

CURRICULUM VITAE

AMVROSSIOS C. BAGTZOGLOU

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<http://www.engr.uconn.edu/~ucremed/>*

Education: **Ph.D.** in Engineering, December 1990
University of California, Irvine (UCI)
Concentration: *Water Resources & Environmental Engineering*
Department of Civil Engineering

M.S. in Civil Engineering, March 1987
Florida Institute of Technology
Concentration: *Hydrology & Water Resources*
Department of Civil Engineering

Diploma (5-year program; equivalent to M.S.) in Civil Engineering, March 1985
Aristotle University of Thessaloniki, Greece
Concentration: *Irrigation-Drainage & Hydraulic Engineering*
Department of Civil Engineering

Languages: Greek, English; intermediate French; basic Spanish

Personal: Born January 1962 in Thessaloniki, Greece
Permanent Resident of the United States
Married, father of twin sons

Academic Positions Held:

May 2009 – Present	Head of Department
Aug 2008 – Present	Professor of Water Resources & Environmental Engineering
Aug 2008 – Aug 2009	Associate Head of Department
Aug 2006 – Aug 2009	Director, UConn Environmental Engineering Program
Feb 2005 – Aug 2009	Undergraduate & Graduate Environmental Engineering Program Coordinator
Feb 2005 – Aug 2006	Interim Director, UConn Environmental Engineering Program
Aug 2002 – Aug 2008	Associate Professor of Water Resources & Environmental Engineering Department of Civil & Environmental Engineering, University of Connecticut, Storrs, CT
Jun 2006 – Jul 2006 & Jun 2008	Invited Visiting Professor (1st class) Institut de Mecanique des Fluides, Institut National Polytechnique, Toulouse, France
Aug 2002 – May 2006	Adjunct Associate Professor of Civil Engineering Department of Civil Engineering & Engineering Mechanics, Columbia University
Jan 1997 – Aug 2002	Assistant Professor of Water Resources & Geoenvironmental Engineering Director, Heffner Laboratory for Hydrologic Research Departments of Civil Engineering & Engineering Mechanics and Earth & Environmental Engineering, Columbia University, New York, NY

Mar 1997 – Aug 2002 **Assistant Professor of Hydrogeology & Water Resources**
 Department of Earth & Environmental Sciences, Lamont-Doherty Earth Observatory of
 Columbia University, Palisades, NY

Jun 1995 – Dec 1996 **Adjunct Professor**
 Earth and Physical Sciences Division, University of Texas at San Antonio, San Antonio, TX

**Experience &
 Institutional Service:**

Jul 2010 – Present **Member of Joint Highway Research Advisory Council**

Oct 2009 – Present **Member of Provost’s Academic Plan Environmental Committee**

Sep 2009 – Present **Member of UConn Environmental Policy Advisory Council (SoE representative)**

Sep 2008 – May 2009 **Member of School of Engineering Academic Plan Committee**

Sep 2008 – Feb 2009 **Member of School of Engineering Computing Services Academic Council**

May 2008 – May 2009 **Member of Dean’s Council on Promotion, Tenure & Reappointment (elected post)**
 School of Engineering, University of Connecticut

May 2007 – May 2008 **Chair of Promotion, Tenure & Reappointment Committee (elected post)**
 Department of Civil & Environmental Engineering, University of Connecticut

Mar 2007 – Dec 2008 **Member of UConn Provost’s Executive Committee for
 Academic Plan Implementation on Environment**

Nov 2006 – Present **Member of CESE Selection Committee for Graduate Student Multidisciplinary
 Environmental Research Awards**

Oct 2006 – Present **Member of CT Institute of Water Resources Advisory Board**

Aug 2006 – Dec 2006 **Environmental Engineering Colloquium Coordinator**

Aug 2006 – Aug 2008 **Inaugural Member of UConn Interdepartmental Courses & Curricula Committee**

Apr 2006 – Present **Member of Advisory Committee**
 Center for Environmental Sciences & Engineering, University of Connecticut

