



Ruthanne Fuller  
Mayor

City of Newton, Massachusetts  
Office of the Mayor

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March 13, 2023

Honorable City Council  
Newton City Hall  
1000 Commonwealth Avenue  
Newton, MA 02459

To the Honorable City Councilors:

I am pleased to reappoint Halina Brown of 56 Cloverdale Road, Newton as a member of the Citizens Commission on Energy. Her term of office shall expire on April 15, 2026 and her appointment is subject to your confirmation.

Thank you for your attention to this matter.

Warmly,

Ruthanne Fuller  
Mayor

CITY CLERK  
NEWTON, MA. 02459

2023 MAR 13 PM 3:55

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# Application Form

## Profile

Halina \_\_\_\_\_ Brown \_\_\_\_\_  
First Name Middle Initial Last Name

hbrown@clarku.edu \_\_\_\_\_  
Email Address

56 Cloverdale Rd. \_\_\_\_\_  
Home Address Suite or Apt

Newton Highlands \_\_\_\_\_ MA \_\_\_\_\_ 02461 \_\_\_\_\_  
City State Postal Code

### What Ward do you live in?

Ward 6

Home: (617) 243-0744 \_\_\_\_\_ Home: (617) 319-0378 \_\_\_\_\_  
Primary Phone Alternate Phone

\_\_\_\_\_  
Employer retired professor \_\_\_\_\_  
Job Title

### Which Boards would you like to apply for?

Citizens Commission on Energy: Submitted

## Interests & Experiences

Please tell us about yourself and why you want to serve.

### Why are you interested in serving on a board or commission?

I have served on the Commission since 2004 and find the work very gratifying. For the past four years I have been chairing the Commission. During that time we produced the Newton Citizens Climate Action Plan and contributed to the development of the official Newton Climate Action Plan by the City. We executed technical analysis for BERDO and have worked with the city on the policy development. Currently, we are working on a plan to reduce greenhouse gas emissions from the residential sector.

[Most Recent-CV-Brown-April 2016.doc](#)

Uploaded a Resume

April 2016

## HALINA SZEJNWALD BROWN

Environmental Science and Policy Program  
IDCE Department (International Development,  
Community and Environment)  
Clark University  
950 Main Street  
Worcester, MA 01610-1477

Phone: (508) 793-7172  
Fax: (508) 793-8820  
hbrown@clarku.edu

### **Present Position.** Since 1994

Professor of Environmental Science and Policy, Clark University  
Senior Scholar: George Perkins Marsh Institute, Clark University

### **Education**

B.A., Chemistry, Washington University of St. Louis  
Ph.D., Chemistry, New York University

### **Current Research Areas**

Socio-technical system innovation in sustainability transition; Sustainable production and consumption; Grassroots socio-technical innovations in energy efficiency and generation; Environmental policy; Corporate social responsibility; Comparative international policy; Sustainability reporting systems; Environmental public health policy; Environmental toxicology and risk assessment.

### **Current Professional Positions**

Co-founder and Member of Executive Board: *Sustainable Consumption Research and Action Initiative* ([www.Scorai.org](http://www.Scorai.org))  
Member of Editorial Board: *New Solutions*

### **Current Teaching**

Environmental Pollution Policy: the US Perspective (*Advanced*)  
Sustainable Consumption and Production (*Advanced*)  
Environmental Toxicology (*Advanced*)  
Research Seminar on Energy and Sustainability (*Advanced*)

### **Previous Positions**

- 2010 April-May: EU Erasmus Mundus Visiting Professor, Department of Environmental Management, Central European University, Budapest, Hungary
- 2008-9 Director, Department of International Development, Community and Environment, Clark University

- 2006 January-May: Visiting Professor, Department of Innovation Studies, University of Utrecht, the Netherlands
- 2002 January-June: Visiting Professor, Environment, Technology and Policy Department (TBM), Technical University of Delft, the Netherlands
- 1990- 1998 Chair, Department of Environmental Science and Policy, Clark University
- 1994- 1998 Director and founder, Environmental School, Clark University
- 1985-1994 Associate Professor of Environmental Health and Policy, Clark University
- 1980-1985 Director, Office of Research and Standards, Massachusetts Department of Environmental Protection.  
Directed and represented the state environmental agency's activities in the areas of risk assessment, public health policy, and environmental research.
- 1978-1980 Research Fellow, Massachusetts Institute of Technology. Department of Applied Biological Sciences. Molecular toxicology.
- 1976-1978 Research Fellow, Columbia University Cancer Research Institute. Division of Environmental Sciences. Mechanisms of carcinogenesis.

