; U of Tel Aviv (Israel); U of Tennessee; U of Toledo; U of Toronto; U of Toulouse (France); U of Trondheim (Norway); Tufts University; Twente Technological U (The Netherlands); USSR Academy of Sciences; Utah State U; United Nations Environment Programme; University College, London; Polytechnic U of Valencia (Spain); Vanderbilt U; Virginia Polytechnic Institute and State U; U of Victoria (British Columbia); U of Vienna (Austria); U of Washington; Washington State U; U of Waterloo (Canada); Western Behavioral Sciences Institute (San Diego); Williams College; U of Winnipeg (Manitoba); U of Wisconsin; Woods Hole Oceanographic Institution; World Council of Churches (Switzerland); World Resources Institute; U of Wyoming; Yale University.

SELECTED UNIVERSITY AND COMMUNITY SERVICE, PRESENT AND PAST

Faculty Advisor, ND GlobeMed, 2008-present
Notre Dame Graduate Council, 1998-2000
ND Kroc Inst. Int.. Peace Studies, Fellow, 1999-present
Steering Comm., ND Hist-Philosophy of Science, 1998-00
USF Library Focus Group, 1995-1998
Board of Directors, USF Division of Sponsored Research, 1994-1995
Chair, Distinguished Research Professors' Course Comm., 1992-1996
Graduate Committee, Department of Philosophy, 1990-1997
Chair, Department Library Committee, 1990-1998
Chair, Distinguished Research Professor Screening Comm., 1987-1992
Colloquium Coordinator, Philosophy Department, 1988-1990
Graduate Coordinator, Department of Philosophy, 1985-1986
University Graduate Council, 1983-1984
Chair, Central U Library Committee, 1982
Chair, University Commission on Academic Excellence, 1982
Chair, University Plans and Policy Committee, 1981
Vice-Chair, University Faculty Senate, 1981
Democratic Party Committee Woman, 35th Legislative District, Precinct B-11, 1976-80
Governing Board, Louisville Civil Liberties Union, 1976-1979
Advisor, National Consortium, Black Professional Development, 1975-1980
Local Coordinator, International Safe Energy Conference, 1978
Energy Advisor, Louisville Board of Aldermen, 1975-1978
Faculty Advisor, Students for Environmental Awareness, 1999-01
ND University Committee on International Studies, 1998-2000
ND Hesburgh Lecture Series, 1998-present