

**EDUCATION**

- 1975 Sc.D., Hydrodynamics & Water Resources -  
Mass. Institute of Technology,  
Cambridge, MA, U.S.A.
- 1971 M.S., Civil Engineering, Northeastern Univ.,  
Boston, Massachusetts, U.S.A.
- 1970 Bachelor of Civil Engineering,  
American University of Beirut, Lebanon

**AWARDS**

Ellis Island Medal of Honor, NECO Foundation, Inc., 2009  
Arthur T. Ippen Memorial Fellowship, M.I.T., 1975

**PROFESSIONAL HISTORY**

- Najarian Associates, Inc.: President, 1993 - Present
- Najarian Associates, L.P.: President, 1990 - 1992
- Najarian & Associates, Inc.: President, 1982-1990
- Najarian, Thatcher & Assoc., Inc.: Pres. 1979-1982
- NY University: Adjunct Asst. Professor, 1980-1998
- University of Delaware: Adjunct Associate Professor,  
1985-1998
- NJDEP - Div. of Water Resources, Drinking Water  
Quality Institute, 1994-2001
- Chesapeake Bay Institute of The John Hopkins Univ.,:  
Associate Research Scientist, 1976-1979
- Resource Analysis, Inc.: Senior Analyst, 1975 - 1976
- Massachusetts Institute of Technology: Research  
Asst. & Graduate Student (Doctoral studies)  
Teaching Asst., 1971 - 1975
- Northeastern Univ.: Graduate Student & Teaching  
Asst., 1970 - 1971
- Carl Weiss: Asst. Site Engineer, 1969

**PROFESSIONAL AFFILIATIONS**

- Ellis Island Medals of Honor Advisory Committee
- American Society of Civil Engineering, Member
- American Geophysical Union, Member
- American Society of Limnology & Oceanography,  
Member
- American Meteorological Society, Member
- Estuarine Research Federation, Member
- Armenian Engineers and Scientists of America, Inc.,  
Member

**EXPERTISE**

Dr. Najarian is an expert in the field of water resources. Over the past 40 years, Dr. Najarian has been involved with the development, adaptation, and application of mathematical models for hydrodynamic and water quality simulations of aquatic systems. Dr. Najarian has particular expertise in applying such models in studies of:

(1) wasteload allocation & regional planning of stormwater runoff; and (2) estuarine eutrophication dynamics. Dr. Najarian also serves as a consultant on hydraulic and environmental issues related to large-scale planned residential, commercial, industrial, and waterfront projects.

Under Dr. Najarian's direction, **Najarian Associates' Civil / Survey Divisions** have designed more than 3 million square feet of commercial space, and 100 miles of roadways, sanitary/storm water sewer lines, and water mains.

Under Dr. Najarian's direction, **Najarian Associates' Environmental Division** has conducted hazardous waste investigations of numerous New Jersey sites. These investigations consist of:

- Conducting over 150 Phase I/Phase II Environmental Audits to screen sites for potential contamination associated with real estate transactions
- Preparation of PA/SI and RI/RAW reports for contaminated sites towards obtaining "No Further Action" letters from NJDEP
- Brownfields Remediation and Redevelopment including obtaining Federal/State Grants for site remediation.

**CONSULTING ACTIVITIES**

- Selection of Water Quality Models of Waste Receiving Waters for Killam Assoc., Inc., Millburn, NJ
- Sediment Transport in the C & D Canal for State University of New York at Stony Brook, NY
- Salinity Intrusion in the Delaware Estuary as Affected by the C & D Canal for the Delaware River Basin Commission, W. Trenton, NJ
- Studies on Water Quality Models for Skaneateles Creek and Owasco Outlet for Leonard S. Wegman Co., New York, NY
- Studies of Lake Pollution in New Hampshire for Resource Planning Assoc., Inc., Cambridge, MA
- Studies on Guidelines for Interceptor Design and Expansion for Abt Assoc., Cambridge, MA
- Review Panelist, Water Quality Modeling of Mobile Bay for National Institute of Health, Washington, DC
- Review Panelist, Chesapeake Bay Program, Hydrodynamics and Water Quality Modeling for Environmental Protection Agency, Washington, DC
- Review Panelist, State Sponsored Research Projects in The Chesapeake Bay, Dept. of Health & Mental Hygiene, State of Maryland Baltimore, MD



