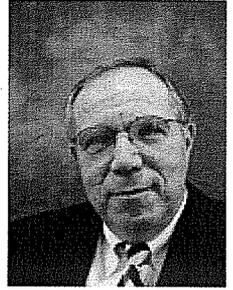


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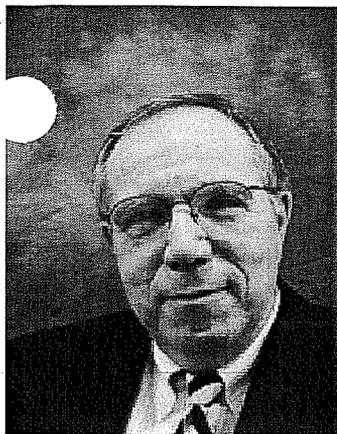
Dominic M. DiToro is the Edward C. Davis Professor of Civil and Environmental Engineering at the University of Delaware. He was elected to the National Academy of Engineers in February 2005. His other awards include the Institute of Scientific Information Highly Cited Researcher in 2003 and The Founders Award of the Society of Environmental Toxicology and Chemistry in 1997.

Dr. DiToro has specialized in the development and application of mathematical and statistical models to stream, lake, estuarine and coastal water and sediment quality problems.. He has published over one hundred technical papers, as well as Sediment Flux Modeling, published by J. Wiley & Sons. He has participated as Expert Consultant, Principal Investigator and Project Manager on numerous water quality studies for industry, research foundations and governmental agencies. Recently, his work has focused on the development of water and sediment quality criteria for the EPA, sediment flux models for nutrients and metals, and integrated hydrodynamic, sediment transport and water quality models.

Dr. DiToro received his B.E.E. in electrical engineering with honors from Manhattan College in 1963, his M.A. in electrical engineering from Princeton University in 1965 and his Ph.D. in Civil and Geological Engineering from Princeton in 1967. He joined the faculty of Manhattan College and became the Donald J. O'Connor Professor of Environmental Engineering in 1999. In 2003, he joined the faculty at the University of Delaware.

Dr. DiToro also served as a Senior Research Consulting Engineer at Hydrosience, Inc. from 1969-1980 and was a founding partner of the successor firm HydroQual, Inc, a consulting firm that specializes in water quality modeling, where he was Principal Consultant from 1980 to 2004.

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Election to National Academy of Engineering (February 2005)

Education

Professional History

Representative Experience

Honors

Professional Affiliations

Courses Taught

Publications

Research Projects

Professional Activities

Sediment Flux Modeling

Education

Manhattan College: B.E.E., Electrical Engineering (with honor) , 1963

Princeton University: M.A., Electrical Engineering, 1965

Princeton University: Ph.D., Civil and Geological Engineering, 1967

Professional History

2003 - present Edward C. Davis Professor of Civil and Environmental Engineering, University of Delaware

1999 - 2003	Donald J. O'Connor Professor of Environmental Engineering, Manhattan College
1986 - 1999	Research Professor of Environmental Engineering, Manhattan College
1980 - Present	Principal Consultant, HydroQual, Inc.
1974 - 1986	Adjunct Associate Research Professor, Environmental Engineering
1969 - 1974	Adjunct Assistant Professor, Environmental Engineering
1969 - 1980	Senior Research Consulting Engineer, Hydrosience, Inc.
1967 - 1969	Research Associate, Environmental Engineering and Science Program

Representative Experience

Dr. Di Toro has specialized in the development and application of mathematical and statistical models to stream, lake, estuarine, and coastal water and sediment quality problems. He has published over one hundred technical papers, as well as *Sediment Flux Modeling*, published by J. Wiley & Sons. He has participated as Expert Consultant, Principal Investigator, and Project Manager on numerous water quality studies for industry, research foundations, and governmental agencies. Recently his work has focused on the development of water and sediment quality criteria for the EPA, sediment flux models for nutrients and metals, and integrated hydrodynamic, sediment transport and water quality models.

