Warren R. Muir 9426 Forest Haven Drive Alexandria, Virginia 22309 (703) 780-7474

Education and Training

<u>Degree</u>	<u>Year</u>	<u>Institution</u>	<u>Field</u>		
B.A.	1967	Amherst College	Chemistry		
M.S.	1968	Northwestern University	Chemistry		
Ph.D.	1971	Northwestern University	Chemistry		
Postdoctoral Training					
1975-7		Department of Epidemiology, School of Hygiene and Public Health, The Johns Hopkins University			

Executive Leadership and Management Program, Federal Executive Institute, Charlottesville, VA

Professional Experience

1980

1981-	President, Hampshire Research Associates, Inc. (A firm emphasizing research and education activities relating to risk assessment and science policy issues.)
1984	Research Professor, Department of Biology, The American University
1981-	Associate, Department of Environmental Health Sciences, School of Hygiene and Public Health, The Johns Hopkins University, (Use of experimental and epidemiological data in risk assessments, environmental health policy.)
1982-6	Adjunct Professor, Department of Biology, The American University
1982-5	Co-founder, Former Chairman of the Board and Executive, IDEA*TECH Associates, Inc., Alexandria, VA (A rapidly growing computer and information consulting and sales firm.)
1980-1	Director, Office of Toxic Substances, U.S. Environmental Protection Agency, Washington, DC
1978-80	Deputy Assistant Administrator for Testing and Evaluation, U.S. Environmental Protection Agency, Washington, DC

Professional Experience (Cont'd)

1974-8 Senior Staff Member for Environmental Health, President's Council on Environmental Quality, Executive Office of the President, Washington, DC

1971-3 Staff Member, President's Council on Environmental Quality Executive Office of the President, Washington, DC

Honors and Awards

1980	U.S. Environmental Protection Agency Outstanding Service Award (\$5000)
1978-	Who's Who in America
1978	Who's Who in the Southeast
1975	President's Council on Environmental Quality nominee for the Charles A. Fleming Award (Scientist/Administrator)
1973	President's Council on Environmental Quality nominee for the Charles A. Fleming Award (Scientist/Administrator)
1968	National Institutes of Health Fellowship
1967	Forris Jewett Moore Fellowship Award, Amherst College
1967	American Chemical Society Student Award, Connecticut Valley Section
1967	Howard Waters Doughty Prize, Amherst College
1966	National Science Foundation Academic Year Award

Federal Government and International Committees

1980-1	Director, U.S. Participating Institute, World Health Organization, International Chemical Safety Programme
1980-1	World Health Organization, International Chemical Safety Programme, Technical Committee
1980-1	World Health Organization, Director-General's Chemical Safety Programme Advisory Committee
1980-1	U.S. Department of Education, Asbestos Schools Hazard Safety Task Force
1980-1	U.S. Environmental Protection Agency, Toxic Integration Strategy Committee

Federal Government and International Committees (Cont'd)

	1978-81	U.S. Environmental Protection Agency, Toxic Substances Priorities Committee
	1978-80	Chair, U.S. Environmental Protection Agency, Toxic Substances Research Committee
	1979	World Health Organization, SCOPE Planning Committee, Bellagio, Italy
	1977-9	Chairman, Federal Interagency Testing Committee
•	1978	Interagency Regulatory Liaison Group, Surrogate
	1978	Interagency Decorated Glassware Task Force
	1976-8	Department of Health, Education, and Welfare, Recombinant DNA Research Committee
	1977-8	Chairman, Executive Office of the President, Federal Task Force on Toxic Substances Data
	1976-8	U.S. Chairman, U.SJapanese Bilateral Exchange on the Identification and Control of Toxic Substances
	1977-8	Interagency Regulatory Liaison Group, Information Committee
	1976-7	Chairman, President's Council on Environmental Quality, Executive Office of the President, Integrated Pest Management Committee
	1971-7	Federal Working Group on Pest Management
	1972-6	U.SU.KCanadian Trilateral Committee on Pesticides
	1975-6	Chairman, Federal Interagency Task Force on the Inadvertent Modification of the Stratosphere
	1974-5	Vice-Chairman, Office of Management and Budget, Executive Office of the President, Federal Interagency Task Force on Environmental and Health Effects of Energy Research and Development
	1973-4	Staff Coordinator, Federal Activities Relating to the Presence of Asbestos in the Duluth, MN Water Supply
	1971-2	Chairman, President's Council on Environmental Quality, Integrated Pest Management Committee