### **Awards and Honors**

Elected Fellow of the International Society for Risk Analysis

Elected Fellow of the American Association for the Advancement of Science

### **Publications**

#### **Books**

Brown, H. S.; Derr, P.; Renn, O.; White, A. L. *Corporate Environmentalism in a Global Economy; Societal Values in International Technology Transfer*, Quorum Books, 1993.

Brown, H.S.; Angel, D.; Derr, P. *Effective Environmental Regulation: Lessons from Poland's Experience*. Praeger 2000.

Cohen, M., Brown, H.S. and Vergragt, P (eds.) *Innovations in Sustainable Consumption* Edward Elgar, 2013.

### **Peer Reviewed and Invited Articles, and Book Chapters**

1. Brown, H.S.; Shapiro, R. Preparation of Enzymatic Hydrolysis of Dinucleoside Monophosphates and DNA Modified with Aromatic Residues, *Biochim .Biophys. Acta* 1977, 475, 241-253.
2. Brown, H.S.; Shapiro, R. Conformation of Aromatic Substituted Dinucleoside Phosphates: An Extension of the Base Displacement Theory of Carcinogenesis. *Biochemistry* 1977, 16, 1229-1235.
3. Brown, H.S. Jeffrey, A.M.; Weinstein, I.B. Formation of DNA Adducts in 10T1/2 Mouse Embryo Fibroblasts Incubated with Benzo(a)pyrene or Dihydrodiol Oxide Derivatives, *Cancer Research* 1979, 39, 1673-1677.
4. Brown, H.S., Bishop, D.R. Rowan, C.A. The Role of Skin Absorption as a Route of Exposure for Volatile Organic Compounds (VOC) in Drinking Water. *American Journal of Public Health* 1984, 74, 479-484.
5. Rowan, C.A., Connolly, W.M. and Brown, H.S. An Evaluation of the Use of Occupational Standards for Controlling Toxic Air Pollutants. *Journal of Environmental Science and Health B* 1984, 19, 611-648.
6. Brown, H.S. Regulating Environmental Pollutants: A View from a State Agency. In Homburger, F., ed., 1985, *Safety Evaluation and Regulation of Chemicals. Volume 2*, 40-49. Basel: Karger.
7. Brown, H.S. Estimation of Human Daily Dose of Organic Contaminants in Drinking Water. In Homburger, F., ed., 1985, *Safety Evaluation and Regulation of Chemicals. Volume 1*, 50-57. Basel: Karger.
8. Brown, H. S.; West, C. R.; Bishop, D. R. Methodology for Assessing Developmental and Reproductive Hazards of Chemicals, *Toxicology and Industrial Health* 1986, 2, 205-218.
9. Brown, H. S.; West, C. R.; Bishop, D. R.; Hicks, L. Methodology for Assessing Carcinogenic Hazards of Chemicals, *Toxicology and Industrial Health* 1986, 2, 183-203.
10. Brown, H. S.; Bishop, D.R.; West, C.R. Methodology for Assessing Mutagenic Hazards of Chemicals, *Toxicology and Industrial Health* 1986, 2, 163-182.
11. Brown, H. S. A Critical Review of Current Approaches to Determining "How Clean is Clean" at Hazardous Waste Sites, *Hazardous Waste and Hazardous Materials* 1986, 3, 233-265.
12. Brown, H. S.; West, C. R.; Bishop, D. R. Chemical Health Effects Assessment Methodology, *Risk Analysis* 1987, 7, 389-402.
13. Brown, H. S.; Goble, R.L.; Tatelbaum, L. Methodology for Assessing Hazards of Contaminants in Seafood, *Regulatory Toxicology and Pharmacology* 1988, 8, 76-101.
14. Brown, H. S. Some Approaches to Setting Cleanup Goals at Hazardous Wastes Sites. In *Hazardous Waste Site Management: Water Quality Issues*. National Research Council, National Academy Press, 1987.
15. Kasperson, R. E.; Renn, O.; Slovic, P.; Brown, H. S.; Emel, J. E.; Goble, R.; Kasperson, J. X.; Ratick, S. The Social Amplification of Risk: A Conceptual Framework, *Risk Analysis* 1988, 10, 177-187.
16. Brown, H. S.; Hattis, D. The Role of Skin Absorption as a Route of Exposure to Volatile Organic Compounds in Household Tap Water: A Simulated Kinetic Approach, *Journal of the American College of Toxicology* 1989, 8, 63-75.
17. Shatkin, J.; Brown, H.S. Multicompartment Pharmacokinetic Model for Absorption of Organic Compounds through Skin, *Environmental Research* 1991, 56, 90-108.