Apr 2006 – May 2008 **Member of Promotion, Tenure & Reappointment Committee (elected post)**
 Department of Civil & Environmental Engineering, University of Connecticut

Jan 2006 – Sep 2006 **University of Connecticut Representative to CUAHSI**

Dec 2004 – Sep 2008 **Member of ABET Accreditation Steering Committee, School of Engineering
 Author of 1st ever Self Study for Environmental Engineering (accredited)**

Aug 2004 – Oct 2005 **Chair of Courses & Curricula Committee, Environmental Engineering Program**

Aug 2003 – May 2009 **Member of Courses & Curricula Committees,
 Environmental Engineering Program & Department of Civil & Environmental Engineering
 & School of Engineering**

Sep 1993 – Dec 1996 **Senior Research Engineer**

Sep 1991 – Sep 1993 **Research Engineer**
 Center for Nuclear Waste Regulatory Analyses,
 Southwest Research Institute, San Antonio, TX

Mar 1991 – May 1991 **Military Service**
 Engineering Corps, Hellenic Army, Nafplio, Greece

Nov 1990 – Mar 1991 **Postdoctoral Research Associate**
 University of California at Irvine & Lawrence Livermore National Laboratory, CA

Jun 1990 – Mar 1991
 & **Modeling Consultant, NBS/Lowry Engineers & Planners, San Diego & Irvine, CA**

Mar 1989 – Aug 1989
 Jan 1990 – Nov 1990
 & **Assistant in Research & Instruction, University of California, Irvine, CA**

Sep 1987 – Sep 1989
 Sep 1989 – Jan 1990 **Teaching Associate (Lecturer), University of California, Irvine, CA**

Sep 1985 – Mar 1987 **Assistant in Research & Instruction, Florida Institute of Technology, FL**

- Apr 1985 – Jul 1985 **Research Fellow**, Aristotle University of Thessaloniki, Thessaloniki, Greece
- Honors & Awards:**
(27)
- Provost's *Special Achievement Award* for Academic Year 2009-10 (2010)
 - Elected Member of *Connecticut Academy of Science & Engineering* (2009)
 - Provost's *Special Achievement Award* for Academic Year 2006-07 (2007)
 - MS Student (Sayma Rahman) was awarded the *American Association for University Women Education Foundation Fellowship* (2007)
 - PhD Student (Jessica Chau) was awarded the *American Geophysical Union & NSF Travel Award* (2007)
 - MS Student (Sandrine Baun) was awarded *Best MS Thesis Award* in UConn SoE (2005)
 - Provost's *Special Achievement Award* for Academic Year 2004-05 (2005)
 - PhD Student (Elsa Loehmann) received *NSF Graduate Fellowship Honorable Mention Award* (2005)
 - Member, Distinguished Board of Examiners *Indian Institute of Technology, Kanpur, India*
 - Nominated for *UConn Outstanding Advisor Award* (2004)
 - Voted by Students Runner up (2nd out of 50) in the *Faculty of the Year Award* (2004)
 - Nominated for *UConn Teaching Innovation Award* (2004)
 - Strathmore's Who's Who, Marquis Who's Who in the World, Marquis Who's Who in America, Marquis Who's Who in Science & Engineering, Outstanding Scholars of the 21st Century (International Biographical Centre)
 - Elected Member of *New York Academy of Sciences* (1999)
 - Member, *Sigma Xi* (the Scientific Research Society), 1997–
 - Represented the USA in the PSAG of the OECD NEA, 1992-1993
 - UCI, Dissertation Fellowship, 1990
 - Phi Beta Kappa* Scholarship, 1990
 - UCI, Civil Engineering Department, Outstanding Service Award, 1990
 - UCI, School of Engineering, Tuition Fellowship, 1988-1989
 - NATO* Scholarship, 1987-1990
 - Member, *Tau Beta Pi* (the National Honor Engineering Society), 1987–
 - Fulbright* Fellowship, 1985-1987
- Memberships:**
(9)
- National Ground Water Association
 - American Society of Civil Engineers
 - American Geophysical Union
 - Hellenic Society of Civil Engineers
 - Hellenic Hydrotechnical Union
 - International Association of Hydrological Sciences
 - American Water Resources Association
 - International Society of Environmental Forensics
 - Water Environment Federation
- Committee Memberships:**
(9)
- Member, *AGU* Hydrology Section Groundwater Technical Committee, 2001–
 - Member, *ASCE* Groundwater Hydrology Committee, 2001–
 - Member, *IAEG* Commission 14 (Underground Disposal of Waste), 2001–
 - Member, *Cheshire Community Advisory Panel* (sponsored by CT DPH), 2002-04
 - Subject Matter Expert of *Pacific Northwest National Laboratory* (US DOE), 2002–
 - Member, *Science & Technical Advisory Committee*, EPA Long Island Sound Study, 2004–
 - Member, *Science Advisory Board*, SE Asia Environmental Forensics Conference, 2004-05
 - Member, *Water Environment Federation*, Groundwater Committee, 2006-08
 - Member, Steering Committee, *Multidisciplinary International Society on Inverse Problems in Science and Engineering*, 2008-09
- Conference Chair:** *36th Mid-Atlantic Industrial & Hazardous Waste Conference*, Storrs, CT, 2004

