

CONSULTANTSHIPS:

- * **Academy of Finland, Research Council for Biosciences and Environment:** Helsinki, Finland
 - (1) External proposal reviewer, 2004
- * **Alabama Attorney General:** Montgomery, AL 1994
 - (1) Review of sediment toxicity information from Dye plant
- * **Alkyl Phenol Ethoxylates Research Council:** Washington, D.C.
 - (1) Development of long-range strategic study plan for ecological risk assessments of Alkylphenol ethoxylates and their degradation products.
 - (2) Field studies of concentrations of APEOs and their degradation products in surface water, sediments and fish tissues.
- * **American Forest and Paper Association:** 2000
 - (1) Ecological risk assessment of polychlorinated dioxins in fishes in rivers of Maine to bald eagles.
 - (2) Development of a bald eagle restoration plan for the State of Maine
- * **BASF Corporation:** Ludwigshafen, West Germany.
 - (1) Assisted in selecting and implementing environmental fate models to study the probable fate of products. 1988.
- * **Belgian Prime Minister; Science Policy Office - National Impulse Program in Marine Sciences:** Brussels Belgium. 1991.
 - (1) Review of program and research proposals on science and economics research on the North Sea.
- * **Brown and Caldwell, Inc.** Maui, Hawaii
 - (1) Analysis of Industrial Chemicals in Waste Waters from Honolulu”
- * **Camp, Dresser and McKee:** Detroit, Michigan
 - (1) Natural resource damage assessment for effects of PCBs and dioxins in Saginaw Bay, Michigan
- * **Canada Research Chairs program:** Ottawa, Canada

- (1) External reviewer of chair application to University of Guelph, 2005
 - (2) External reviewer of chair application to University of Waterloo, 2005
- * **Canadian Network of Toxicology Centres:** Guelph, Ontario.
- (1) Board of directors. 1991-Present.
 - (2) External audit of programs-member of audit team
- * **Cantox corp:** Mississauga, Ontario, Canada.
- (1) Expert panel for Project for Chlorene Institute on chlorinated hydrocarbons in the environment. 1992.
 - (2) Reviewer- Scientific principles for evaluating the potential for adverse effects from chlorinated organic chemicals in the environment. 1995
 - (3) Member of Expert Panel for the review of the Human and Ecological Risk Assessment of the Herbicide *Roundup* (Glyphosate). 1998
- * **CBR-Canada:** Sidney B.C. Canada.
- (1) Review of sediment quality guidelines for polycyclic aromatic hydrocarbons. 1991.
- * **Chemical Manufacturer's Association:** Washington, D.C.
- (1) Briefings on chlorinated hydrocarbons in the environment to CMA Council. 1991
 - (2) Briefings to congressional staffers on the senate and house sides. Issues: Chlorinated hydrocarbons, especially xeno-estrogens in the environment. Re-authorization of the *Clean Water Act*.
- * **Chlorine Chemistry Council:** Washington, D.C., 2001
- (1) Review of Research foundation for Health and Environmental Effects Science Research Plan for Fy 2001-2006.
- * **Chlorine Institute.** Washington, D.C.
- (1) Preparation of position papers on the sources, fates and effects of chlorinated compounds in the environment. The 1900 page document covers 9 product categories and over 90 compounds. 1992-1994
- * **City of Columbus, Ohio Water Works:** 1979.
- * **City University of Hong Kong, Co-operative Education Center, Faculty of Science and Engineering, 2005-Present**

(1) Student mentor for environmental sciences

(1) Pilot study to reduce halomethane precursors in feed water by ultrafiltration.

* **Clemson University- The Institute of Wildlife and Environmental Toxicology (TIWET):**

(1) External Advisory Board. 1991-1994. 1996-1997; Co-chairperson 1993-1994.