Professional Activities

Societies

Air Pollution Control Association American Association for the Advancement of Science American Chemical Society American College of Toxicology American Conference of Governmental Industrial Hygienists American Public Health Association Environmental Mutagen Society Federation of American Scientists National Capital Area Society of Toxicology New York Academy of Sciences Phi Lambda Upsilon Chemical Society Royal Chemical Society Sigma Xi Society for Applied Learning Technology Society for Epidemiological Research Society for Occupational and Environmental Health Society for Risk Analysis

Professional Committees

1985-6	National Academy of Sciences, National Research Council, Committee on Scientific and Regulatory Issues Underlying Pesticide Use Patterns and Agricultural Innovation
1984-	National Conference of Lawyers and Scientists, American Association for the Advancement of Science and American Bar Association
1984-	Advisory Board on Non-Chemical Pest Controls, The Institute for Consumer Policy Research, Consumer Union
1982	National Academy of Sciences, National Research Council, Panel on Land, Sea, and Air Options for the Disposal of Industrial and Domestic Wastes
1982-5	American Chemical Society, Canvassing Committee for the ACS Award for Creative Advances in Environmental Science and Technology, Chairman 1984-5
1977-8	American Chemical Society, Younger Chemists Committee
1977	Society for Occupational and Environmental Health Nominating Committee
1976-7	Chairman, Society for Occupational and Environmental Health, Committee on the Health Effects of Lead Smelter Emissions
1976	National Academy of Sciences, National Research Council, Panel for the Study of Principles of Decision Making for Regulating Chemicals in the Environment

0



Consulting Activities

Organisation for Economic Cooperation and Development, Workshop of Experts on Exposure Assessment

American Association for the Advancement of Science

National Academy of Sciences, National Research Council, Air Pollution Epidemiology Committee

National Academy of Sciences, Panel on Selected Research Opportunities on the Health Effects of Hazardous Chemical Exposures

National Academy of Sciences, National Research Council, Committee on the Risks of Asbestiform Minerals

National Academy of Sciences, National Research Council, Board on Toxicology and Environmental Health Hazards

INFORM, Inc.

Environmental Policy Institute

M.I.T., Center for Policy Alternatives

Bio-Research Laboratories, Ltd.

World Health Organization, Division of Environmental Health

World Health Organization, International Programme for Chemical Safety

World Health Organization, European Regional Office Consultant in Environmental Health to the Government of Poland

Adler & Adler, Inc.

Robert Sterling Clark Foundation

U.S. Environmental Protection Agency

Life Systems, Inc.

Dynamac Corporation

U.S. Interagency Testing Committee

Publications

Books, Chapters, and Reports

Young, J.S., Muir, W.R. <u>Design of Field Guidance and Implementation</u>

<u>Plan: Microcomputer-Assissted Risk and Exposure Assessment Tools.</u> EPA

Contract No. 68-02-4228, 1987.

- Books, Chapters, and Reports (Cont'd)
- Young, J.S., Muir, W.R., Muir, J.M. Risk Assessment at Facilities
 Handling Toxic Substances: EPA Regional Offices' Review of Hazardous
 Waste Facilities Function Testing. EPA Contract No. 68-02-4228, 1987.
- Young, J.S., Muir, W.R. <u>Brief Review of Environmental Fate and Exposure Models and Other Appropriate Software Concepts for Use in a Microcomputer Risk and Exposure Assessment</u>. EPA Contract No. 68-02-4228, 1987
- Young, J.S., Muir, W.R. Organ Function Testing: The Incorporation of Organ Function Tests in Toxicity Testing Schemes Strategic Issues. EPA Contract No. 68-02-4228, 1986.
- Bass, B.F., Muir, W.R., and Rose, N.R. Immunotoxicology Strategy: A Review of Major Scientific Conferences. Federal Activities, and Federal Policies Relating to Immunotoxicology. EPA Contract No. 68-02-4228, 1986.
- Bass, B.F., Muir, W.R., and Rose, N.R. <u>Immunotoxicology Strategy:</u> <u>Identification of Policy and Programmatic Options</u>. EPA Contract No. 68-02-4228, 1986.
- Young, J.S. and Muir, W.R. Organ Function Testing: Survey of Major Toxicology Testing Laboratories on the Use of Organ Function Testing in Toxicology. EPA Contract No. 68-02-4228, 1986.
- Bass, B.F., Colb, A., Muir, J.M., Muir, W.R. <u>Hazardous Waste Reduction Information Needs</u>. Office of Technology Assessment Contract No. 633-1900.0, 1986.
- Muir, W.R., Bass, B.F., and Muir, J.M. <u>User Friendliness of OTS</u>
 <u>Information Resources and Systems</u>. EPA Contract No. 68-02-4228, 1986.
- Sarokin, D.S., Muir, W.R., Miller, C., and Sperber, S. <u>Cutting Chemical Wastes Hazardous Waste Reduction in the Organic Chemical Industry</u>. INFORM Books, December 1985.
- Bass, B.F. and Muir, W.R. <u>Neurotoxicity Risk Assessment Guidelines</u>. EPA Contract No. 68-01-7037, 1985.
- Young, J.S. and Muir, W.S. <u>Evaluation Report of Micro-Computer Software</u>
 <u>Systems for an HERD Neurotoxicity Data Base</u>. EPA Contract No. 68-024228, 1986.
- Bass, B.F. and Muir, W.R. <u>Summary of Federal Actions Relating to Neurotoxicity</u>. EPA Contract No. 68-01-7037, 1985.
- Muir, W.R., Colb, A., Kensler, T., Young, J.S., and Bass, B.F. Information Review of Chlordene. U.S. Interagency Testing Committee, EPA Contract No. 68-01-6650, 1985.