(2) *37th Mid-Atlantic Industrial & Hazardous Waste Conference*, Cincinnati, OH, 2007

Conference Session Chair: *Inverse Methods for Environmental Applications*, Inverse Problems, Design and Optimization Symposium, Miami, FL, 2007

(11) *Pollution Source Identification-Environmental Forensics*, 37th Mid-Atlantic Industrial & Hazardous Waste Conference, Cincinnati, OH, 2007

Sensors III, 2nd International Conference on Advanced Technologies for Homeland Security, Storrs, CT, 2004.

Earth-Atmosphere Interaction, Space-Based Water Resources and Hydrology, 9th ASCE Biennial International Conference on Engineering, Construction and Operations in Challenging Environments, Houston, TX, 2004

Water Quality Modeling, 33rd Mid-Atlantic Industrial & Hazardous Waste Conference, Riverdale, New York, NY, 2001

Selected Issues in Groundwater Flow & Transport, AGU Spring Meeting, Boston, Massachusetts, 2001

Fractured Porous Media, XII International Conference on Computational Methods in Water Resources, Crete, Greece, 1998

Flow in Rivers, Lakes, Lagoons and Pipes, XII International Conference on Computational Methods in Water Resources, Crete, Greece, 1998

Subsurface Transport, X International Conference on Computational Methods in Water Resources, Heidelberg, Germany, 1994

Treatment of Spatial Variability in Probabilistic Safety Assessments, 14th Meeting, Probabilistic System Assessment Group of the Radioactive Waste Management Committee of the OECD Nuclear Energy Agency, Santa Fe, New Mexico, 1993

Software Developments, IX International Conference on Computational Methods in Water Resources, Denver, Colorado, 1992

Symposium Organizer: *Methods for Identifying Contaminant Source Location, Release History & Boundary*

(4) *Initial Conditions*, AGU Spring Meeting, Boston, Massachusetts, 2001

Advanced Mathematical Modeling in the Waste Management Program, 3rd SIAM Conference on Mathematical and Computational Issues in the Geosciences, San Antonio, Texas, 1995

Flow and Transport through Unsaturated Fractured Rock, Evans Workshop VII, Phoenix, Arizona, 1995

Coupling Regulatory Policies with Geosphere Transport Models, AGU Spring Meeting, Baltimore, Maryland, 1995

Scientific/Organizing Committee Member: *International Conference on Cleaner Technologies & Environmental Management*, Pondicherry, India, 2007

(12) *International Conference on Infrastructure Development & Environment*, Abuja, Nigeria, 2006

10th ASCE Biennial International Conference on Engineering, Construction & Operations in Challenging Environments, Houston, TX, 2006

