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Energy Ethics in Science and Engineering Education Bibliography

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Description

This bibliography contains articles on ethics education in science and engineering, energy education and policy, and energy ethics.

Body

This bibliography contains articles on ethics education in science and engineering, energy education and policy, and energy ethics. This bibliography was compiled as part of the Energy Ethics in Science and Engineering Education collaborative project between the National Academy of Engineering and Arizona State University.

Anderson, M.S., A.S. Horn, K.R. Risbey, E.A. Ronning, R. De Vries, and B.C. Martinson. 2007a. What do mentoring and training in the responsible conduct of research have to do with scientists' misbehavior? Findings from a national survey of NIH-funded scientists. *Academic Medicine* 82(9): 853-60.

Anderson, M.S., E.A Ronning, R. De Vries, and B.C. Martinson. 2007b. The perverse effects of competition on scientists' work and relationships. *Science and Engineering Ethics* 13(4): 437-461.

Anderson, M. S., B.C. Martinson, and R. De Vries. 2007c. Normative dissonance in science: Results from a national survey of U.S. scientists. *Journal of Empirical Research in Human Research Ethics*

2(4): 3-14.

Balogh, B. 1993. *Chain Reaction: Expert Debate and Public Participation in American Commercial Nuclear Power 1945-1975.* Cambridge: Cambridge University Press.

BECCC (Behavior, Energy, and Climate Change Conference). 2009. http://peec.stanford.edu/events/2009/becc/#BECC 2009 Conference Program w/ Downloadable Presentations. Accessed 11/27/09.

Bostrom, A. 2005. Risk assessment. Pp. 1640-1642 in *Encyclopedia of Science, Technology, and Ethics,* C. Mitcham, ed. US: Thomson Gale.

Bozeman, B., and D. Sarewitz. 2005. Public value failures and science policy. *Science and Public Policy* 32(2): 119–136.

CGS (Council of Graduate Schools). 2008a. Best Practices in Graduate Education for the Responsible Conduct of Research. Washington, DC: Council of Graduate Schools.

CGS. 2008b. The Project for Scholarly Integrity in Graduate Education: A Framework for Collaborative Action. Online. Available at http://www.cgsnet.org/best-practices-graduate-education-responsible-conduct-research.

Crocker, D. 2008. *Ethics of Global Development: Agency, Capability, and Deliberative Democracy*. Cambridge: Cambridge University Press.

Dietz, T., and P.C. Stern, eds. 2002. *New Tools for Environmental Protection: Education, Information, and Voluntary Measures. Washington, DC: National Academies Press*

Fisher, E., and M. Lightner. 2009. Entering the social experiment: a case for the informed consent of graduate engineering students. *Social Epistemology* 23(3): 283-300.

Fishkin, J.E. 2009. *When the People Speak: Deliberative Democracy and Public Consultation*. New York: Oxford University Press.

Frechtling, J. 2002. *The 2002 User Friendly Handbook for Project Evaluation*. Prepared under Contract to Westat, REC 99-12175, for the Division of Research,

Evaluation and Communication, Directorate for Education & Human Resources, National Science Foundation.

Froschauer, K. 1999. *White Gold: Hydroelectric Power in Canada*. Vancouver: University of British Columbia Press.

Geels, F.W. 2002. Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy* 31(8-9): 1257-1274.

Gilbert, M. 2000. *Sociality and Responsibility: New Essays in Plural Subject Theory*. Lanham, MD: Rowman and Littlefield.

Glenna, L.L. 2010. Value-laden technocratic management and environmental conflicts: The case of the New York City watershed controversy. *Science, Technology & Human Values* 35(1): 81-112.

Goldman, M. 2005. Imperial Nature: *The World Bank and Struggles for Social Justice in an Age of Globalization*. New Haven: Yale.

Gomes, C.P. 2009. Computational sustainability: Computational methods for a sustainable environment, economy, and society. *The Bridge* 39(4): 5-13.

Goodnick, S. 2009. ASU Energy Initiative: Arizona Institute for Renewable Energy. Online. Available at http://aire.asu.edu/AIRE 2 11 09 presentation.pdf. Accessed 11/27/09.

Hansson, S.O. 2005. Risk ethics. Pp. 1642-44 in *Encyclopedia of Science, Technology, and Ethics*, C. Mitcham, ed. Gale Cengage.

Hauser, C., D. Bakken, and A. Bose. 2005. A failure to communicate: Next generation communication requirements, technologies, and architecture for the electric power grid. *IEEE Power and Energy Magazine* 3(2): 47-55.

Hecht, G. 1998. *The Radiance of France: Nuclear Power and National Identity After World War II*. Cambridge: MIT Press.

Hollander, R.D. 2005. Professional responsibilities in scientific and engineering research. Pp. 414-420 in *Science, Technology, and Society, An Encyclopedia*, S. Restivo, ed. New York: Oxford University Press.

Hughes, T. 1983. *Networks of Power: Electrification in Western Society, 1880-1930* . Baltimore: Johns Hopkins University Press.

Jackson, K. 1987. *Crabgrass Frontier: The Suburbanization of the United States*. Oxford: Oxford University Press.

Jamieson, D. 2010. Climate change, responsibility, and justice. Science and Engineering Ethics. Online. Available at http://www.springerlink.com/content/8700303g3544g035/.

Johnson, D. 2005. Responsibility: Anglo-American Perspectives. Pp. 1616-18. In *Encyclopedia of Science, Technology, and Ethics*, C. Mitcham, ed US: Thomson Gale.

Khagram, S. 2004. *Dams and Development: Transnational Struggles for Water and Power*. Ithaca: Cornell.