(2) Consultant to hire a new director for TIWET

* **Commerce Township, Michigan**

(1) Assessment of Potential Toxicity of Ammonia to the reddsided dace in Michigan Waters. A risk assessment conducted for Commerce Township, Michigan, 2005

* **Consumer Power Company: Jackson, MI.**

(1) Review of potential hazards due to coal ash stored at Woodtick Point, Ohio and use of material in constructing a sea wall in Lake Erie. 1989.

(2) Assessment of the risk of Arsenic and Selenium migrating off site at an ash disposal basins at the Campbell plant near Grand Haven Michigan.

(3) Assessment of the potential risks of dam removal on rivers in Michigan. Residues in fish and sediments were measured and a risk assessment conducted.

* **State of Delaware, Attorney General's Office:**

(1) "Marine Sediment Contamination by Coal." 1984.

* **Dow-Corning, Corp. Midland, Michigan**

(1) Science advisory group (SAG) for silicones in the environment Jointly with Procter & Gamble Co. 1991.

(2) Reassessment of silicones in the environment. 1994.

(3) External promotion reviewer, 2004

* **DowAgrosciences, Inc.: Indianapolis, IN**

(1) Ecological Risk Assessments of chlorpyrifos in surface waters , 1998

(2) Comments to US EPA on their ecological risk assessment for chlorpyrifos.

* **EarthWatch Institute: Maynard, MA**

(1) Member of Speaker Bureau, 2002-

* **East Lansing, Waste Water Treatment Plant:**

(1) Bioassay for waste water permitting.

East Michigan Environmental Action Council: Birmingham, Michigan.

(1) Revision of Hazardous Waste Siting Response Handbook. 1989-1990.

* **ECETOC, Brussels, Belgium**

(1) Briefing on Estrogenic Compounds in the Environment, 1994

* **ENTRIX, Inc., Houston, TX:**

(1) Senior Consultant, 1995-Present

* **Environment Agency of England and Wales:** Wallingford, England, UK

(1) External reviewer Environment Agency Science on Endocrine Disruptors, 2004

* **Environment Canada: Canadian Center for Inland Waters, Burlington, Ont., Canada.**

(1) "Workshop on developing biological sediment criteria". 1991.

(2) Intergovernmental Aquatic Toxicology Group. 1990.

(3) Subcommittee Review of "Environment Canada Sediment Guideline". 1992

* **Environment Canada:**

(1) Review of Draft Technical Document for the Canadian Environmental Screening Assessment of Perfluorooctane Sulfonate (PFOS) and Its Precursors Under the Authority of the Canadian Environmental Protection Act. (CEPA 1999). 2003

* **Environment Canada: Great Lakes University Research Council.**

(1) Review of research proposals. 1991.

(2) Technical subcommittee to review "Guidelines on collection, storage, manipulation of whole sediment, pore water, elutriates and solvent extracts of sediments for toxicity testing and chemical characterization". 1992-

* **Environmental Policy Center Law Companies Environmental Group:**

(1) Review of Risk Dialogue Group Documents.

- * **European Commission, Directorate General-12**, Brussels, Belgium
 - (1) Joint EU/US Endocrine Disruptor Expert Panel on Research Directions, 1999
- * **External Advisory Council - Institute of Wildlife and Environmental Toxicology, Clemson, University**: 1990-1993.
- * **Florida Department of Environmental Protection**: Tallahassee, Florida.
 - (1) Task Force on Water Pollution Control. Metals in fish effects on fish, mercury and cadmium. 1983.
 - (1) Assessment of Potential Toxicity of Ammonia to the reddsided dace in Michigan Waters. A risk assessment conducted for Commerce Township, Michigan, 2005
- * **Greely and Hanson Inc**: Chicago, Illinois; 1983.
 - (1) Assessment of the use of "Microtox^R" as a rapid screening tool for acute toxicity studies.
- * **Griffith University**:
 - (1) External Reviewer of Ph.D. Dissertation
- * **Hercules, Inc.**, Wilmington, DE
 - (1) Assessment of risks of dioxins to wildlife, Bayou Meto, Vertac Site, Jacksonville, Arkansas, 1999-2000
 - (2) Ecological risk assessments of perfluorinated compounds, for registration. 2000-201
- * **Hoechst-Roussel Agri-Vet Company**: **Sommerville, NJ**.
 - (1) Review of testing protocols for agricultural chemical ecotoxicology. 1986-1990.
 - (2) General consultant on agricultural chemical ecotoxicology. 1985-1990.
- * **Hong Kong Baptist University**: Hong Kong, China
 - (1) External examiner for Degree of Doctor of Philosophy, 2004
- * **Hong Kong Environmental Protection Department**
 - (1) Review and Development of Marine Water Quality Objectives: Feasibility Study, 2008-2009
- * **Hong Kong Research Grants Council**: Hong Kong, China