Books, Chapters, and Reports (Cont'd)

Muir, W.R., Colb, A., Kensler, T., Young, J.S., and Bass, B.F.

<u>Information Review of Pentachloropyridine</u>. U.S. Interagency Testing
Committee, EPA Contract No. 68-01-6650, 1985.

Muir, W.R., Colb, A., Kensler, T., Young, J.S., and Bass, B.F. Information Review of 1,2-Butadiene. U.S. Interagency Testing Committee, 68-01-6650, 1985.

"Using Environmental Health Data in Standard Setting," <u>Guidelines on Principles an Procedures for Developing Environmental Health Standards</u>, World Health Organization, (Technical review completed, expected 1986 release).

Muir, W.R. (Technical Editor), <u>Guidelines on Principles and Procedures</u> for <u>Developing Environmental Health Standards</u>, World Health Organization, 1986 Release.

Muir, W.R., and Young, J.S. <u>Neurotoxicity Risk Assessment Data Report</u>. EPA Contract No. 68-01-7037, 1985.

Bass, B.F., Muir, W.R., and Young, J.S. <u>Neurotoxicity Science Issue</u>
Reports, "Acute Exposure Tests". EPA Contract No. 68-01-6554, 1985.

Bass, B.F., Muir, W.R., and Young, J.S. <u>Neurotoxicity Science Issue Reports</u>, "Acute vs. Repeated Exposure Tests". EPA Contract No. 68-01-6554, 1985.

Muir, W.R., Bass, B.F., and Young, J.S. <u>Neurotoxicity Science Issue Reports</u>," Programmatic Issues". EPA Contract No. 68-01-6554, 1985.

Muir, W.R. The Preselection or Establishment of a Hierarchy of Chemicals in Safety Evaluation. <u>Acute Toxicity Testing - Alternative Approaches</u>, Mary Liebert Press, 1984.

Muir, W.R. Pest Control - A Perspective. <u>Pest Control Strategies - Understanding and Action</u>, Academic Press, 1978.

Muir, W.R. Subchronic Toxicity Testing in Perspective. <u>Proceedings of the Subchronic Toxicity Workshop</u>, Oak Ridge National Laboratories, 1978.

Muir, W.R., and Bastian, C.L. Man-Made Stratospheric Change - A Possible Public Health Concern. New England Journal of Medicine, November, 1976.

Muir, W.R. and Pegler, C.L. Fluorocarbun e Ambiente. Encyclopedia Della Scienza e Della Technica, Modadori Press, 1976.

Muir, W.R., et al. A Review of Three Studies on the Effects of Lead Smelter Emissions in El Paso, Texas. Society of Occupational and Environmental Health, 1976.

Books, Chapters, and Reports (Cont'd)

Muir, W.R. Introduction to Part IV: Prevention of Occupational Cancer - Toward an Integrated Program of Government Action. Occupational Carcinogenesis, N.Y. Academy of Sciences, 1976.

Muir, W.R. (Managing Editor) <u>Environmental Quality - 1976</u>. President's Council on Environmental Quality, 1976.