18. Brown, H. S.; Kasperson, R. E.; Raymond, S. Trace Pollutants in the Global Environment: A Three Hundred Year Perspective. In B.L. Turner, et al., Eds.; *Earth Transformed by Human Action*; Cambridge University Press, 1991.
19. Renn, O.; Brown, H. S.; White, A. Ethics and Value Issues in Managing Hazardous Technologies by Multinational Corporations in Developing Countries., *Environmental Science and Technology* 1991, 25, 1964-1969.
20. White, A. L.; Brown, H. S.; Himmelberger, J. J. Corporate Environmentalism in Developing Countries: A Tale of Three Multinationals, *International Environmental Affairs* 1992, 4 (4), 338-360.
21. Brown, H. S.; Himmelberger, J. J.; White, A. L. Development-Environment Interactions in the Export of Hazardous Technologies: A Comparative Study of Three Multinational Affiliates in Developing Countries, *Technological Forecasting and Social Change* 1993, 43, 125-155.
22. Webler, T.; Brown, H. S. Population Exposure to Tetrachloroethylene via Contaminated Drinking Water Pipes in Massachusetts: A Predictive Model, *Archives of Environmental Health* 1993, 48, 293-297.
23. Brown, H. S.; Goble, R. L. Industrial Development and Population Cancer in Poland. In Levy, B. Ed. *Environment and Health in Eastern Europe*. Proceedings of the Symposium on Occupational and Environmental Health, Pultusk, Poland, June 29-July 2, 1992, Management Sciences for Health, Boston, 1994.
24. Brown, H. S. Lessons from Bhopal, *Chemical and Engineering News* 1994 (October), 38-39.
25. Shatkin, J.A., H.S. Brown and S. Licht 1995. Composite Graphite Ion Selective Electrode Array Potentiometry for the Detection of Mercury and Other Relevant Ions in Aquatic Systems. *Anal. Chem.* 67: 1147-1151.
26. Himmelberger, J.; Brown, H. S. Global Corporate Environmentalism: Theoretical Expectations and Empirical Experience, *Business Strategy and the Environment* 1995, 4, 192-199.
27. Brown, H. S.; Goble, R. L.; Kirschner, H. Social and Environmental Factors in Lung Cancer Mortality in Post-War Poland, *Environmental Health Perspectives* 1995, 103, 64-70.
28. Brown, H. S. Assessment of the Relationship between Pollution and Lung Cancer Mortality in Poland Using Ecological Epidemiological Approach, *International Journal of Environmental and Occupational Health* 1996, 11, 23-28.
29. Brown, H. S. Two Decades of Environmental Legislation in the United States: Its Relation to Societal Values. *Proceedings of a Workshop on Environmental Health and Safety in Poland: Confronting the Transition to Democracy and Free Market Economy*. Central Institute of Labour Protection in Warsaw, Poland, May 1996.
30. Brown, H.S.; Cook, B.; Shatkin, J. A.; Krueger, J. R. Reassessing the History of Hazardous Waste Disposal Policy in the United States: Problem Definition, Expert Knowledge, and Agenda-Setting. *Risk, Issues and Health, Safety and Environment*. 1997, 8, 249-272.
31. Brown, H. S.; Angel, D.; Derr, P. Environmental Reforms in Poland, *Environment*. 1998, January/February, 10.
32. Broszkiewicz, R.; Krzyskow, B.; Brown, H. S. Occupational Safety and Health System in Poland During Transition to Democracy and Market Economy, *New Solutions*. 1998, 8 (2), 221-242.
33. Angel, D.; Brown, H. S.; Broszkiewicz, R.; Wronski, S. The Environmental Regulation of Privatized Firms in Poland *Environment and Planning C*. 2000, 18:575-592.