Honors

Member, National Academy of Engineering

Institute of Scientific Information Highly Cited Researcher, 2003

Gordon Conference Chairman (Elected) Environmental Sciences Water - 2002

Sigma Xi - Manhattan College Chapter, Distinguished Alumnus Award - 2000

Society of Environmental Toxicology and Chemistry, The Founders Award - The Society's Highest Award - 1997

New York Water Environment Association, Kenneth Allen Memorial Award - 1994

Department of the Army, Certificate of Achievement - 1991

International Association for Great Lakes Research, The Chandler Misener Award - 1983

American Society of Civil Engineers, Wesley W. Horner Award, 1980

International Association for Great Lakes Research, The Chandler Misener Award - 1978

American Society of Civil Engineers, Samuel A. Greely Award - 1974

American Society of Civil Engineers, Met Section Prize Paper Award - 1970

NSF Cooperative Fellowship, Princeton University 1963-1966

Institute of Radio Engineers - AIEE, Prize Paper Contest - 1963

Professional Affiliations

American Chemical Society

American Geophysical Union

American Society of Civil Engineers

American Society of Limnology and Oceanography

Association of Environmental Engineering and Science Professors

Estuarine Research Federation

Institute of Electrical and Electronic Engineers

International Association for Great Lakes Research

International Water Association

Society of Toxicology and Environmental Chemistry
The Geochemical Society

Courses Taught

Mathematical Water Quality Models
Mathematical Methods
Engineering Statistics
Simulation Analysis
Special Topics in Water Quality

Publications

Books

Di Toro, D.M. Sediment Flux Modeling. J. Wiley and Sons., New York: (2001), 624p.

Edited Books

Paquin, P. R., K. Farley, R. C. Santore, C. D. Kavvas, K. G. Mooney, R. P. Winfield, K. B. Wu, and D. M. Di Toro, eds. (2003). Metals in Aquatic Systems: A Review of Exposure, Bioaccumulation, and Toxicity Models, SETAC Press, Pensacola, FL.

Paquin, M. C., W. A. Stubblefield, W. J. Adams, D. M. Di Toro, P. V. Hodson, R. J. Erickson, and E. J. Keating Jr., eds. (2003). Reevaluation of the State of the Science for Water Quality Criteria Development, SETAC Press, Pensacola, FL.

Water Quality Modeling

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Di Toro, D.M., J.D. Mahony, D.J. Hansen, and W.J. Berry. "A model of the oxidation of iron and cadmium sulfide in sediments." Environ. Toxicol. Chem. 15 (1996): 2168-2186.

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Di Toro, D.M. "Vertical interactions in phytoplankton populations - An asymptotic eigenvalue analysis." *Proc. 17th Conf. Great Lakes Research* (1974): 17-27.

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Hansen, D.J., W.J. Berry, J.D. Mahony, W.S. Boothman, D.M. Di Toro, D.L. Robson, G.T. Ankley, D. Ma, Q. Yan, and C.E. Pesch. "Predicting the toxicity of metals-contaminated field sediments using interstitial concentrations of metal and acid volatile sulfide normalizations." *Environ. Toxicol. Chem.* 15 (1996): 2080-2094.

Berry, W.J., D.J. Hansen, J.D. Mahony, D.L. Robson, D.M. Di Toro, B.P. Shipley, B. Rogers, J.M. Corbin, and W.S. Boothman. "Predicting the toxicity of metals-spiked laboratory sediments using acid volatile sulfide and interstitial water normalizations." *Environ. Toxicol. Chem.* 15 (1996): 2067-2079.

Hansen, D.J., J.D. Mahony, W.J. Berry, S.J. Benyi, J.M. Corbin, S.D. Pratt, D.M. Di Toro, and M.B. Able. "Chronic effect of cadmium in sediments on colonization by benthic marine organisms: An evaluation of the role of interstitial cadmium and acid volatile sulfide in biological availability." *Environ. Toxicol. Chem.* 15 (1996): 2126-2137.

Ankley, G.T., N.A. Thomas, D.M. Di Toro, D.J. Hansen, J.D. Mahony, W.J. Berry, R.C. Swartz, R.A. Hoke, A.W. Garrison, H.E. Allen, and C.S. Zarba. "Assessing potential bioavailability of metals in sediments: A proposed approach." *Environmental Management* 18 (1994): 331-337.