- Chairman, Technical Advisory Committee, Whippany Watershed Project, NJDEP Office of Land Use & Water Planning
- Advisory Council, NJ Water Resources Institute Rutgers University, N. Brunswick, NJ
- State Plan Implementation Advisory Group, NJ Dept. of Community Affairs
- Committee on the Collaborative Large-scale Engineering Analysis Network for Environmental Research (CLEANER), Water Science and Technology Board, National Research Council of the National Academies, Washington, DC
- NJDEP-Scientific Advisory Board

### EXPERT TESTIMONY

Dr. Najarian has provided testimony as an expert witness to numerous townships, counties, agencies and courts in the field of environmental/water resource engineering. A brief listing of court cases is as follows:

- Norman Krischer, et al. vs. New Jersey Pinelands Commission (Docket No. OCN-L-4381-96), 1999
- Borough of Ramsey vs. NJDEP (OAL Docket No. EWR11834-95), 1995
- United States Land Resources, LP vs. Phelps Dodge Copper Products, Corp., et al. (Civil Action No. CIV-93-978), 1994
- National Audubon Society, et al. vs. Historic Smithville Development, et al. (OAL Docket No. ESA1140-83), 1983
- Sierra Club vs. Hovsons, 1983

### ACADEMIC ACTIVITIES

- Lecturer-Rutgers, Princeton Universities
- Monmouth University, Board of Trustees, 2017-2021
- Monmouth University, Board of Trustees, 2005-2015
- Monmouth University, Chair Audit Committee, 2010
- Monmouth University, Real Estate Institute, 1997
- Monmouth University, Advisory Board Member Science, Technology and Engineering, 1997
- Member, NJ Water Resources Research Institute, Rutgers University 1995-Present
- Rutgers University, New Jersey, Fundamental and New Concepts in Environmental Modeling, Case Studies in Coastal and Estuarine Models and Toxic Substance Models, April 1988
- The Johns Hopkins University, Baltimore, MD Convener of "Environmental Modeling" Symposium. Part I. Spring/Summer: Physical Processes in Coastal and Oceanographic Environments, 1977

- Massachusetts Institute of Technology, Cambridge, MA. Lecturer Summer Course 2.03s Ecodynamic Systems, Dept. of Mechanical Engineering, 1976.

### Refereed Papers

J.L. DiLorenzo, P. Huang, G.M. Bolin, and T.O. Najarian, (2012). "Conceptual model for back-bay inundations," *ASCE, Journal of Waterway, Port, Coastal and Ocean Engineering Division*, 12<sup>th</sup> International Estuarine and Coastal Modeling Conference.

H.S. Litwack, J.L. DiLorenzo, P. Huang, and T.O. Najarian (2006). "Development of a simple phosphorus model for a large urbanized watershed." *ASCE, Journal of Environmental Engineering*, 132: 538-546.

J.L. DiLorenzo, R.J. Filadelfo, C.R. Surak, V.K. Gunawardana, T.O. Najarian (2004). "Tidal Variability in the Water Quality of an Urbanized Estuary." *Estuaries*, 27, No. 5: 851-860.

J.L. DiLorenzo, P. Huang and T.O. Najarian (1994). "Mixed-Layer Hydrothermal Reservoir Model," *ASCE Journal of Hydraulic Engineering*, 120, No. 7.

J.L. DiLorenzo, R.V. Ram, P. Huang and T.O. Najarian (1994). "A Two-Dimensional Hydrothermal Reservoir Model," *ASCE, Journal of Hydraulic Engineering*,

J.L. DiLorenzo, P. Huang, T.O. Najarian and M.L. Thatcher (1994). "Dredging Impacts on Delaware Estuary Tides," *American Society of Civil Engineers, Journal of Waterway, Port, Coastal and Ocean Engineering*, 3<sup>rd</sup> International Estuarine & Coastal Modeling Conference 9/8 - 9/10/93, Oak Brook, Illinois.

J.L. DiLorenzo, R.V. Ram, P. Huang, and T.O. Najarian (1994). "Pollution Susceptibility of Well-Mixed Tidal Basins," *ASCE, Journal of Waterway, Port, Coastal and Ocean Engineering Division*, 120 (4): 404-422.