34. Brown, H. S.; Angel, D. Environmental Regulatory Reform in Poland: Lessons for Industrializing Economies. *Environmental Science and Technology*. 2000, 34:3849-3856.
35. Rossi, M.; Brown, H. S.; Baas, L. Leaders and Partners in Sustainability: Defining the Agenda and the Agents of Change. *Business Strategy and Environment*. 2000, 9: 273-286.
36. Brown, H. S.; Angel, D.; Broszkiewicz, R.; Krzyskow, B. Occupational Health and Safety in Poland during the 1990s: Regulatory System Adapting to Societal Transformation. *Policy Sciences*. 2001, 34: 247-271.
37. Broszkiewicz, R., Brown, H.S. and Hibner, Z. Occupational and Environmental Status of Polish Industry: A Comparative Study of Private and Public Sectors. *New Solutions*. 2002, 12(3): 263-280.
38. Brown, H.S., Vergragt, P. Green, K. and Berchicci, L. Learning for Sustainability Transition through Bounded Socio-technical Experiments in Personal Mobility. *Technology Analysis and Strategic Management*. 2003, 15: 291-315.
39. Brown, H.S. "Can Poland's Success in Environmental Policy Reforms Translate to Technological Innovation for Environment?" In: Weber, M. and Hemmelskamp, J., eds., *Towards Environmental Innovation Systems*. Heidelberg: Springer, 2005, pp. 81-96.
40. Brown, H.S. and Vergragt, P. "System Innovation through Experiments in Individual Mobility". In: Elzen, B., Geels, F. and Green, K. *System Innovation and the Transition to Sustainability: Theory, Evidence and Policy*. Edward Elgar. 2005: pp.191-222.
41. Brown, H.S. and C. Carbone, Learning through Technological Innovation in Personal Mobility: The Cases of Gismo and Sparrow. In Nieuwenhuis, P., ed. *The Business of Sustainable Mobility: From Vision to Reality*. Greenleaf Publishing, 2006 (pp. 112-124).
42. Brown, H.S. and C. Carbone, Technological Innovation in Personal Mobility as Vehicles for Social Learning. *Greener Management International*. July 2006: 77-88.
43. Brown, H.S., Institutional Transplantation within Borders: Transformation of Environmental Regulatory System in Poland during the 1990s. *Knowledge, Technology, and Policy*. Winter 2007: 26- 43.
44. Vergragt, P., and Brown, H.S., Sustainable Mobility: From Technological Innovations to Societal Learning. *Journal of Cleaner Production* 2007, 15: 1104-1115.
45. Brown, H.S. and P. J. Vergragt. 2008. Bounded Socio-Technical Experiments as Agents of Systemic Change: The Case of a zero-Energy Residential Building. *Technological Forecasting and Social Change* 75: 107-130.
46. Vergragt, P.J. and H.S. Brown. 2008. Genetic Engineering in Agriculture: New Approaches to Generating Societal Consensus. *Technological Forecasting and Social Change* 75: 783-798.
47. Brown, H.S., de Jong, M. and Lessidrenska, T. 2009. "The Rise of Global Reporting Initiative (GRI) as a Case of Institutional Entrepreneurship." *Environmental Politics*. 18(2): 182-200.
48. Brown, H., De Jong, M., and Levy, D. 2009. "[Building Institutions Based on Information Disclosure: Lessons from GRI's Sustainability Reporting.](#)" *Journal of Cleaner Production* 17(4): 571-580.
49. Levy, D., Brown, H.S., and de Jong, M. 2010. "NGO Strategies and the Politics of Corporate Governance: the Case of Global Reporting Initiative." *Business and Society* 49: 88-115.
50. Vergragt, P.J. and H.S. Brown. 2010. "Genetic Engineering in Agriculture: The Role of Small Scale Experimentation and Standardized Sustainability Reporting for Risk Management and