Kuletz, V. 1998. *The Tainted Desert: Environmental and Social Ruin in the American West*. London: Routledge.

Ladd, J. 1982. Collective and individual moral responsibility in engineering: Some questions. *IEEE Technology and Society Magazine* 1(June): 3-10.

Laird, F. 2009. A Full Court Press for Renewable Energy. *Issues in Science and Technology*, Winter. http://www.issues.org/25.2/laird.html. Accessed 11/27/09.

Lenk, H. 2005. Responsibility: German Perspectives. Pp. 1618-1624. In *Encyclopedia of Science, Technology, and Ethics*, C. Mitcham, ed US: Thomson Gale.

Lutzenhiser, L. 1993. Social and behavioral aspects of energy use. *Annual Review of Energy and the Environment* 18(1): 247-89.

McDaniel, P., and S. McLaughlin. 2009. Security and privacy challenges in the smart grid. *IEEE Security and Privacy* 7(3): 75-77.

Miller, C. 2009. Changing the energy system. *Issues in Science and Technology*, Spring. Online. Available at http://www.issues.org/25.3/forum.html. Accessed 11/27/09

.

Mitcham, C., ed. 2005a. Responsibility: Overview. Pp. 1609-16 in *Encyclopedia of Science, Technology, and Ethics*. US: Thomson Gale.

Mitcham, C., ed. 2005b. Risk and safety: Overview. Pp. 1639-40 in *Encyclopedia of Science, Technology, and Ethics*. US: Thomson Gale.

Mowery, D., R.R. Nelson, and B. Martin. 2009. "Technology policy and global warming: why new policy models are needed (or why putting new wine in old bottles won't work)" Provocation. 10. Published by the National Endowment for Science, Technology and the Arts.

Mumford, M.D., L.D. Devenport, R.P. Brown, S. Connelly, S.T. Murphy, J.H. Hill, and A.L. Antes. 2006. Validation of ethical decision-making measures: Evidence for a new set of measures. *Ethics and Behavior* 16(4): 319-345.

Mumford, M.D., S. Connelly, R.P. Brown, S.T. Murphy, J.H. Hill, A.L. Antes, E.P. Waples, and L.D. Devenport. 2008. Sensemaking approach to ethics training for scientists: Preliminary evidence of training effectiveness. Ethics and Behavior 18(4): 315-339

NAE (National Academy of Engineering). 2004. *Emerging Technologies and Ethical Issues in Engineering*. Washington, DC: National Academies Press.

NAE. 2005. *Measuring Student and Faculty Engagement in Engineering Education*. August. Washington, DC: Center for the Advancement of Scholarship on Engineering Education. AREE Final Report 5902001-20050705.

National Commission on Energy Policy, Bipartisan Policy Center. 2009. *Innovation Policy for Climate Change: A Report to the Nation*. Based on workshops sponsored by the Consortium for Science Policy & Outcomes and the Clean Air Task Force. September. 48pp.

NRC (National Research Council). 2008. *Summit on America's Energy Future: Summary of a Meeting*. Washington, DC: National Academies Press.

NRC. 2009a. *America's Energy Future: Technology and Transformation*. Washington, DC: National Academies Press.

NRC. 2009b. Workshop on Addressing the Challenges of Climate Change through the Behavioral and Social Sciences December 4, Panel on Public Acceptance of Energy Technologies.

NRC. 2009c. *On Being A Scientist: A Guide to Responsible Conduct in Research*. Washington, DC: National Academies Press.

Nissenbaum, H. 2010. Privacy in Context: *Technology, Policy, and the Integrity of Social Life*. Stanford: Stanford University Press.

Nye, D. 1992. *Electrifying America: Social Meanings of a New Technology*. Cambridge: MIT Press.

Pacala, S., and R. Socolow. 2004. Stabilization wedges: Solving the climate problem for the next 50 years with current technologies. *Science* 305: 968-971.

Pogge, T. 2002. *World Poverty and Human Rights: Cosmopolitan Responsibilities and Reforms*. UK: John Wiley & Sons Polity Press

Richardson, H. S. 1999. Institutionally divided moral responsibility. Pp. 218-249 in *Responsibility,* E. F. Paul, F. D. Miller Jr., and J. Paul, eds. Cambridge, U.K.: Cambridge U. Press.

Roeser, S. 2005. Risk and emotion. Pp. 1637-39 in *Encyclopedia of Science, Technology, and Ethics*, C. Mitcham, ed. US: Thomson Gale.

Sarewitz, D. 2005. Hazards. In *Encyclopedia of Science, Technology, and Ethics*, C. Mitcham, ed US: Thomson Gale.

Stokes, D.E. 1997. Pasteur's Quadrant: *Basic Science and Technological Innovation* . c. 196pp. Washington, DC: Brookings Institution Press.

Tate, P.D., and D.D. Denecke. 2006. *Graduate Education for the Responsible Conduct of Research*. 46pp. Washington, DC: Council of Graduate Schools

Walker, J. 2004. *Three Mile Island: A Nuclear Crisis in Historical Perspective*. Berkeley: University of California Press.

Weart, S. 1988. *Nuclear Fear: A History of Images*. Cambridge: Harvard University Press.

Weiss, C., and W. Bonvillian. 2009. *Structuring an Energy Technology Revolution* . MA: MIT Press.

Wil**son, C., and H. Dowlatabadi.** 2007. Models of decision making and residential energy use. *Annual Review of Environmental Resources* 32(2): 1-35.

Woodhouse, E., and D. Sarewitz. 2007. Science policies for reducing societal inequities. *Science and Public Policy* 34(2): 139–150.

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