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Di Toro, D. M., J D. Mahony, D J. Hansen, K J. Scott, M B. Hicks, S M. Mayr, and M S. Redmond. "Toxicity of Cadmium in Sediments: The Role of Acid Volatile Sulfide." *Environ. Toxicol. Chem.* 9 (1990): 1487-1502.

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Sorption Models

Ponizovsky, A. A., Thakali, S., Allen, H. E., Di Toro, D. M., and Ackerman, A. J. "Effect of soil properties on copper release in soil solutions at low moisture content." *Environ. Tox. Chem.*, 25(3) (2006): 671-682.

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trace metals in sandy sediments and application to sediment quality criteria." *Environ. Tox. Chem.* 15 (1996): 2198-2208.

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Horzempa, L M. and D. M. Di Toro. "The extent of reversibility of polychlorinated biphenyl adsorption." *Wat. Res* (1982)

Statistical Models

Di Toro, D. M. "Probability model of stream quality due to runoff." *J. Environ. Engr. ASCE* 110(3) (1984): 607-628.

Di Toro, D. M. and G van Straten. Uncertainty in the parameters and predictions of phytoplankton models. International Institute for Applied System Analysis (IIASA), (1979). WP-79-27.

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Small, M J. and D. M. Di Toro. "Stormwater Treatment Systems." *Journal of the Environmental Engineering Division, ASCE* 105 (1979): 557.

Research Projects

University of Delaware

Delaware Research Infrastructure Improvement Program, State of Delaware, EPSCoR Seed Grant Program

Integrated Water Quality Monitoring, Habitat Mapping, and Fish Tracking with an Automated Underwater Vehicle, National Oceanic and Atmospheric Administration

A Prototype System for Multi-disciplinary Shared Infrastructure? Chesapeake Bay Environmental Observatory (CBEO): Concept Development Toward a Collaborative Large Scale Engineering Analysis Network for Environmental Research (CLEANER) with Focus on the Chesapeake Bay, National Science Foundation

CHRP: Linking Water Quality Models with Individual-based Models to Investigate Impacts of Diel-cycling Hypoxia on Nursery Habitat Quality for Estuarine Dependent Fishes, National Oceanic and Atmospheric Administration

Toxicity and Mobilization of Metals and Metal Mixtures in Sediments, National Institute of Environmental Health and Safety

Developing a Unit World Model for Metals in Streams and Rivers, Center for the Study of Metals in the Environment. EPA Center

Collaborative Research: Concept Development Toward a Collaborative Large Scale Engineering Analysis Network for Environmental Research (CLEANER) with Focus on the Chesapeake Bay, National Science Foundation

Mechanisms of Genetic and Epigenetic Susceptibility to Superfund Chemicals, NIEHS Superfund Hazardous Substances Research Program (New York University)

Developing a Unit World Model for Metals in Aquatic Environments, Center for the Study of Metals in the Environment. EPA Center

Developing a Model to Predict the Persistence of Metals in Aquatic Environments, Center for the Study of Metals in the Environment. EPA Center

Quantitative Structure Activity Relationships for Toxicity and Fate Parameters of Metal and Metal Compounds, Center for the Study of Metals in the Environment. EPA Center

Manhattan College

Water-Sediment Model and Criteria for Arsenic and Chrome, NIEHS Superfund Hazardous Substances Research Program (New York University, Manhattan College, Rutgers University)

Development of fate and transport models for exposure assessment, Center for the Study of Metals in the Environment, EPA Center

Oxidation of Sediment Bound Silver Sulfide and Application of Sediment Flux Model to Silver, Silver Coalition - Photographic Imaging Manufacturing Association

A Modeling and Experimental Investigation of Metal Release from Contaminated Sediments: The Effects of Metal Sulfide Oxidation and Resuspension, EPA STAR Grant

Bioavailability, Trophic Transfer and Fate of Pollutants in the Aquatic Environment, EPA Cooperative Agreement

Experimental Determination and Modeling of Flux of Copper from Sediments, International Copper Association