J.L. DiLorenzo, P. Huang and T.O. Najarian (1989). "Water Quality Model for Small Tidal Inlet Systems," *ASCE Journal of Environmental Engineering*, 115, No. 1.

T.O. Najarian and D.R.F. Harleman (1989). "Role of Models in Estuarine Flow and Water Quality Analysis," Estuarine Circulation, B.J. Neilson, A. Kuo and J. Brubar (eds.), Humana Press.

T.O. Najarian, P. Huang and D-P Wang (1986). "Analysis of Residual Currents Using a Two-Dimensional



Model,” *Physics of Shallow Estuaries and Bays*, J. Van de Kreeke (ed.), Springer-Verlag.

T.O. Najarian, T.T. Griffin and V.K. Gunawardana (1986). “Development Impacts on Water Quality: A Case Study,” *ASCE Journal of Water Resources Planning and Management*, 112, No. 1.

T.O. Najarian, D-P Wang, and P. Huang (1984). “A Lagrangian Transport Model for Estuaries,” *ASCE Journal of the Waterway, Port, Coastal and Ocean Division*, 110, No. 3.

T.O. Najarian, P.J. Kaneta, J.L. Taft and M.L. Thatcher (1984). “Application of Nitrogen-Cycle Model to Manasquan Estuary,” *ASCE Journal of Environmental Engineering*, 110, No. 1.

T.O. Najarian and M.L. Thatcher (1983). “Transient Hydrodynamic and Salinity Simulations in the Chesapeake Bay Network,” *Estuaries*, 6, No. 4: 356-363

T.O. Najarian and J.L. Taft (1981). “Nitrogen-Cycle Model for Aquatic Systems: Analysis,” *ASCE Journal of Environmental Engineering*, 107, No. EE6.

T.O. Najarian, M.L. Thatcher, and D.R.F. Harleman (1980). “C & D Canal Effect on Salinity of Delaware Estuary,” *ASCE Journal of the Waterway, Port, Coastal, and Ocean Division*, 106, No. WW1.

T.O. Najarian and D.R.F. Harleman (1977). “Real Time Simulation of Nitrogen Cycle in an Estuary,” *ASCE Journal of Environmental Engineering*, 103, No. EE4.

### **Conference Proceedings**

T.O. Najarian (1997). “Watershed Modeling Needs: A Consultant’s Perspective.” EPA National Risk Management Research Laboratory’s Watershed Modeling Workshop, Edison, NJ.

T.O. Najarian and H. S. Litwack (1997). “Balancing Development Pressure and Environmental Stewardship, A Discussion of the Great Swamp Watershed.” ASCE’s 1997 Annual Convention and Exposition, Minneapolis, MN.

NJPDES Task Force. New Jersey Builders Association, Plainsboro, New Jersey, April 1992.

“Southern New Jersey Coastal Modeling Workshop”  
Panel Moderator - “Combining the Water Quality and

Shore Protection Modeling Needs into an Integrated Numeric Solution for Use in Future Engineering Projects.” U.S. Army Corps of Engineers, Philadelphia District, and Coastal Research Center, Stockton State College (September 10-11, 1991).

J.L. DiLorenzo, R. Ram, P. Huang and T.O. Najarian (1991). “Simplified Tidal-Flushing Model for Small Marinas.” ASCE World Marina 91 Conference, Long Beach, California.

“The Governor’s Economic Conference: Investing in New Jersey’s Future.” Government Regulations Task Force Member, NJ. Department of Commerce, Energy & Economic Development, Trenton, New Jersey (March-September 1991).

T.O. Najarian (1991). “Research Priorities for Hydraulic and Water Quality Model Forecasting.” Proceedings of the Seminar for Water Resources Research in the 1990’s, Rutgers University/Cook College, New Brunswick, New Jersey.

T.O. Najarian (1991). “Innovative Nutrient Load Allocation Concepts for Water Quality Modeling in Tidal Waters.” Wastewater Treatment Facilities, Pressing Issues of the 1990’s, Biological Nutrient Removal Workshop, O’Brien & Gere Engineers, Inc., Arlington, VA.

T.O. Najarian (1991). “Engineering Considerations for Stormwater Runoff Control.” 42<sup>nd</sup> Annual Convention of the New Jersey Builders Association, Atlantic City, New Jersey.