- (1) Grant Proposal review, 2001
- * **Hudson River Foundation:** New York, NY
 - (1) Proposal review panel, 1997
- * **HydroQual, Inc:** Mahwah, NJ.
 - (1) Design of study for registration of Chlorpyrifos for Turf Grass applications. 1987.
- * **Idaho Board of Education Specific Research Grant Program**
 - (1) Review of research proposals, 1993.
- * **Indiana University School of Public and Environmental Affairs:** Bloomington, Indiana
 - (1) External reviewer for promotion and tenure, 1997
- * **Intelecom, Inc.:** Pasadena, CA
 - (1) Preserving the Legacy. A 26 part educational video program on environmental biology, produced for the National Science Foundation. Preparation of materials and on-camera interviews.
- * **International Joint Commission:** Windsor, Ontario, Canada.
 - (1) Consultation on the use of bald eagles as indicators of ecosystem health. 1990, 1991.
 - (2) Consultation on effects of contaminants on reproduction of salmonid fishes of the Great Lakes. 1990.
 - (3) Objectives and evaluation subcommittee to set water quality standards. 1987-1991.
 - (4) Ecosystem objectives workgroup of binational objectives development committee. 1991-1993.
 - (5) Consultation on the effects of contaminants on colonial water birds of the Great Lakes Region. 1992.
 - (6) Reviewer of Detroit River Remedial Action Plan, 1991.
- * **Irish Research Council for Science, Engineering and technology (IRCSET):** Dublin, Ireland

- (1) External reviewer of grants for the EMBARK Initiative, 2004
- * **Italian Institute of Hydrobiology, Italian National Research Council:** Pallanza, Italy.
 - (1) Sediment toxicity and metal speciation in Lake Orta, which is acidified and contaminated with copper and ammonia.
- * **Kalamazoo River Study Group:** Kalamazoo, Michigan
 - (1) Ecological Risk Assessment of PCBs in Sediments of the Kalamazoo River, Michigan
- * **Kemper Insurance Co.:** See Tressler et al.
- * **Kimberly-Clark, Inc.:**
 - (1) Advisory Group, fates and effect of chlorinated dioxins and similar compounds. 1992-Present.
- * **King Faisal University:** Dammann, Saudi Arabia
 - (1) External advisor and program reviewer, 1992-Present.
- * **Lewis Publishers:** Chelsea, MI. CRC Press, Boca Raton, FL, 1987-Present.
 - (1) Editorial board.
 - (2) Advances in trace substances research.
- * **Life Systems, Inc.,** Cleveland, Ohio: 1979-1992.
 - (1) Periodic review of EPA documents such as reports and standards.
 - (2) Periodic responses to technical questions on fate and effects of trace contaminants in aquatic systems.
- * **Limnotech Inc:** Ann Arbor, Michigan. 1983-1990.
 - (1) Optimization of sampling plan for U.S.E.P.A. Water Quality Monitoring and the Wasteload Allocation Program.
 - (2) Litigation land developers vs. Fairfax County, VA. Assessment of Effects of Treatment of Occuquon Reservoir with Copper Sulfate. General waste and runoff water allocation problem.
- * **Maine Pulp and Paper Association:** Portland, Maine, 2001-2002

- (1) Survey of Dioxins in fish above and below 7 paper mills. Experimental and statistical design and analysis.

