

Abridged Curriculum Vitae

RICHARD F. HIRSH

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CURRENT AND PAST POSITIONS

- 1980- Assistant Prof. (1980-94), Assoc. Prof. (1984-91), and Full Professor (1991-)
Dept. of History (and participating faculty member in Science & Technology Studies), Virginia Tech
- 1983-85 On leave from VT, visiting research fellow at Harvard Business School
- 1979-80 Lilly Foundation Postdoctoral Teaching Fellow, University of Florida
- 1976&77 Historian, National Aeronautics and Space Administration (summers), Washington, DC

EDUCATION

- 1979 Ph.D., History of Science, University of Wisconsin, Madison, WI.
- 1980 M.S., Physics, University of Wisconsin, Madison, WI.
- 1976 M.A., History of Science, University of Wisconsin, Madison, WI.
- 1974 B.A., cum laude, History, Middlebury College, Middlebury, VT.

AWARDS AND HONORS (Selected)

- 2014 Appointed to Academy of Faculty Service, recognizing VT faculty members who demonstrate "exceptional service to the university beyond their usual responsibility."
- 2013 Land-Grant Scholar's Award, for faculty member within the VT College of Liberal Arts and Human Sciences (CLAHS) whose work favorably "reflects the engagement mission of the university."
- 2005 IEEE Life Members' Prize in Electrical History, recognizing the best paper in electrical history published during 2004, presented by the Society for the History of Technology.
- 2004 Excellence in Research and Creative Scholarship Award, VT CLAHS.
- 2002 Sturm Award for Excellence in Faculty Research, awarded by Phi Beta Kappa, Mu of Virginia Chapter, Virginia Tech.

GRANTS (Selected)

- 2012-16 Interdisciplinary Graduate Education Program in Remote Sensing, VT Graduate School. I am a participating member on this graduate program, which sponsors an STS student for three years.
- 2009-10 Research Award, Appalachian Regional Commission (through the Cadmus Group, of Arlington, VA), \$249,000, "Planning and Financing Energy-Efficient Infrastructure." I was a contributor on a grant with two other VT participants who received about 18% of the value of the grant.
- 2003-07 Research Award, National Science Foundation, Program in Electric Power Networks Efficiency and Security (EPNES), \$350,000, plus supplemental educational grant of \$120,000, "A Holistic Approach to the Design and Management of a Secure and Efficient Distributed Generation Power System." (With 7 other colleagues and several graduate students.) I was the lead PI and project director.
- 2001-05 Research Award, National Science Foundation, Program in Science & Technology Studies, \$81,443, SES-0112430, "Technological Change in a Deregulated Era: A Study of Innovation in Environmentally Preferable Technologies in a Restructured Electric Utility System."
- 1984-85 Research Award, National Endowment for the Humanities, Program in the Humanities, Science and Technology, RH-20539-84, jointly funded by the NSF, Program in the History and Philosophy of Science, \$31,500. "Limits to Technological Progress in the Electric Power Industry, 1960 to 1975." Published results: book, Technology and Transformation (below) and several articles.

SELECTED PUBLICATIONS

Books

- Power Loss: The Origins of Deregulation and Restructuring in the American Electric Utility System* (Cambridge, MA: MIT Press, 1999 [paperback, 2002]), xi + 406 pp.
- Technology and Transformation in the American Electric Utility Industry* (Cambridge: Cambridge University Press, 1989 [paperback, 2002]), xiv + 274 pp.
- Glimpsing an Invisible Universe: The Emergence of X-Ray Astronomy* (Cambridge: Cambridge University Press, 1983 [paperback, 1985]), viii + 186 pp.