Investigating the Toxicity of Silver in Sediments, Silver Coalition

Application of a Modern Eutrophication Model to the MERL Mesocosm Experiments, National Science Foundation

Predicting Toxic Heavy Metal Adsorption and Desorption from Contaminated Soils and Suspensions, NIEHS Superfund Hazardous Substances Research Program

HydroQual: 1995 - Present

Development of a Contaminant Fate, Transport, and Toxicity Model for New York Harbor, Hudson River Foundation

Investigation of the Toxicity of Weathered and Non-weathered Oil, ExxonMobil Corporation, USA

Analysis of the Persistence of Metals in Aquatic Systems, Kennecott Copper Company

Review of Nutrient Criteria, Association of Municipal Sewerage Agencies

Development of a Biotic Ligand Model for Silver, Water Environment Research Foundation

Development of Biotic Ligand Model, EPA Office of Water

Technical Support Document of Sediment Quality Criteria, U.S. EPA, Criteria and Standards Division

Development of Sediment Quality Criteria for PAH Mixtures, U.S. EPA, Criteria and Standards Division

Sediment Quality Criteria for PAHs using Narcosis Theory, U.S. EPA, Criteria and Standards Division

Impact of Chromium Contaminated Sediments in Tannery Bay, Cypress AMAX

Long-Range Transport And Deposition: The Role Of Henry's Law Constant, Dow Corning Chemical Company

Review of a Model of the Lagoon of Venice, Delft Hydraulics Laboratory

Silver Risk Assessment, Eastman Kodak Company

Analysis of Cadmium in the Sediments of the Neponset Reservoir, Foxboro Co.

Biotic Ligand Model Review for EPA Science Advisory Board, EPA Office of Water

Development of a New York Harbor Eutrophication Model, New York Department of Environmental Protection

Development of a Biotic Ligand Model for Copper Toxicity, International Copper Association

Sediment Criteria for Zinc: Application to Risk Assessment, International Lead Zinc Research Association

Upper Mississippi River Eutrophication Study - Development of Coupled Eutrophication - Sediment Transport Model, Metropolitan Council Wastewater Services

Development of a Eutrophication Model for the Croton Reservoir Filtration Study, Medcalf and Eddy - Hazen and Sawyer

Investigation of the Impact of the Boston Harbor Outfall. Development of a Eutrophication Model, Massachusetts Water Resources Agency

Fate and Transport of Mine Tailings and Copper from a Copper Mine, Freeport - McMoRan

Model of Calcium Carbonate Precipitation in Onondaga Lake, AlliedSignal Corp.

Development of a PCB Model for Green Bay, State of Wisconsin Department of Environmental Quality

Development of a Wetlands Water Quality Model of the Everglades, South Florida Water Management District

Development of a Sediment Flux Model for Iron and Manganese, U.S. Army Corps of Engineers-Waterways Experiment Station

Development of a Model of Bivalves in Chesapeake Bay, U.S. Army Corps of Engineers-Waterways Experiment Station

Selected Projects - pre-1995

Chesapeake Bay Water Quality Model - Development of Sediment Flux Model, U.S. Army Corps of Engineers-Waterways Experiment Station/U.S. EPA Chesapeake Bay Program

Upper Mississippi River Eutrophication Study - Development of Coupled Eutrophication - Sediment Transport Model, Metropolitan Council Wastewater Services

Development of a Wetlands Water Quality Model of the Everglades, South Florida Water Management District

Development of a Dissolved Oxygen/ Eutrophication Model of New York/New Jersey Harbor (HEM), New York City Department of Environmental Protection, Bureau of Environmental Engineering

New Jersey Toxic Metal Wasteload Allocation Model, U.S. EPA, Region II

Long Island Sound Eutrophication Study - Development of a Three Dimensional Eutrophication - Dissolved Oxygen Model, U.S. EPA Regions I and II

Urban Stormwater Manual - Statistical Models for Stormwater Treatment Systems, U.S. EPA, Office of Water

PCB Fate and Transport in Watts Bar Reservoir, McKenna & Cuneo, Washington, D.C. (representing Union Carbide)