* **MAXUS Engergy Corp:** 1991.

- (1) Sediment monitoring and assessment.

* **Michigan Council on Environmental Quality:** Lansing, Michigan

- (2) Panel to set Environmental Priorities for the State of Michigan, January, 1990.

* **Michigan Department of Agriculture:** Lansing, Michigan

- (1) Advisory Working Group on Dioxin, 2002

* **Michigan Department of Natural Resources, Biology Division:** Lansing, Michigan, 1981-Present.

- (1) Review of water quality criteria for metals.
- (2) Assessment of effluent toxicity at the Anthony Ragnone Waste Water Treatment Plant, 1982. *In situ* acute and chronic fish bioassay. Responses to ammonia and chlorine. Enzyme and substrate analysis, histopathology.
- (3) Review of "draft document," Interdepartmental Risk Assessment in Michigan.
- (4) Development of surface water quality standard for selenium. 1985.

* **Michigan Department of Natural Resources:**

- (1) Review of "Michigan Site Assessment System (MSAS)." A model for priority of sites for remedial action under the Michigan Environmental Response Act (ACT 307)." 1987.
- (2) Hazardous Waste Site Review Board. Seven member board to study and make recommendations on the licensing and regulation of generating, transporting, treating, storing or disposal of hazardous materials. Appointment by Governor. 1989-1990.
- (3) "Development of a Multi-Media Inventory for Bioaccumulative Compounds of Concern (BCCs) for the Saginaw Bay Watershed", Advisory Committee, 1994-Present.

* **Michigan Department of Public (Community) Health:** Lansing, Michigan

- (1) Development of advisories for consumption of fish from the Great Lakes by humans, May 1989-present.

- (2) Sampling plan and chemical analyses of samples of Great Lakes fishes, May, 1989.
- (3) Review of proposed methods to remove PBBs from contaminated people and livestock, April, 1990.
- (4) Division of Toxicology and Chemistry and Division of Occupational Epidemiology. Delegate to the workshop on development of a biomonitoring program. 2002.
- (5) Biomonitoring Planning Team. Development of list of chemicals of concern for possible monitoring.

* **Michigan Great Lakes Protection Fund:**

- (1) Program Review, 1991.

* **Michigan Legislative Services Bureau Science Office:** Lansing, Michigan

- (1) Herbicide active ingredients. 1984.

* **Michigan United Conservation Clubs:**

- (1) Effects of Contaminants on Furbearers of the Great Lakes Region. Preparation of Study Plan. 1989.

* **Moneco Consultants, Ltd:** Calgary, Alberta, Canada.

- (1) Review of Water Quality Criteria documents. Benzene and Chlorinated Benzenes. 1986-1987.

* **Monsanto Corp (Solutia, Inc.).**

- (1) External Reviewer-Environmental Stewardship programs. 1985
- (2) Member of Expert Panel for the review of the Human and Ecological Risk Assessment of the Herbicide Roundup (Glyphosate). 1998

* **Oak Ridge National Laboratories, Environmental Sciences Division:** Oak Ridge, Tennessee

- (1) External Advisory Board

* **Oxidental Petroleum, Inc.:** 1991.

- (1) Sediment monitoring and assessment.

* **National Wildlife Federation:** Washington, D.C.

(1) Review of Great Lakes Initiative Plan for control of toxics in the Great Lakes.

* **National Academy of Sciences and National Research Council**

(1) Committee on Hormone-Related Toxicants in the Environment: 1997-1999

(2) Committee on Risk-Based Criteria for Non-RCRA Hazardous Waste: 1998-1998

(3) Committee on Vietnam Agent Orange Research Interests and Priorities: 1998-1999

* **National Agricultural Chemical Association (NACA):** Washington, D.C.