IAHR International Symposium on Ground Water Hydraulics in Complex Environments, Toulouse, France, 2006

International Conference on Energy, Environment and Disasters, Charlotte, NC, 2005

Southeast Asia Environmental Forensics Conference, Taipei, Taiwan, 2005

2nd International Conference on Advanced Technologies for Homeland Security, Storrs, CT, 2004

9th ASCE Biennial International Conference on Engineering, Construction & Operations in Challenging Environments, Houston, TX, 2004

15th Engineering Mechanics Division ASCE Conference, New York, NY, 2002

4th International Conference on the Protection & Restoration of the Environment, Halkidiki, Greece, 1998

36th U.S. Rock Mechanics Symposium (NYRocks97), New York, NY, 1997

**Research Projects
Directed/Funded:
(38)**

Total as PI or co-PI: \$6,187,400 Personal as PI or co-PI: \$2,771,700
Annual Research Expenditures (1992-2011): \$134K/year

- 07/2011–06/2012 “Analysis and Design of Rotating Cylinder with Micro Fins for Optimum Lift and Drag Force in a Reciprocating Renewable Hydropower Harvesting System”, *USDA NIFA* via subcontract w/ *eGen LLC*, with Co-PI R. Malla (\$82K–personal share 60%–cumulative personal \$2771.7K; total \$6187.4K)
- 05/2011–06/2012 “Optimal Relocation and Operation of Well A in the Fenton Well Field”, *AES/Facilities-UCONN*, with Co-PI G. Warner (\$104K–personal share 90%–cumulative personal \$2722.5K; total \$6105.4K)
- 01/2011–12/2012 “The Ethiopian-U.S. Partnership in Sustainable Water Resources: Capacity Building in Education, Research and Outreach”, *USAID-HED*, with Co-PIs M. Gebremichael, M. Accorsi, M. Anagnostou, G. Wang, C. Atkinson-Palombo, J. Osleeb and F. Shah (\$1,100K–personal share 10%–cumulative personal \$2628.9K; total \$6001.4K)
- 10/2010–12/2013 “Environmental Engineering Internships”, *State of Connecticut DPH*, (\$60K–personal share 100%–cumulative personal \$2518.9K; total \$4901.4K)
- 07/2010–06/2011 “Advanced Concrete and Geo-Materials for Resilient Transportation Infrastructure: Material Level to System Level Integrated Design”, *DHS Center of Excellence for National Transportation Security*, with Co-PIs D. Basu, M. Chrysochoou, A. Zofka, M. Accorsi (\$50K personal share 0% cumulative personal \$2458.9K; total \$4841.4K)
- 08/2008–08/2010 “Reversing Urban Sprawl: A Reclaimability Index Approach for Reviving Downtown Brownfields”, *DOT Center for Transportation and Urban Planning*, with Co-PIs M. Chrysochoou, K. Segerson, N. Garrick (\$149.7K–personal share 15%–cumulative personal \$2458.9K; total \$4791.1K)
- 07/2009–06/2010 “Strengthening and Modeling of Earth Embankments under High Loads”, *DHS Center of Excellence for National Transportation Security*, with Co-PIs M. Chrysochoou and D. Basu (\$118.4K–personal share 10%–cumulative personal \$2436.4K; total \$4641.4K)
- 06/2009–12/2009 “Ethiopian-UConn Partnership in Sustainable Development & Management of Water Resources”, *USAID Higher Education for Development Africa: U.S. Higher Education Initiative Planning Grants*, with several Co-PIs (\$60K–personal share 0%–cumulative personal \$2424.6K; total \$4523K)
- 10/2008–05/2009 “Assessing the Performance of a Wastewater Treatment Technology for the Removal of Nitrogen and BOD”, *Entex Technologies Inc.*, with Co-PIs J. Bushey, C. Perkins (\$12.3K–personal share 20%–cumulative personal \$2424.6K; total \$4463K)
- 09/2008–06/2009 “Fluid-Structure Interaction Analysis and Testing of an Innovative Small-Scale, Environmentally Friendly, Low-Head Hydropower Concept”, *NativeNano LLC*, with Co-PIs R. Malla, B. Cetegen, T. Barber (\$177.8K–personal share 37%–cumulative personal \$2422.2K; total \$4450.7K)
- 01/2009–12/2009 “Inland Waterways: Sensing, Monitoring and Strengthening of Levees”, *DHS Center of Excellence for National Transportation Security*, with Co-PI M. Chrysochoou (\$20K–personal share 50%–cumulative personal \$2356.4K; total \$4272.9K)
- 08/2008–07/2011 “MRI: Development of Instrumentation for an Autonomous Underwater Sensor Network System”, *NSF/MRI*, with Co-PI J.-H. Cui et al. (\$500K from NSF and \$150,000 cost sharing personal share 6%–cumulative personal \$2346.4K; total \$4252.9K)
- 01/2008–06/2009 “Hydrogeologic Characterization and Modeling at the Naval Base Ventura County, Port Hueneme, CA”, *Naval Facilities Engineering Command*, ESTCP Project CU-0421, Contract N47408-04-C-7514, with Co-PI G. Robbins (\$199.7K–personal share 50%–cumulative personal \$2307.4K; total \$3602.9K)
- 06/2007–01/2008 “Integration of Global Precipitation Measurement Data Product with the Hydrologic Engineering Center-Hydrologic Modeling System”, *NASA*, Subcontract with University of Mississippi and Tennessee Technological University (\$15K–personal share 100%–cumulative personal