Articles and book chapters

- "Welcoming the PIMBY ("Please in my backyard") Phenomenon: The Acceptance of Wind Turbines and the Culture of the Machine in the Rural Midwest," (with Joshua T. Brinkman), *Technology and Culture* 58, no. 2 (2017): 335-67, <https://muse.jhu.edu/article/662980>.
- "Shedding New Light on Rural Electrification: The Neglected Story of Successful Efforts to Power Up Farms in the 1920s and 1930s," accepted for publication in *Agricultural History* in 2018.
- "Electricity Consumption and Economic Growth: A New Relationship with Significant Consequences?" (with Jonathan G. Koomey), *The Electricity Journal* 28, no. 9 (Nov. 2015): 72-84.
- "Generating Knowledge and Power: The Role of Land-Grant Colleges in Electrifying America," in Alan I. Marcus, ed., *Science as Service: Establishing and Reformulating American Land-Grant Universities, 1865-1930* (Tuscaloosa, AL: University of Alabama Press, 2015), 193-238.
- "History's Contributions to Energy Research and Policy," (with Christopher F. Jones), *Energy Research & Social Science* 1 (Mar. 2014): 106-11.
- "Wind Turbines and Invisible Technology: Unarticulated Reasons for Local Opposition to Wind Energy," (with B.K. Sovacool), *Technology and Culture* 54 (Oct. 2013): 705-34.
- "Historians of Technology in the Real World: Reflections on the Pursuit of Policy-Oriented History," *Technology and Culture* 52 (Jan. 2011): 6-20.
- "Beyond Batteries: An Examination of the Benefits and Barriers to Plug-in Hybrid Electric Vehicles (PHEVs) and a Vehicle-to-Grid (V2G) Transition," (with B.K. Sovacool), *Energy Policy* 37 (2009): 1095-1103.
- "Island Wind Energy: A Significant Potential U.S. Resource," (with B.K. Sovacool), *Renewable Energy* 33 (August 2008): 1928-35.
- "Assessing U.S. Energy Policy," (with Marilyn A. Brown and Benjamin K. Sovacool), *Daedalus* (Journal of the American Academy of Arts and Sciences) 135 (#3, Summer 2006): 5-11.
- "Power Struggle: Changing Momentum in the Restructured American Electric Utility System," *Annales historiques de l'électricité* (No. 2, June 2004): 107-123.
- "Revamping and Repowering," *Forum for Applied Research and Public Policy* 15 (No. 2, Summer 2000): 12-18.
- "PURPA: The Spur to Competition and Utility Restructuring," *Electricity Journal* 12 (Aug./Sept. 1999): 60-72.
- "Power Switch: Will the Restructured Electric Utility System Help the Environment?" (with A.H. Serchuk), *Environment* 41 (Sept. 1999): 4-9, 32-39.
- "Condemned to Repeat? Historical Lessons, IOUs and Green Electricity," (with A.H. Serchuk), *The Electricity Journal* 11 (Mar. 1998): 76-86.
- "Momentum Shifts in the American Electric Utility System: Catastrophic Change or No Change at All?" (with A.H. Serchuk), *Technology and Culture* 37 (Apr. 1996): 280-311.
- "Renegotiating the Social Contract: Toward a New Consensus in the Electric Utility Industry," *Electricity Journal* 5 (Dec. 1992): 51-7.
- "How Success Short-Circuits the Future," *Harvard Business Review* 86 (Mar./Apr. 1986): 72-6.

SELECTED RECENT PRESENTATIONS

- "NIMBY and PIMBY: Why People Hate--and Love--Wind Turbines," University of Mass-Amherst, IGERT Offshore Wind Energy Program Seminar Series Lecture, Amherst, MA, 14 Apr. 2016.
- "Innovation, Stagnation, and Innovation in the American Electric Utility System," Workshop on the Nature of Technological, Social and Industrial Innovation and Transition in Power Generation and Delivery, Santa Fe Institute, Santa Fe, NM, 30 Mar. 2016.
- "Shedding New Light on Rural Electrification: The Neglected Story of Successful Efforts to Energize Farms in the 1920s and early 1930s," History of Science, Technology, and Medicine Colloquium, Univ. of Minnesota, Program in HSTM, Minneapolis, MN, 19 February 2016.