(1) Development of testing protocols to determine the environmental impact of agricultural chemicals. 1984-Present.

* **National Air and Stream Improvement Institute (NCASI):**, Kalamazoo, Michigan.

(1) Briefing on chlorinated dioxins in the environment to officials of pulp and paper industry

* **National Institutes of Health, National Institute of Environmental Health Sciences, Superfund Basic Research Program**

(1) Review of Superfund Basic Research Program applications, October 4-7, 2004, Research Triangle Park, NC.

* **Natural Environment Research Council:** Swindon, UK

(1) External reviewer Directed Research Grants Program, 2004

* **New York State Department of Conservation:**

(1) Review of "Biothreat" model for hazard assessment of hazardous waste sites. 1987.

New York State Department of Health: Albany, New York

(1) Review of Research Scientist for promotion. 2005

* **New Zealand Ministry of the Environment:** Auckland, New Zealand.

(1) Lead consultant for national environmental risk assessment of organochlorine compounds, 1997-1999.

* **Netherlands Health Council,** 2002

(1) Review of method for the development of environmental risk limits for PCBs in the environment

- * **NOVA WGBH Television: Boston**
 - (1) Review of Programing on Environmental Issues, 1994
- * **Novartis, Inc.**
 - (1) Member of Expert panel to conduct an ecological risk assessment of atrazine as an Endocrine Disruptor, 1997
- * **Oak Ridge National Laboratory, Environmental Sciences Division: Oak Ridge, Tennessee**
 - (1) Member Advisory Committee, 1998-2001.
 - (2) Chair Advisory Committee on Environmental Health Initiative, 2000
- * **Ontario Ministry of the Environment; Water Resources Branch: Toronto, Ontario**
 - (1) Comprehensive review of: Water Quality Criteria Development Document on Benzene and Substituted Benzenes in the Aquatic Environment. 1985.
 - (2) Laboratory Sediment Biological Testing Protocol. 1991.
- * **Ontario Pre-commercialization Business Development Fund**
 - (1) Re view of proposal, 2009
- * **Organization for Economic Cooperation and Development: Paris, France.**
 - (1) Development of sediment quality criteria. 1991.
 - (2) Reviewer AOECD Guidelines for the Testing of Chemicals: Chironomid Toxicity Test Using Spiked Water, 1998
- * **Partners in Research: Arlington, VA**
 - (1) Review of A Ambient Aquatic Life Water Quality Criteria for Nonylphenol". External expert for review of this proposed US EPA regulation. 1997
- * **Pharmacia & Upjohn, Inc. Kalamazoo, Michigan (see Upjohn, Co.)**
 - (1) Advisor on environmental stewardship, 1997.
- * **Prismatic Images: Flint, Michigan.**
 - (1) Educational films on fisheries and aquatic biology. 1984-1985.
- * **Proctor and Gamble, Inc.: Cincinnati, OH**

(1) Science advisory group on silicones in the environment. March, 1991.

* **Research and Evaluation Inc:** Chapel Hill, N.C.

(1) Reviews of EPA Test Rules, Integrated Support Documents and Ad Hoc Reviews. 1985-Present.

* **Research and Evaluation Associates Inc:** Chapel Hill, NC.

(1) Review of *ad hoc* document submitted to US EPA entitled "96-hr flow- through toxicity study of butylbenzyl phthalate to the freshwater crayfish, *Procambarus sp.* 1986.

* **Residuals Management Inc.,** Madison, Wisconsin: 1982-1984.

(1) Fate of PCBs in Shiawassee River due to cleanup operations.

* **City of Rochester, Michigan:** 1991-1992.

(1) Bioassays for waste water permitting.

* **Risk and Decision Processes Center Philadelphia:** Philadelphia, Pennsylvania

(1) Review of issues in citing a hazardous waste facility. 1991.