Toxicity Modeling Feasibility Study, Naugatuck River, U.S. EPA, Monitoring and Data Support Division

Evaluate Suitability of Toxic Criteria Procedure for Complex Wastewater Discharges in the Naugatuck River, U.S. EPA, Office of Water, Office of Water Regulations and Standards

Development of Sediment Quality Criteria for Metals, U.S. EPA, Office of Water, Health and Ecological Criteria Division, Office of Science and Technology

Determination of Water-Sediment Partition Coefficients for Priority Heavy Metals, U.S. EPA, Environmental Research Laboratory

Metals Sediment Quality Criteria Methodology Development, U.S. EPA, Criteria and Standards Division

Development of Interim Sediment Quality Criteria, U.S. EPA, Criteria and Standards Division

Technical Guidelines Supporting Establishment of Sediment Quality Criteria, U.S. EPA, Office of Water, Health and

Ecological Criteria Division, Office of Science and Technology

Sediment Quality Criteria For Five Nonionic Organic Chemicals, U.S. EPA, Office of Water, Health and Ecologic Criteria Division, Office of Science and Technology

SQC Science Advisory Board Briefing Document, U.S. EPA, Criteria and Standards Division

Sediment Criteria Workshops, U.S. EPA, Criteria and Standards Division

Waukegan Harbor PCB Project, U.S. EPA, Region V

Professional Activities

Academic Year 2001-2002

Invited Lectures and Seminars

"The Biotic Ligand Model"

International Copper Association Conference.

Woods Hole Oceanographic Institution. Woods Hole, MA. July 2001

"Numerical Water Quality Standards"

Association of Metropolitan Sewerage Agencies (AMSA) Developments in Water & Wastewater Law. Savannah GA
November 2001

"Modern Water Quality and Sediment Criteria: Toxicological Interactions"

Environmental Sciences Department. Rutgers University, October 2001

"Modern Water and Sediment Quality Criteria: Toxicological and Chemical Interactions - How Much Is Too Much"

Department of Earth and Environmental Engineering. Columbia University, November 2001

"TMDL Listings and Modern Water Quality Criteria"

Metropolitan Water Reclamation District of Greater Chicago. Cicero IL, March 2002.

Workshops

"Evaluating persistence: suspended solids and sediments"

Workshop on Metals Persistence, Bioaccumulation and Toxicity in Aquatic Systems.

University of Quebec, CA. March 2002

Short Courses

"Understanding Total Maximum Daily Loads, Tools and Techniques for Achieving Reasonable TMDL-Based Limits"

D. Katz, D. M. Di Toro, T. W. Gallagher, A. Thuman, Government Institutes Division, ABS Group Inc. Washington, DC, October 2001

Papers Presented

"The Intrinsic Toxicity of Narcotic Chemicals and PAHs in Pure Phases and Mixtures"
SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

resented Papers Co-authored

"Alternative Approaches for Modeling the Physiological Response of Aquatic Organisms to Acute Metal Toxicity"
P. R. Paquin, V. Zoltay, K.B. Wu, V. Navab, R. Mathew, R. C. Santore, and D. M. Di Toro, SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

"Predicting the Effects of Weathering on Crude Oil Using Narcosis Theory: Case Studies"
J. A. McGrath, F. L. Hellweger, W. Stubblefield, D. M. Di Toro, SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

"An Application of the Biotic Ligand Model (BLM) Framework for Cadmium"
K.B. Wu, V. Navab, R. C. Santore, P. R. Paquin, D. M. Di Toro, SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

"The Partitioning of Silver at Picomolar Concentrations to Humic Material"
J. Mahony, D. M. Di Toro, T. Shadi, K. Rader, SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

"An Alternative Approach to PBT for Assessing Hazard of Metals and Metal Compounds"
W. Adams, K. Brix, D. M. Di Toro, P. R. Paquin, H. Allen, P. Campbell, D. DeForest, A. Green, SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