P. Huang and T.O. Najarian (1990). “Application of SWMM-4 for Long-Term Pollutant Discharge Assessment in Two New Jersey Watersheds.” Symposium on Transferring Models to Users - Symposium on Urban Hydrology, 26<sup>th</sup> Annual Conference of American Water Resources Associates, Denver, Colorado.

T.O. Najarian (1990). “Analysis of Modeling Methodologies in Water Quality Studies.” Proceedings of Stormwater and Water Quality Management Modeling Group Meeting (SWMM User’s Group Meeting).

T.O. Najarian (1988). “Important Highlights of New Jersey Freshwater Wetlands Preservation Act.” The National Wetlands Policy Forum, Summit, New Jersey.



T.O. Najarian (1988). "New Wetlands Regulations: A Dilemma in Project Planning." New Jersey Builders Association Convention, Atlantic City, New Jersey.

T.O. Najarian and P. Huang (1988). "Hydrothermal and Water Quality Model Development and Adaptation to the Wanaque Reservoir." A Combined Workshop on Hydrodynamic and Water Quality Modeling Interfacing and Long Term Modeling of Chesapeake Bay, Baltimore.

T.O. Najarian (1985). "Detention Basin Influences on the Hydrology and Water Quality of Small Watersheds." Seminar on Flood Plain Hydrology, New Jersey Institute of Technology.

P. Huang, D-P Wang and T.O. Najarian (1984). "Analysis of Residual Currents Using a Two-Dimensional Model." Proceedings of an International Symposium on the Physics of Shallow Estuaries and Bays.

T.O. Najarian, V.K. Gunawardana, M.L. Thatcher (1984). "Assessment of Surface and Subsurface Water Quality Impacts of a Proposed Residential Development." Proceedings Stormwater and Water Quality Management Modeling Group Meeting (SWMM User's Group Meeting) edited by W. James, McMaster University, Ontario.

T.O. Najarian, V.K. Gunawardana and P. Huang (1984). "Influence of Flow Control on Salt Intrusion in a Small Atlantic Coast Estuary." Conference Lecture, ASCE Water Resources Planning and Management Division, Urban Water '84.

T.O. Najarian, M.L. Thatcher and D.R.F. Harleman (1983). "The Effect of Sub-Tidal Variations on Long-Term Water Quality Trends." Proceedings of the ASCE Specialty Conference on Environmental Engineering, pp. 174-181.

T.O. Najarian, V.K. Gunawardana (1981). "Preliminary Analysis of CSO Impact on Lower Rahway River Water Quality." Proceedings of the Stormwater and Water Quality Management Modeling Group Meeting (SWMM User's Group Meeting), edited by W. James, McMaster University, Ontario, file d11:SWMMproc.rno.

T.O. Najarian (1979). "Fate of Nitrogen in Estuarine Environments," Seminar on Water Quality in the Tidal Potomac River. Compiled by J.P. Bennett, U.S. Geological Survey, Open-File Report 79-1588.

H.T. Carter, T.O. Najarian, D.W. Pritchard and R.W. Wilson (1979). "The Dynamics of Motion in Estuaries and Other Coastal Water Bodies." AGU, Vol. 17, No. 7.

T.O. Najarian and D-P Wang (1978). "A Mathematical Model for Stratified Estuaries." 16<sup>th</sup> International Conference on Coastal Engineering, Hamburg, Germany.

T.O. Najarian (1978). "Biogeochemical Simulation Modeling" Methods for the Assessment and Prediction of Mineral Mining Impacts on Aquatic Communities: A Review and Analysis. Workshop Proceedings, Fish and Wildlife Service, U.S. Dept. of Interior FWS/OBS-78/30.

T.O. Najarian and D.R.F. Harleman (1976). "Model of Nitrogen Cycle in an Estuary," Presented at ASCE National Water Resources and Ocean Engineering Convention, San Diego, Preprint 2676.

T.O. Najarian and D.R.F. Harleman (1975). "A Real-time Model of Nitrogen-Cycle Dynamics in an Estuarine System," Proceedings of the Conference on Nitrogen as a Water Pollutant, International Assoc. on Water Pollution Research, Copenhagen, Vol. 2.

S.L. Frankel, B.R. Pearce and T.O. Najarian (1975). "The Nitrogen-Cycle: A Sixty Hour Experiment at the Lightship Boston," Thirty-Eighth Annual Meeting, American Society of Limnology and Oceanography, Inc., Halifax, 22-26.