* **Saginaw National Watershed Initiative, 1994-Present.**

(1) Technical Steering Committee

* **SETAC Foundation for Environmental Education:** Pensacola, Florida

(1) Chairman, Board of Directors, 1992-1993.

* **Silicones Environmental Health & Safety Council**

(1) Science Advisory Group (SAG) for silicones in the environment, 1994

* **South Florida Water Management District:** West Palm Beach, FL,

(1) Review of research results- "The Influence of Phosphorus on Mercury Cycling and Bioaccumulation in the Everglades". 1995

* **Soviet All Union Scientific Research Institute for Protection of Waters:**

(1) Development of methodology for sediment toxicity assessment. 1988.

State of New York, Department of Health

(1) External examiner, promotion and tenure, 2004

- * **Swedish Environmental Protection Agency:**
 - (1) Prioritization of Research Topics. 1990.
- Swedish Research Council for Environment, Agricultural Sciences and spatial Planning:** Stockholm
 - (1) Review of Applications for: “Support for strong research environments”. 2005
- * **Swedish Natural History Museum, Stockholm:**
 - (1) External Reviewer of the collections and research programs, 2002
- * **Swiss Federal Institute for Environmental Science (EAWAG), Dubdorf, Switzerland, 2003**
 - (1) Project Fishnet. Advisor to the task force investigating possible causes of declines in fish stocks in Swiss Rivers.
- * **Swiss National Research Programme:**
 - (1) Reviewer, Research Proposals, Endocrine Disruptors Programme
- * **Texas Learning Technology Group**
 - (1) Technical advisor for development of a multi-media program entitled AEcoExpert: Health Risks in Our Town” . This computer-based program is to be used in public and K-12 educational programs.
- * **The Texas Institute for Advancement of Chemical Technology**
 - (1) External reviewer for Insights, V. 6 (1), 1995 AChlorine in Perspective”
- * **Three M Corporation:** Minneapolis, Minnesota. 1993-Present
 - (1) Review of environmental toxicology programs. 1993
 - (2) Assessment of products for environmental fates and effects. 1993.
 - (3) Corporate environmental stewardship strategic planning. 1996-Present.
 - (4) Ecological Risk Assessment of products containing perfluorinated compounds. 1999-2004
 - (5) Registration of perfluorinated products in the United States and Japan. 2000
- * **T N & Associates, Inc.:** Cincinnati, Ohio

- (1) Acquisition and Critical Review of Literature on the Ecological Effects of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and related Compounds on Aquatic Life and Associated Wildlife. Primary consultant on project design, data acquisition and report preparation. Contractor to US EPA.

* **Trans-boundary Contaminants Work Group: 2007-Present**

A working group established by the Upper Columbia White Sturgeon Recovery Initiative (UCRWSRI) and Columbia River International Environmental Monitoring Program (CRIEMP) to investigate and prepare reports on contaminants in the Columbia River. The Committee is made up of individuals from the various state, provincial, federal, and tribal agencies as well as independent academics and consultants.

* **United States Conference of Mayors:**

- (1) Risk assessment of dioxins in soils due to use of urban bio-solids as a soil amendment, 1998.

* **University of Aachen, Germany**

- (1) External Examiner for Promotion, Biology Department

* **University of Aberdeen: Aberdeen, Scotland, UK,**

- (1) External promotion and tenure reviewer, 2004

* **University of Agriculture of Malaysia:**

- (1) External Assessor. 1990-1993.

* **University of California: Oakland, California**

- (1) External reviewer of grants for the Coastal Environmental Quality Initiative, 2004

* **University of California - Davis Ecotoxicology Program**

- (1) External Review Panel. 1994.

* **University of California – Davis, Wildlife Health Center**

- (1) Review grant proposals, 2001.