Muir, W.R., et al. A Review of Three Studies on the Effects of Lead Smelter Emissions in El Paso, Texas. <u>International Conference on Heavy Metals in the Environment</u>, Toronto, Canada, October, 1975.

CEQ Report - <u>Carcinogens in the Environment</u>. U.S. Printing Office 041-011-00030-1, 1975

Books, Chapters, and Reports (Cont'd)

Muir, W.R. Information as a Basis for Policy Formulation. <u>Design of Environmental Information Systems</u>. R.A. Deiniger (Ed.), Ann Arbor Publishers, Inc., 1974.

CEQ Report - Integrated Pest Management. U.S. Printing Office 411-0010.

Muir, W.R. The Mechanism of the Oxidative-Addition of Alkyl Halides to Square-Planar Iridium Complexes. Ph.D. Thesis, 1971.

Muir, W.R. The Orientation of Second-Sphere Solvent Molecules About Chromium Complexes. B.A. Thesis, 1967.

Articles

Sarokin, D.S., and Muir, W.R. Too Little Toxic-Waste Data. New York Times, October 7, 1985, (Op-ed).

Muir, W.R. The Role of Risk Assessment in the Regulatory Process. Proceeding of a Symposium on Risk Assessment, The State University of New Jersey - Rutgers, 1984.

Muir, W.R., and Tardiff, R.G. Priorities for Environmental Health Research. <u>Journal of Risk Analysis</u>, March, 1983.

Muir, W.R. Law-Science Cooperation Under the National Environmental Policy Act - A Scientific Viewpoint. Natural Resources Lawyer, 1983.

Muir, W.R., and Bastian, C.L. Man-Made Stratospheric Change - A Possible Public Health Concern. New England Journal of Medicine, November, 1976.

Johnson, R.W., Muir, W.R., and Sweigart, R.A. Formation of Metal - Metal Bonds Between Transition Metals via Lewis Acid-Base Interactions. Chem. Commun. 643, 1970.

Books, Chapters, and Reports (Cont'd)

Muir, W.R., and Langford, C.H. Anation of cis-Co(en)₂NO₂dmso²⁺ Ion in Dimethyl Sulfoxide: Dissociative Interchange. <u>Inogranic Chemistry</u> 7: 1032, 1968.

Langford, C.H., and Muir, W.R. The Thermodynamics of Formation of Co(NH₃)₅Cl²⁺ from Co(NH₃)₅OH₂³⁻: Separation of Environmental Effects. J. Phys. Chem. 71: 2602, 1967.

Langford, C.H., and Muir. W.R. The Dissociative Interchange Mechanism for the Formation of Acidopentaaminecobalt (III) Ions. <u>Journal Am. Chem. Soc.</u> 89: 3141, 1967.

Reports for Government Agencies (Project Officer):

President's Council on Environmental Quality, Chemical Substances Information Network (3 reports)

President's Council on Environmental Quality, Study on the Impact of Government Restricts on the Production and Use of Chemicals, 1975-77.

President's Council on Environmental Quality, Farmers' Pesticide Use Decisions and Attitudes on Alternate Crop Protection Methods, 1974.

President's Council on Environmental Quality, Citizen Participation Study, 1973.

President's Council on Environmental Quality, the Adequacy of Data on Natural Resource Availability, 1973.

President's Council on Environmental Quality, Evaluation of Integrated Pest Management Programs (Cotton, Tobacco, Peanuts), 1973.

President's Council on Environmental Quality, Protection, Distribution, Use and Environmental Impact Potential of Selected Pesticides Study, 1972-73.

President's Council on Environmental Quality, Ecocycles Study, 1972.

President's Council on Environmental Quality, Cross-Media Study, 1972.

Author of Government Agency Reports:

Second Report of the Interagency Testing Committee, 1978.

First Report of the Interagency Testing Committee, 1977.

Preliminary Report of the Interagency Testing Committee, 1977.

Report of the Federal Interagency Committee on Health and Environmental Effects of Energy Use R&D, 1975.

Government Agency Reports (Cont'd)

Fluorocarbons and the Environment, Report of the Federal Interagency Committee on the Inadvertent Modification of the Stratosphere, 1977.

Toxic Substances, Environmental Health, and Pesticide Sections of the President's Council on Environmental Health, Environmental Quality - 1972, Environmental Quality - 1973, Environmental Quality - 1974, Environmental Quality - 1975, Environmental Quality - 1976, Environmental Quality - 1977.

President's Council on Environmental Quality Report, 1974 - The Adequacy of Data on Natural Resource Availability.