### **Selected Reports**

G.R. Marino, P. Huang, T.O. Najarian (2000). "Water Quality Assessment of the Upper Passaic River Watershed and Wanaque Reservoir." Reported submitted to NJDEP.

P. Huang and T.O. Najarian (1994). "Hydraulic Transient Study of the North and South Suburban Network, East Baton Rouge Sewer Improvement Program."

H.S. Litwack and T.O. Najarian (1993). "Impact Analysis of a Wastewater Discharge on the Water Quality of the Upper Musconetcong River." Report submitted to Musconetcong Sewerage Authority.

T.O. Najarian (1991). "Evaluation of Real Estate Development: Status & Potential." Report submitted to Midlantic National Bank.

V.K. Gunawardana and T.O. Najarian (1991). "Impact Analysis of Koelle Boulevard Wastewater Treatment





Plant Discharge on the Water Quality of the Lower Hackensack River.” Report submitted to Buck, Seifert & Jost, Inc.

J.L. DiLorenzo, P. Huang, R.V. Ram and T.O. Najarian (1990). “Water Quality Screening Analysis of Small Tidal Embayments Bordering the Hudson River Estuary.” Report for Hudson River Foundation.

V.K. Gunawardana, P. Huang, T.O. Najarian and R.V. Ram (1990). “Impact Analysis of Bergen County Sewage Treatment Plant Discharges on the Water Quality of the Lower Hackensack River.” Report submitted to Clinton Bogart Associates.

J.L. DiLorenzo and T.O. Najarian (1990). “A Field and Model Study of the Dilution Capacity of the Passaic Valley Sewerage Commissioners’ Wastewater Outfall System.” Report for Killam Associates and Passaic Valley Sewerage Commissioners.

H.S. Litwack and T.O. Najarian (1988). “Lower Lopatcong Creek Wasteload Allocation Model Analysis.” Report submitted to Morel & Segal, Inc.

T.O. Najarian and V.K. Gunawardana (1988). “Analysis of Different Effluent Discharge Alternatives from The Two Bridges Sewage Treatment Plant and The Water Quality of Pompton and Passaic Rivers.” Report submitted to Malcolm Pirnie, Inc.

P. Huang, T.O. Najarian and V.K. Gunawardana (1988). “Influence of Wanaque South Diversion on The Trophic Level of Wanaque Reservoir and its Water Quality Management Program.” Report submitted to co-owners of the Wanaque South Project.

J.L. DiLorenzo, H.S. Litwack, T.O. Najarian and G.R. Marino (1988). “Adaptation of a Hydrologic and Water Quality Model to The Great Swamp Watershed: Generation of a Management Tool.” Draft report submitted to NJDEP.

T.O. Najarian, P. Huang, T.T. Griffin and V.K. Gunawardana (1985). “Influence of Wanaque South Diversion on The Trophic Level of Oradell Reservoir and its Water Quality Management Program.” Report submitted to co-owners of the Wanaque South Project.

T.O. Najarian and V.K. Gunawardana (1985). “Influence of Wanaque South Project on the Temperature and Dissolved Oxygen Regimes of the Pompton and Passaic

Rivers.” Report submitted to co-owners of the Wanaque South Project.

T.O. Najarian and T.T. Griffin (1984). “Water Quality Impact Due to Development in Smithville, New Jersey,” Historic Smithville Development Co.

T.O. Najarian and R.J. Petrides (1984). “The Chronological Events in South Brunswick Sewer Network Capacity Improvements.” Report submitted to the Attorneys of IBM.

T.O. Najarian, V.K. Gunawardana and P. Huang (1983). “Influence of Flow Control on the Salt Intrusion in the Lower Manasquan River.” Report submitted to New Jersey Water Supply Authority.

T.O. Najarian, M.L. Thatcher, V.K. Gunawardana and P. Huang (1983). “The Short-Term and Long-Term Impacts of CSO Discharges on the Water Quality of the Lower Passaic River.” Report submitted to Passaic Valley Sewerage Commissioners.

T.O. Najarian, D-P Wang and P. Huang (1982). “Lagrangian Transport in Estuaries and Sea-Level Canals,” Maryland Power Plant Siting Program, Department of Natural Resources, Report No. PPRP-69.