- Policy Development”. In: Michael Baram Ed. *Safety in Applying Genetic Engineering in Agriculture*. Springer.
51. Levy, David L. and Halina Brown. 2010. “The Global Reporting Initiative: Collaboration and conflict in the development of non-financial reporting.” In: Subhash Jain and Ben Kedia (eds.), *Enhancing Global Competitiveness through Sustainable Environmental Stewardship*. PP. 129-152. London: Edward Elgar
  52. Book Review. Brown, H.S. 2010. “Energy Efficiency and Sustainable Consumption: the Rebound Effect”, by Horace Herring and Steve Sorrell. *Sustainability: Science, Practice, & Policy* 6(2): 41-42.
  53. Levy, David L. and Halina Brown 2011. “The Global Reporting Initiative: The Promise and Limitations of Non-Financial Reporting for Corporate Governance.” In: Reed, Utting and Mukherjee-Reed (eds). *Business, Non-State Regulation and Development*, New York: Routledge, pp. 46-60.
  54. Brown, Halina S. “Global Reporting Initiative” 2011. In Thomas Hale and David Held, eds. *Handbook of Innovations in Transnational Governance*, Polity Press, pp. 91-95.
  55. Brown, Halina s. And Philip Vergragt 2011. “An innovative approach to designing a zero-energy residential building in Boston: enhancing and monitoring learning.” In: Lahlou, Saadi *Case Studies in Sustainable Consumption and Production: Energy Use and the Built Environment. System Innovation for Sustainability Series, Volume 4*. Aizlewood’s Mill: Greenleaf Publishing, Pages 27-52.
  56. Cohen, M.J., Brown, H.S. and P.J. Vergragt 2011. Individual Consumption and Systemic Societal Transformation: Introduction to the Special Issue 2011. *Sustainability: Science, Practice and Policy*. 6(2): 6-12.
  57. Brown, H.S. 2012 (Feature article). Sustainability Science Needs to Include Sustainable Consumption. *Environment: Science and Policy for Sustainable Development* 54: 20-24.
  58. P.J. and Halina Brown, 2012. The challenge of energy retrofitting the residential housing stock: grassroots innovations and socio-technical system change in Worcester, MA, *Technology Analysis & Strategic Management* 24 (4): 407–420.
  59. Brown, H.S. and Philip J. Vergragt, 2012. “Grassroots Innovations and Socio-Technical System Change: Energy Retrofitting of the Residential Housing Stock”. In: G. Marletto (ed.) *Creating a Sustainable Economy. An Institutional/ Evolutionary Approach to Environmental Policy*. Routledge: Routledge Studies in Ecological Economics. (2012).
  60. Brown, H.S. Philip J. Vergragt, Maurie Cohen 2013. “Setting the stage: Three theoretical perspectives illustrated by the case of Passive House”. In: Maurie Cohen, Philip J. Vergragt, Halina S. Brown (eds.) *Meeting the Crises of a Constrained World: Socio-Technical Transitions, Social Practices, and the New Economics* Edward Elgar.
  61. Brown, H.S. 2014. Editorial: The next generation of research on sustainable consumption. *Sustainability: Science, Practice, & Policy* 10(1):1-3.
  62. Book Review: *Sustainability Science* by Bert J.M. De Vries, Cambridge University Press. Published in *Sustainability: Science, Practice, & Policy* 10, 2014.
  63. Book Review: “A Road Toward a Sustainable City” *Sustainable Communities: Creating a Durable Economy* by Rhoda Phillips, Bruce Seifer and Ed Antczak. Published in *Environmental Innovation and Societal Transitions*. December 2014: 129-130.  
<http://www.sciencedirect.com/science/journal/22104224/13>
  64. Book Review: “What would Jane Jacobs Say?”; *A Country of Cities: A Manifesto for an Urban America* by Vishaan Chakrabarti, Metropolis Books, 252



pp. Published on the Great Transitions website

<http://www.greattransition.org/publication/what-would-jane-jacobs-say>

65. Brown, H.S. and Vergragt, P.J. 2015. From Consumerism to Wellbeing: Toward a Cultural Transition. *Journal of Cleaner Production*, in press.

66. Vergragt, P and H. Brown 2016. "Grassroots Innovations vs. Green Cluster Initiatives: Reconciling Two Different Approaches in Housing Energy Retrofit Programming." In: Hodgson, M. and S. Marvin *Retrofitting Cities: Priorities, Governance and Experimentation*. New York and London: Earthscan (pp.119-134).

### **Service on National, State and Municipal Advisory Committees**

2007-10 Advised the Massachusetts Undersecretary of Energy as a Member of a Task Force on Consumer Education on Energy Production and Use.