Posters Co-authored

"Arsenic Fate and Transport Modeling in Lakes: Approach and Preliminary Results"
F. L. Hellweger, K. Farley, U. Lall, D. M. Di Toro,
Arsenic in Drinking Water - An International Conference at Columbia University. November, 2001

"Estimating the Competition of Other Metals to the Binding of Copper to NOM"
R. Mathew, R. C. Santore, P. R. Paquin, D. M. Di Toro, J. Mitchell
SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

"Application of the Biotic Ligand Model to Acute Metal Toxicity for Aquatic Organisms"
R. C. Santore, R. Mathew, V. Navab, V. Zoltay, P. R. Paquin, K.B. Wu, D. M. Di Toro,
SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

"Dissolution, Weathering and Toxicity of Exxon Valdez Crude Oil"
F. L. Hellweger, J. A. McGrath, W. Stubblefield, D. M. Di Toro
SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

"The Chemical Immobilization of Silver in Sediments when Acid Volatile Sulfide is not Present"
J. Mahony, D. M. Di Toro, T. Shadi, K. Rader, P. Dombrowski
SETAC 22nd Annual Meeting, Baltimore MD. Nov. 2001

Academic Year 2000-2001

Invited Lectures and Seminars

"Review and Comparison of Existing and Developing Standards/Criteria/Screening Guidelines for MGP Sites"
Electric Power Research Institute (EPRI) Conference
Jacksonville FL, October 2000

"Theoretical Approaches to Sediment Quality Guidelines Development and their Applications"
A Short Course on the Collection, Analysis, and Interpretation of Sediment Quality Data
Southern California Coastal Water Research Project (SCCWRP)
Long Beach, CA. October 2000

"Reflections on the History of SETAC. Virtues and Faults. Sins of Omission, Sins of Commission"
Plenary Lecture.
Society of Environmental Toxicology and Chemistry (SETAC)
21st Annual Meeting, Nashville, TN November 2000

"The Chesapeake Bay Eutrophication Model"
Johns Hopkins University, Department of Geography and Environmental Engineering
February 2001

"Modern Water Quality Criteria in the TMDL Modeling Process"
Keynote Speaker
TMDL Science Issues Conference.
Water Environment Federation and ASIWPCA
St. Louis MO, March 2001

"Rational Criteria and Remediation"
Keynote Speaker
33rd Mid-Atlantic Industrial and Hazardous Waste Conference
Manhattan College, Riverdale NY June 2001

Workshops

"Current Structure of the BLM Model"
The Biotic Ligand Model (BLM): Current Status and Future Directions Colloquium sponsored by the Electric Power Research Institute (EPRI)
January 2001, Wash. DC

Short Courses

The Safe Drinking Water Act & Clean Water Act:
1. Understanding the Basics of How Water Quality Standards Are Developed
2. Wet Weather and Nutrients: Special Concerns for Special Problems

The Association of Metropolitan Sewerage Agencies and the Association of Metropolitan Water Agencies (AMSA)
Phoenix, AZ. November 2000

Advanced Study Institute on Recent Developments in Coastal Eutrophication Research: Prediction, Decision Support Systems, and Management
1. Modern Eutrophication Models
2. Sediment Flux Modeling
Supported by the Croucher Foundation

The University of Hong Kong, Hong Kong. February 2001

Manhattan College 47th Institute in Water Pollution Control. Water Quality Modeling. A Computer-Based Workshop with Applications to TMDLs. June 2001

Papers Presented

"Sediment Toxicity Prediction"
Conference on Dredged Material Management: Options and Environmental Considerations
Massachusetts Institute of Technology, Cambridge, MA December 3-6, 2000

"Determining Site-Specific Water Quality Criteria for Copper"
WERF 2001 Subscriber Meeting
Washington DC, April 2001

Panel Member

Expert Advisory Panel
Canadian Network of Toxicology Centre
Metals in the Environment Research Program (MITE-RN) March, 2001

Academic Year 1999-2000

Invited Lectures and Seminars

"Modeling Contaminant Fate in Aquatic Systems in the New Millennium"
Invited Paper: Gordon Conference, Environmental Sciences: Water, June 2000