\$2207.5K; total \$3403.2K)

06/2007–05/2010 “Developing a Novel Infrastructure for Underwater Acoustic Sensor Networks”, *NSF*, with Co-PI J. Cui et al. (\$320K awarded from original budget of \$800K–personal share 9%–cumulative personal \$2192.5K; total \$3388.2K)

11/2006–12/2010 “Defining Optimality Criteria for the Effective Use of Satellite Precipitation Datasets in Land Surface Hydrology and Water Cycle Studies”, *NASA*, with Co-PI E. Anagnostou (\$433K Personal share 40%–cumulative personal \$2163.7K; total \$3068.2K)

05/2006–05/2007 “Detailed Hydraulic Assessment Using a High-Resolution Piezocone Coupled to the GeoVis: Statistical, Modeling, and Tracer Support Activities at the NETTS, Port Hueneme, California”, *Naval Facilities Engineering Service Center*, ESTCP Project CU-0421, Contract N47408-04-C-7514, with Co-PI G. Robbins (\$60.8K–personal share 35%–cumulative personal \$1990.5K; total \$2635.2K)

12/2005–06/2006 “Enhancement of Undergraduate Environmental Engineering Laboratory Curriculum by Adding Portable Time-Domain Reflectometer (TDR) Array”, *SoE Dean's Undergraduate Laboratory Initiative*, with Co-PIs L. Liu and A. MacKay (\$22.3K–personal share 33%–cumulative personal \$1969.2K; total \$2574.4K)

08/2004-06/2006 “EPA Superfund Innovative Technology Evaluation Project at the Roosevelt Mills, Vernon, CT”, *Town of Vernon (HUD EDI Program)*, with Co-PI A. Dahmani (\$195K–personal share 75% cumulative personal \$1961.8K; total \$ 2552.1K)

01/2003-12/2005 “Long-Term Analysis of the University of Connecticut’s Fenton River Water Supply Wells on The Habitat of the Fenton River”, *UCONN AES (with USGS matching funds)*, with Co-PIs G. Warner, F. Ogden (\$524K–personal share 33%–cumulative personal \$1815.5K; total \$2357.1K)

05/2004-05/2006 “Chaotic Advection Enhanced Remediation” *USGS IWR* (\$162.1K–personal share 100%–cumulative personal \$1640.8K; total \$ 1833.1K) (including UConn matching funds)