2004- Co-Chair of Newton Citizens' Commission on Energy. Appointed by the Mayor of Newton, MA.

1997-04 Member of Executive Committee, Greening of Industry Network

2003 Member of a Blue Ribbon Panel to evaluate the court ordered cleanup plan by General Electric for Housatonic River. Members of the panel were nominated by the Society for Risk Analysis.

1995-99 American Association for the Advancement of Science, Annual Meeting Scientific Program Committee.

1995 National Science Foundation, Special review panel in a competition for the National Center for Environmental Decision Making Research and for Centers for Global Environmental Change.

1994-98 Science Advisory Board, Massachusetts Toxic Use Reduction Institute. Appointed by the Governor of Massachusetts.

1993 National Academy of Sciences, Special Committee to Recommend to the Assistant Secretary of Energy on the Use of Risk Assessment in Managing Environmental Restoration at the Weapons Manufacturing Facilities.

1993-96 Consultant to the Science Advisory Board to the Environmental Protection Agency, Environmental Health Committee.

1993-96 National Academy of Sciences, Committee to Review the Technical Considerations in Siting of Low Level Radioactive Waste Disposal Facility in New York State.

- 1992-93 National Academy of Sciences, Committee to Review Department's of Energy Environmental Restoration Priority System.
- 1990-93 National Science Foundation, Proposal Review Panel for the Ethics and Values Studies in Science and Technology (EVS).
- 1988-90 Member. Science Advisory Committee, Northeastern Hazardous Substances Research Center.
- 1987 Environmental Protection Agency, Member of an advisory panel on Ranking of Weight of Evidence for Non-Cancer Health Effects, Alexandria, VA.
- 1987 Peer reviewer of research proposals, National Science Foundation, Division of International Programs and Program on Ethics and Values in Science and Technology.
- 1985-89 Member, Massachusetts State Superfund Advisory Committee
- 1985 Congressional Testimony. Senate Committee on Energy and Environment, Senator Henry Waxman, Chairman. Hearings on reauthorization of the Safe Drinking Water Act, Washington, D.C.
- 1985 U.S. Environmental Protection Agency Member of an advisory panel on Ranking of Severity of Toxic Effects, Cincinnati, Ohio.
- 1982-85 Member, Massachusetts Cancer Registry Advisory Committee.

### **Consulting and Other Professional Activities (since 1985)**

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- 2007- Food and Consumer Product Safety Authority (VWA), the Netherlands. Developing Communication and disclosure platform for assessing the risks of nanotechnology.
- 2003-04 Cadmus Group, Watertown, MA. Risk assessment for pathogens in a Municipal Solid Waste stream.
- 2003- Member of the City of Newton Citizens Energy Commission. Appointed by the Mayor. The Commission is preparing Energy Action Plan for the City of Newton.
- 2001- EPA. Reassessment of dose response relationships for cancer and non-cancer health effects of arsenic, for the purpose of reevaluating the drinking water standard.
- 2000-01 Palmer and Dodge Law Firm. Boston, MA. Expert witness on issues of risk assessment.

- 1999-00 The Fox River Group. Member of Blue Ribbon Panel for risk assessment of PCB contamination in Fox River, Wisconsin.
- 1999 AlphaGary Company. Assessment of public health impacts of environmental releases of toxic chemicals.
- 1998-99 Grippo and Elden Law Firm. Chicago, Ill. Preparation of expert testimony on the historical developments of knowledge about toxic properties of industrial chemicals, covering the period of 1900-1960.
- 1997-98 Plunkett and Cooney Law Firm. Detroit, MI. Preparation of expert testimony on the historical developments of knowledge about toxic properties of industrial chemicals, covering the period of 1900-1960.
- 1997 Merriman Company. Development of public information materials regarding soil contamination.
- 1996-98 Bowditch and Dewey Law Firm. Worcester, MA. Expert witness in risk assessment for groundwater contamination.
- 1996-97 Environmental Protection Agency. Analysis of dose-response relationship for cadmium and chromium for the purpose of performing benefit-risk analysis.
- 1996 Environmental Protection Agency, Region 2. Implementation of a weight of evidence system for non-carcinogenic effects.
- 1995 Environmental Protection Agency, Region 2. Development and implementation of ranking system for severity of non-carcinogenic toxic effects.
- 1994 Co-founder of Risk Assessment and Policy Association.
- 1994 Environmental Protection Agency. Review of Document on Respiratory Absorption of Volatile Drinking Water Contaminants.
- 1992-94 Day, Berry and Howard Law Firm. Preparation of expert testimony in legal proceedings on the history of management of hazardous waste.
- 1993 Testimony at public hearings on Revisions to the Massachusetts Contingency Plan for Cleanup of Hazardous Waste Sites.
- 1992-94 Tellus Institute. Assessment of the cost of externalities in power generation by fossil fuel facilities in New York State.
- 1992-93 General Electric Corporation. Risk assessment and management of hazardous waste sites.