"Modeling the Environmental Impacts of Copper Mining in Indonesia"
Department of Civil and Environmental Engineering
University of Delaware, March 2000

Workshops

"Bioavailability of Organic Chemicals and Metals in the Water Column and in Sediments"
Experts Workshop on Review of the State of the Science, PBT Concepts and Metals and Metal Compounds. US EPA and International Council of Metals in the Environment (ICME), January, 2000 Arlington VA

Short Courses

Manhattan College 46th Institute in Water Pollution Control. Water Quality Modeling. A Computer-Based Workshop. June 2000

Papers Presented

"Narcosis and PAH Sediment Criteria"
Electric Power Research Institute (EPRI) Conference, New Orleans, September 1999

"A Mass Balance Model for Use in Evaluating Exposure Levels and Effects of Metals Downstream of Point Source Discharges"

Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

"Long-Range Transport and Deposition: The Role of Henry's Law Constant"
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

"Mechanism of hydrogen sulfide oxidation I. Methodology"
American Chemical Society National Meeting, Computational Methods in Environmental Chemistry
Division of Chemistry in Computers, Division of Geochemistry
San Francisco, CA March 2000

"A Sediment Flux Model for Manganese"
American Chemical Society National Meeting, Division of Environmental Chemistry.
Chemical Speciation and Reactivity in Water Chemistry and Water Technology: A Symposium in Honor of James J. Morgan
Washington DC, August 2000

Presented Papers Co-authored

"MARS: Model for the Assessment and Remediation of Sediments"
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999, 1999

"Extension of the Biotic Ligand Model of Acute Toxicity of Copper and Silver to Invertebrates"
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

"Mechanism of hydrogen sulfide oxidation II. Application"
American Chemical Society National Meeting, San Francisco, CA
Computational Methods in Environmental Chemistry Division of Chemistry in Computers, Division of Geochemistry,
March 2000

Posters Co-authored

"Predicting the Toxicity of Metals in Sediments"
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

"Defining total PAH concentrations in Field Collected sediments"
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

"Orthogonal Distance Regression: An Alternative to Ordinary Least Squares."
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

"Assessing the Importance of Environmental Ligands in Determining Metal Speciation and Bioavailability"
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

"Sediment Transport Modeling in Green Bay: A precursor to Addressing PCB Fate and Transport"
Society of Environmental Toxicology and Chemistry (SETAC)
20th Annual Meeting, Phil. PA November 1999

Panel Member

Mercury Source-Receptor Relationships Expert Panel
Sponsored by EPRI. Madison WI, May 2000

Expert Review Panel: Channel Deepening Project. Modeling Review.
Port of New York and New Jersey Authority

Academic Year 1998-1999

Invited Lectures and Seminars

"PAH Sediment Quality Criteria: Narcosis Theory and EPA Guidelines"
PSE&G. Newark, NJ. Sept. 1998

Debate: "Equilibrium Partitioning vs. Empirically Based Criteria"
SETAC Conference Charlotte, NC. Nov. 1998

"The Biotic Ligand Model and its Applicability to Water Quality Criteria"
EPA Science Advisory Board: Wash. DC, April 1999

Workshops

Hudson River Foundation
CARP Workshop. NYC. Oct. 1998
A Sponsored Workshop: Dissolved Oxygen Criteria.
Annapolis, MD. Nov. 1998
Hudson River Foundation
CARP Workshop. NYC. Dec. 1998
Silver Water and Sediment Criteria Workshop.
Kodak. Rochester, NY. May 1999

Short Courses

Manhattan College 45th Institute in Water Pollution Control. Water Quality Modeling. A
Computer-Based Workshop. June 1999

Papers Presented

"PAH Mixture Criteria and the Narcosis Model"
SETAC Regional Meeting. Presented Paper Newark, NJ. Sept. 1998

"Biotic Ligand Model and Silver Water Quality Criteria"
SETAC Conference Charlotte, NC. Nov. 1998

"Metals Criteria and Environmental Impacts"
International Corrosion Conference Galveston TX, Feb. 1999

"Bioavailability of Metals in the Water Column and Sediment"
SETAC Europe Conference. Brussels. May 1999



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