

Kristin Shrader-Frechette, Biographical Sketch

Kristin Shrader-Frechette has held senior professorships at the University of California and the University of Florida. Currently she is O'Neill Family Professor, Department of Biological Sciences and Department of Philosophy, at the University of Notre Dame, where she also directs the Center for Environmental Justice and Children's Health. She studied physics at Xavier University and then graduated summa cum laude, in 1967, with an undergraduate major in mathematics from Edgecliff College, Xavier University. In 1972, she received her Ph.D. in philosophy from the University of Notre Dame. Shrader-Frechette also did postdoctoral work for 2, 1, and 2 years, respectively, in biology (community ecology), economics, and hydrogeology. She has held Woodrow Wilson Foundation, National Science Foundation, and Carnegie Foundation 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 National Research Council/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 work with minority and poor communities. 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 a member of the US EPA Science Advisory Board. She also serves on the editorial boards of 18 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 National Science Foundation, the National Endowment for the Humanities, the Council on Philosophical Studies, and the US Department of Energy. NSF has funded her research for 25 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 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 350 articles and 15 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), and Taking Action, Saving Lives: Our Duties to Protect Environmental and Public Health (2007). 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, Environment and Values, 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: Nuclear Power and Climate Change and Risks of Risk Assessment.

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 different 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 recent honors graduates of Princeton. Danielle is a financial analyst for Disney, and in 2007 Eric completed an M.D./Ph.D. at the University of California. The family spends free time canoeing, scuba diving, hiking and doing volunteer work.