* **University of California-Santa Cruz: Santa Cruz, California**

- (1) External reviewer for promotion and tenure, 1997

* **University of Guelph: Guelph, Ontario, Canada**

(1) External reviewer for Ph.D dissertation, 1997

University of Toronto:

(1) External reviewer for promotion and tenure, 2004

* **University of Turku:** Turku, Finland

(1) External examiner for PhD dissertation, 2006

* **University of Windsor:** Windsor, Ontario, Canada

(1) External examiner for tenure and promotion, 2011

* **University of Wyoming:** Laramie, Wyoming

(1) External promotion and tenure reviewer, 2004

* **Upjohn, Corp.,** Kalamazoo, MI. 1993-Present

(1) Environmental monitoring for organic and inorganic contaminants in water recharge system. 1993

(2) Monitoring for octachlordibenzo-*p*-dioxin in soil and groundwater. 1994

(3) Sediment toxicity assessment of several plants in Michigan Maryland and Virginia. 1994-1995

(4) Monitoring for concentrations of organic compounds in fishes from surface waters adjacent to production facilities. 1994-1995

(5) Expert witness in defense in litigation relative to PCB contamination of the Kalamazoo River. Depositions and testifying witness.

* **U.S. Army Corps of Engineers:** Buffalo District Office.

(1) Design of program for monitoring of residues leaching from contained dredge material disposal sites in Buffalo Harbor, 1987.

* **U.S. Dept. Interior, National Sea Grant Program:**

(1) Scientific panel to review Chesapeake Bay Toxics Research Program. 1992.

* **US Dept. Agriculture, Agricultural Systems Program:**

(1) Review of proposals to the National Research Initiative Competitive Grants Program. Annually 1998-2004

- * **US Dept. Agriculture, Animal Growth and Nutrient Utilization Program:** Washington, DC
 - (1) External reviewer of research proposals, 2004
- * **U.S. EPA Office of Research and Development:**
 - (1) Review of core research program. Chair person of SETAC *ad hoc* review committee.
- * **U.S. Environmental Protection Agency/U.S. Department of Justice:** Washington, D.C.
 - (1) Expert witness, United States of America against Petro Processors of Louisiana, Inc. Toxic waste site litigation, 1983. Background information, case development and testimony as aquatic toxicologist.
 - (2) Office of Waste Programs Enforcement. Enforcement Case Support Expert Resources Inventory System. Clement Associates, Inc. Arlington, VA 1984-Present.
- * **U.S. Environmental Protection Agency:** Washington, D.C.
 - (1) Hudson River PCB Site Reassessment Committee, 1991.
 - (2) Amphipod bioassay workshop, 1991-1992.
 - (3) Sediment Quality Criteria Workshop, 1992-Present.
 - (4) Water Quality Criteria for Metals, 1993-present.
 - (5) Aquatic Risk Assessment and Risk Mitigation. Dialogue group for Pesticides. 1993. 17 member task force to develop procedures for assessing the hazard of pesticides to aquatic ecosystems. ***Invited Delegate***
 - Member Steering Committee
 - (6) Peer review panel workshop "Ecological Risk issues concerning 2,3,7,8-Tetrachlorodibenzo-p-dioxin. Minneapolis, MN, Sept. 14-15, 1993. ***Invited Delegate***
 - (7) Program Review, Bioassessment Program, Environmental Research Laboratory-Cincinnati, OH, Sept. 7-8, 1994. ***Chairperson***
 - (8) Peer Review, *Ecological Risk Assessment*, Risk Assessment Forum, US EPA. Alexandria, VA, August 16-18, 1994.
 - (9) Acquisition and Critical Review of Literature on the Ecological Effects of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and related Compounds on Aquatic Life

and Associated Wildlife. Primary consultant on project design, data acquisition and report preparation. Contract to US EPA, 1998.