T.O. Najarian, M.L. Thatcher and V.K. Gunawardana (1982). “Assessment of Surface and Subsurface Water Quality Changes Resulting from the Proposed Development at the Towne of Historic Smithville.” Report prepared for Historic Smithville Development Co., Smithville, NJ.

T.O. Najarian, D-P Wang and M.L. Thatcher (1981). “Upper Chesapeake Bay Salinity Study,” Maryland Power Plant Siting Program, Department of Natural Resources, Report No. PPRP-51.

T.O. Najarian and V.K. Gunawardana (1981). “Preliminary Assessment of the Influence of the City of Amsterdam, NY, CSO Discharges on the Water Quality of the Lower Mohawk River.” Report submitted to the City of Amsterdam, NY.

M.L. Thatcher, T.O. Najarian and P. Huang (1981). “Fifty-Year Analysis of Salinity Intrusion and the Associated Average Annual Costs to Water Users in the Delaware Estuary.” Report to U.S. Army Corps of Engineers, Philadelphia District Office.



T.O. Najarian, V.K. Gunawardana and M.L. Thatcher (1981). "Pompton-Passaic Diversion Impact on The Water Quality of The Passaic River." Appendix II, Vol. II of Report Wanaque South Project Economic Feasibility Study. Prepared for North Jersey District Water Supply Commission.

T.O. Najarian, V.K. Gunawardana and P. Huang (1981). "Impact Assessment of Alternative Control Strategies of Steel Manufacturing Plant Effluents." Chapter IV of the Report of the Effect of The Water Bubble Policy on Individual Iron and Steel Facilities. Prepared for U.S. Environmental Protection Agency, Office of Planning and Evaluation.

T.O. Najarian, M.L. Thatcher and P.J. Kaneta (1981). "Salt Intrusion Investigation in the Manasquan Estuary." Report to the Manasquan River Regional Sewerage Authority, through State of New Jersey Dept. of Environmental Protection.

M.L. Thatcher and T. O. Najarian (1981). "Comparison of Salt Intrusion in the Delaware Estuary Under the Influence of Pre and Post-Enlargement Flows in C & D Canal." Report to U.S. Army Corps of Engineers, Philadelphia District Office.

T.O. Najarian and V.K. Gunawardana (1981). "Preliminary Analysis: Combined Sewer Overflow and Bypass Discharge Impact on the Water Quality of the Lower Rahway River." Report to Rahway Valley Sewerage Authority, through EPA Region III funding.

T.O. Najarian and M.L. Thatcher (1981). "Review of Dynamic Estuarine Water Quality and Ecologic Models Applicable to the Chesapeake Bay Network." Report to U.S. Environmental Protection Agency, Environmental Research Laboratory, Athens, GA.

T.O. Najarian, P.J. Kaneta and M.L. Thatcher (1981). "The Influence of Excess Heat Discharges on the Ecology of Mount Hope Bay." Technical Report to Marine Research, Inc., Falmouth, MA.

M.L. Thatcher and T.O. Najarian (1980). "Salt Intrusion in the Delaware Estuary Under the Influence of C & D Canal Flows." Report to U.S. Army Corps of Engineers, Philadelphia District Office.

D.R.F. Hareman, J.E. Dailey, M.L. Thatcher, T.O. Najarian, D.N. Brocard and R.A. Ferrara (1976). "User's Manual for the M.I.T. Transient Water Quality Network Model including Nitrogen-Cycle Dynamics for Rivers

and Estuaries." Ralph M. Parsons Laboratory for Water Resources and Hydrodynamics, Department of Civil Engineering, Massachusetts Institute of Technology, Technical Report 2216, Cambridge, MA.

T.O. Najarian and D.R.F. Harleman (1975). "A Real Time Model of Nitrogen-Cycle Dynamics in an Estuarine System." Technical Report 204, Ralph M. Parsons Laboratory for Water Resources and Hydrodynamics, Department of Civil Engineering, Massachusetts Institute of Technology, Cambridge, MA.

D.R.F. Harleman, D.N. Brocard and T.O. Najarian (1975). "Prediction of Ambient Temperature in Unsteady Flows." Technical Report 175, Ralph M. Parsons Laboratory for Water Resources and Hydrodynamics, Department of Civil Engineering, Massachusetts Institute of Technology, Cambridge, MA.