01/2004-01/2005 “Development of an Efficient Inverse Method for Near Real-Time Atmospheric Contamination Source Identification”, *UCRF* (\$15.9K–personal share 100%–cumulative personal \$1478.7K; Total \$1671K)

12/2003-12/2005 “Investigation of Enhanced Characterization and Representation of Flow through Karst Aquifers”, with multiple PIs, *AWWARF* (\$500K; UCONN \$50K–personal share 100% cumulative personal \$1462.8K; total \$1655.1K)

09/2001–09/2004 “Chaotic Advection Enhanced Natural Attenuation”, Proposal co-authored by advisee (P. Oates) was awarded the *NSF* Research Fellowship (\$90K–personal share 100%–cumulative personal \$1412.8K; total \$1605.1K)

06/2001–06/2002 “Systems Approach to Earth & Environmental Engineering”, with 10 other Co-PIs, *Columbia University Academic Quality Fund* (\$389K–personal share 10%–cumulative personal \$1398.4K; total \$1515.1K); participation in this 3-yr project ended in 2002; only 1/3 counts towards totals

03/2001–09/2001 “Campus Environmental Sustainability Master Plan”, *ARUP Corporation, New York City* (\$23.1K–personal share 100%–cumulative personal \$1385.4K)

02/2000–09/2000 “Development of a Mechanistic Model for Preferential Unsaturated Flow in Fractured Rock”, *SwRI, X99219N/20-1402* under *NRC-02-97-009* (\$27.5K–personal share 100%–cumulative personal \$1362.3K)

08/1999–08/2000 “Pollution Source Identification”, Proposal co-authored by advisee (J. Atmadja) was awarded the *Bakhmeteff* Fellowship in Fluid Mechanics (\$12K–personal share 100%–cumulative personal \$1334.8K)

09/1999–09/2000 “Identification of Groundwater Pollution Sources”, *NGWA/API* equipment purchase grant, with Co-PI J. Atmadja (\$2K–personal share 100%–cumulative personal \$1322.8K)

04/1999–10/1999 “Investigation of the Dripping Phenomenon through Rough Fractures”, *SwRI, 999117P/20-1402-661* under *NRC-02-97-009* (\$57.4K–personal share 100%–cumulative Personal \$1322.8K)

08/1999–09/2000 “Lower Hudson River Model Calibration”, *Columbia Earth Institute*, with Co-PI P. Schlosser (\$5K–personal share 100%–cumulative personal \$1322.8K)

06/1997–12/1999 “Development of Hydrologic Research Laboratory Capabilities at Columbia University”, *Heffner*

11/1996–11/1998	<i>Foundation</i> , with Co-PI R. Testa (\$120K–personal share 100%–cumulative personal \$1317.8K) “Microbial Plugging of Pores and Fractures in Tuff: Effects on Thermo-Hydrologic Modeling”, <i>SwRI ACR, 20-9998</i> , with 2 other Co-PIs (\$119.5K–personal share 100%–cumulative personal \$1197.8.5K)
02/1996–04/1997	“Isothermal Flow Code Development – SUFLAT (Stochastic Unsaturated Flow and Transport)”, <i>U.S. NRC, FIN W6270</i> (\$5.8K–personal share 100%–cumulative personal \$1078.3K)
02/1996–09/1996	“Yucca Mountain Isothermal Flow Applied Technical Investigations”, <i>U.S. NRC, FIN W6270</i> (\$104.5K–personal share 100%–cumulative personal \$1072.5K)
10/1994–01/1996	“Subregional Hydrogeologic Flow and Transport Processes”, <i>U.S. NRC, FIN W6270</i> (\$412K personal share 100%–cumulative personal \$968K)
10/1992–09/1994	“Stochastic Analysis of Flow and Transport in Unsaturated, Fractured Rock”, <i>U.S. NRC,</i> <i>FIN B6664</i> (\$455.5K–personal share 100%–cumulative personal \$556K)
10/1992–09/1994	“Development of a Neuro-Fuzzy Methodology for Simulation of Flow in Heterogeneous Porous Media with Limited and/or Imprecise Parameters”, <i>SwRI Advisory Committee for Research,</i> <i>20-9740</i> , with 2 other Co-PIs (\$100.5K–personal share 100%–cumulative personal \$100.5K)