- 1991-92 United Nations Centre for Transnational Corporations. Consulted on development, application and data interpretation in the survey of transnational corporations on Technology Transfer and Sustainable Development. The final report was presented at the Environment and Development Conference in Brazil in 1992.
- 1992 Co-organizer, International Conference on Protecting Workers, the Environment, and Health in a Market Economy: Translating Science into Policy and Action, Pultusk, Poland, June 26-July 1, 1992.
- 1991 Session organizer, Dermal Absorption of Environmental Pollutants. Special Session of the Annual Meeting of the Society for Risk Analysis, Baltimore 1991.
- 1990-91 Massachusetts Department of the Attorney General. Expert testimony in environmental risk assessment.
- 1990-91 Town of Orange, Massachusetts. Environmental Health Consultant on a proposed hazardous waste processing facility.
- 1990 U.S. Department of Energy. Consultant on ranking of hazardous waste sites at the DOE nuclear production facilities.
- 1990 Boston Bar Association. Member of Subcommittee on Revisions to the State Superfund Regulations (Massachusetts Contingency Plan).
- 1989 Session organizer. Transfer of Hazards to Developing Countries. Special Session at the Annual Meeting of the Society for Risk Analysis, San Francisco 1989.
- 1989 Co-organizer. International Conference on Responsibilities and Value Issues in the International Transfer of Hazardous Technologies, Luxembourg, June 19-22, 1990.
- 1988-89 District of Columbia Department of Consumer and Regulatory Affairs. Expert testimony on the health impacts of the Benning Power generating facility proposed by Potomac Power Company (PEPCO).
- 1987-89 Town of Braintree, Massachusetts. Environmental Health Consultant on a proposed hazardous waste incinerator.
- 1987-88 Massachusetts Institute of Technology. Participant in year-long faculty seminar series on Risk Management.
- 1986-87 Rhode Island Department of Environmental Management. Consultant on methodology for assessing health risks of chemical contaminants in seafood in Narraganset Bay.

- 1986 Massachusetts Department of the Attorney General. Expert testimony on testing methodologies, risk assessment and regulatory history of tetrachloroethylene in drinking water.
- 1986 Massachusetts Department of the Attorney General. Expert testimony on toxic effects of volatile organic compounds at hazardous waste sites.
- 1986 Tufts University Center for Environmental Management. Consultant on current approaches to determining how clean is clean at hazardous waste sites.
- 1986 New England States for Clean Air Use and Management (NESCAUM). Consultant on Draft Health Assessment Document for Trichloroethylene.
- 1986 Testimony given at public hearings on the proposed Massachusetts Cancer Policy. Massachusetts Department of Public Health, Boston, MA.
- 1985 Co-organizer of the Annual Meeting of the Society for Risk Analysis, November 1986.
- 1985 Co-author of a position paper on occupational and environmental health issues in New England. The New England Conference on Health Promotion and Illness Prevention. Sponsored by the Erna Yaffe Foundation, Boston, MA.

### **Memberships**

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American Association for the Advancement of Science  
Society for Risk Analysis

### **Foreign Languages**

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Polish  
Russian

### **Organizational Activities (since 1985)**

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- 1997-07 Member of the Board, International Greening of Industry Network
- 1994-99 Councilor, Risk Assessment and Policy Association
- 1990-91 Member of the Nominating Committee, Society for Risk Analysis.
- 1987-89 Councilor, New England Chapter, Society for Risk Analysis.
- 1985-87 Councilor, Northeastern Chapter, Society of Toxicology.

1984-85 Chairperson, Environmental and Occupational Section, Massachusetts Public Health Association.