- (10) Peer review panel for ADioxin Reassessment-Wildlife”, 1998.
- (11) Preparation of a briefing document for the interagency working group in support of the UNEO Global POPs treaty. “Organochlorine Residues in and Their Effects on Fish and Wildlife of the North American Great Lakes”, John P. Giesy, Paul D. Jones, Kurunthachalam Kannan and Alan L. Blankenship.

US Environmental Protection Agency: Reviewer of ACE model Acute to Chronic Estimation (Version 2.0), 2003

* **U.S. Environmental Protection Agency, Science Advisory Board:** Washington, D.C.

- (1) Ecological Processes and Effects Committee: Sediment Quality Guidelines for Metals in Sediments, 1999.
- (2) Ecological Processes and Effects Committee: Aquatic Life Criteria for Water-Metals, 1999.
- (3) Ecological Processes and Effects Committee: Ecological Soil Screening Levels for Superfund Sites, 1999.

* **U.S. Environmental Protection Agency, Environmental Fate and Effects Branch, Office of Pesticide Programs, Science Advisory Panel:** Washington, D.C.

- (1) Ecological Committee on FIFRA Risk Assessment Methods (ECOFRAM), 1999

* **U.S. Environmental Protection Agency Environmental Biology Review Panel of the Exploratory Research Program, Office of Research and Development.** Review of proposals submitted to the program, including traveling to the Study Panel Meetings.

- (1) 1984 - Dallas, TX.
- (2) 1986 - Duluth, MN.
- (3) 1989 - Las Vegas, NV.
- (4) 1990 - Tempe, AZ.
- (5) 1991 - Knoxville, TN.
- (6) 1991 - Sarasota, FL.
- (7) 1994 - Washington, DC.

* **U.S. Fish and Wildlife Service, Great Lakes Fisheries Laboratory:** 1982-Present.

- (1) ATP analysis in fish eggs, effects of xenobiotics on fish eggs; trace metal speciation.
 - (2) Review of Technical Document on Toxicity of Metals of Fishes. 1992.
- * **VCI (Verband Der Chemische Industrie Deutschland):** Frankfurt, West Germany, 1988.
- (1) Development of systems to rank hazardous materials, based on probable toxicity, carcinogenicity, teratogenicity and persistence in the environment. Including terrestrial and aquatic organisms and plants. QSAR techniques were used. 1988.
 - (2) Selection and implementation of models to predict the fate of organic compounds in aquatic systems. Design of pond studies to evaluate the models, including sensitivity analyses. 1988.
- * **Verasa, Inc.** (For US EPA), 2002
- (1) Review of document entitled "Estimating Bioaccumulation Factors for Dioxins and Related Compounds".
- * **Versar, Inc., Springfield VA.**
- (1) Review of the US EPA document entitled "Framework for Applications of the Toxicity Equivalence Methodology for Polychlorinated Dioxins, Furans Biphenyls and Ecological Risk Assessment". 2003
- * **Wageningen Agricultural University:** Wageningen, The Netherlands
- (1) Program Review for Ecotoxicology, May 1999.
- * **Warren Waste to Energy Inc: Warren, MI:** 1984.
- (1) Assessment as Release of Metals from Fluidized Bed Incineration of Municipal Waste for Energy Recovery from Waste. Permitting with State of Michigan.
- * **Wildlife International Ltd:** St. Michaels, MD.
- (1) Development of Protocol for Multi-species Testing for the Effects of Pyrethroid Insecticides on Aquatic Organisms. 1985.
- * **World Health Organization Advisorships**
- (1) Development of Toxic Equivalency Factors of polychlorinated dibenzo dioxins (PCDDs, polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs) for fish, birds and mammals: 1996-1999.

- (2) Global Assessment of the State-of-the-Science of Endocrine Disruptors. United Nations Environment WHO Program and International Programme on Chemical Safety: 1998.

* **W.W. Engineering & Science.** Grand Rapids, MI, 1994

- (1) Review of report on sediment toxicity assessment for St. Mary's River, Michigan.