Reviewerships & Editorships:

Peer-Review Panels
(10) *SwRI* Internal Research & Development Program, *NIH* Superfund Hazardous Substances
Basic Research Program, *Hellenic Ministry* of National Education & Religious Affairs,
Directorate of the *European Union* Support Framework, *NSF* Hydrologic Sciences
Program, *NSF* Division of Earth Sciences, *State of Connecticut* Institute of Water
Resources, *NIWR-USGS* Review Board for Aquatic Sciences, *DOE Office of Science*
Review Panel (Environmental Management Science Program), *University of Vermont* UTC

External Referee for
PhD Dissertations
(3) Anirban Dhar (*Indian Institute of Technology, Kanpur*)
Minh-Phuong Lam (*Institut National Polytechnique de Toulouse*)
Raj Mohan Singh (*Indian Institute of Technology, Kanpur*)

External Referee for
Tenure/Promotion
(2) Pengfei Zhang (*City University of New York*)
Mary Poulton (*University of Arizona*)

Technical Journals
(48) *Water Resources Research*, *Advances in Water Resources*, *Water Resources Bulletin*, *J. of Water*
Resources Association, *Ground Water*, *Transport in Porous Media*, *J. of Hydrology*, *ASME J. of*
Fluids Engineering, *Water Research (J. of IAWQ)*, *J. of Mathematical Geology*, *Stochastic*
Environmental Research & Risk Assessment, *Transportation Research Board*, *Environmental*
Modelling & Software, *ASCE J. of Environmental Engineering*, *ASCE J. of Water Resources*
Planning and Management, *Mechanics Research Communications*, *Environmental Forensics*,
Geophysical Research Letters, *J. of Water, Air & Soil Pollution*, *Applied Mathematics Letters*,
Water Resources Management, *Numerical Methods for Heat & Fluid Flow*, *ASCE J. of Materials*
in Civil Engineering, *Environmental Engineering Science*, *Inverse Problems in Science and*
Engineering, *J. of Hydroinformatics*, *Water International*, *Hydrological Processes*, *Estuarine*
Coastal and Shelf Science, *ASCE J. of Hydrologic Engineering*, *Environmental Monitoring and*
Assessment, *J. of Contaminant Hydrology*, *Water Environment Research*, *Hydrogeology*,
Chemical & Biochemical Eng Quarterly, *IEEE Inter. Geoscience & Remote Sensing*, *ICC'08*
Wireless Communications, *Vadose Zone Journal*, *The Open Environmental Engineering Journal*,
J. of Environmental Management, *Lakes & Reservoirs: Research and Management*, *Atmospheric*
Environment, *Journal of Hydro-Environment Research*, *Journal of Advances in Information*
Fusion, *Marine Pollution Bulletin*, *Hydrobiologia*, *Mathematical Problems in Engineering*,
Journal of Applied Mathematics

<i>Technical Books</i> (3)	CRC Press (Environmental Science), McGraw-Hill (Fluid Mechanics), Lewis (Ground Water Modeling), Wiley (Understanding Mathematical and Statistical Techniques in Hydrology)
<i>Editorial Board Member</i> (4)	Environmental Forensics (2003-2005) Environmental Forensics (2007–) The Open Civil Engineering Journal (2007–) The Open Environmental Engineering Journal (2008-2010)
<i>Associate Editor</i> (8)	Ground Water (1994-1997) Water Resources Research (1999-2001) Water Resources Research (2001-2004) Environmental Forensics (2002-2003) Journal of the American Water Resources Association (2002-2007) Inverse Problems in Science and Engineering (2007-2009) Stochastic Environmental Research and Risk Assessment (2006–) The Open Environmental Engineering Journal (2010–)
<i>Editor</i> (3)	<i>Water, Air, and Soil Pollution: Advances in Remediation Technology</i> (2004-2006) Environmental Engineering Topical Editor for the <i>Encyclopedia of Earth</i> (2006–) <i>Water, Air, and Soil Pollution: Innovative Remediation Technologies for Pollution Abatement</i> (2007-2008)

A. LIST OF TECHNICAL PUBLICATIONS (149; 79*)

A.1 REFEREED PUBLICATIONS (103; 53*)

A.1.1 FULL & SHORT ARCHIVAL JOURNAL PAPERS OR BOOK CHAPTERS (62; 33*)

(A * after a co-author's name indicates student or post-doc working under Bagtzoglou's direct supervision)

(A # after the year indicates short archival journal paper)

(A ## after the year indicates book chapter)

- 1) Grafiadelis, M., A.C. Bagtzoglou, and E. Georgiadis, 1986, "Development of a System for Controlling Air Temperature in Greenhouses by Spraying Geothermal Water on the Roof" (in Greek with extended summary in English), *Scientific Bulletin*, Center for Agricultural Research of Northern Greece, Vol. 2: 51-68.
- 2) Bagtzoglou, A.C., A.F.B. Tompson, and D.E. Dougherty, 1991^{##}, "Probabilistic Simulation for Reliable Solute Source Identification in Heterogeneous Porous Media", Chapter in *Water Resources Engineering Risk Assessment*, J. Ganoulis (ed.), NATO ASI Series, G 29, Springer-Verlag, Heidelberg, pp. 189-201.
- 3) Bagtzoglou, A.C., A.F.B. Tompson, and D.E. Dougherty, 1992, "Projection Functions for Particle-Grid Methods", *Numerical Methods for Partial Differential Equations*, 8(4): 325-340.
- 4) Bagtzoglou, A.C., D.E. Dougherty, and A.F.B. Tompson, 1992, "Application of Particle Methods to Reliable Identification of Groundwater Pollution Sources", *Water Resources Management*, 6(1): 15-23.
- 5) Guymon, G.L., A.C. Bagtzoglou, and M.R. Welch, 1992, "A Lumped Stream-Aquifer Model to Assess Reclaimed Water Impacts", *Water Resources Bulletin (JAWRA)*, 28(2): 361-370.
- 6) Manolis, G.D., and A.C. Bagtzoglou, 1992, "A Numerical Comparative Study of Wave Propagation in Inhomogeneous and Random Media", *Journal of Computational Mechanics*, 10(6): 397-413.
- 7) Dougherty, D.E., and A.C. Bagtzoglou, 1993, "A Caution on the Regulatory Use of Numerical Solute Transport Models", *Journal of Ground Water*, 31(6): 1007-1010.
- 8) Bagtzoglou, A.C., M.N. Khan, G.L. Guymon, and J.R. Thornton, 1993, "Groundwater Quality Management of a Low Inertia Basin: Application to San Mateo Basin, California", *Water Resources Management*, 7(3): 189-205.
- 9) Ababou, R., A.C. Bagtzoglou, and E.F. Wood, 1994, "On the Condition Number of Covariance Matrices in Kriging, Estimation, and Simulation of Random Fields", *Journal of Mathematical Geology*, 26(1): 99-133.

- 10) Sagar, B., A.C. Bagtzoglou, R.T. Green, and S.A. Stothoff, 1995[#], “Measurement and Modeling of Flow through Unsaturated Heterogeneous Rock in the Context of Geologic Disposal of Nuclear Waste”, Chapter in *Heat, Mass, and Momentum Transfer in Environmental Flows* (S.A. Sherif *et al.*, eds.), HTD-Vol. 321/FED-Vol.233, American Society of Mechanical Engineers, New York, NY, pp. 271-284.
- 11) Ofoegbu, G.I., A.C. Bagtzoglou, R.T. Green, and M. Muller, 1999, “Effects of Perched Water on Thermally Driven Moisture Flow at the Proposed Yucca Mountain Repository for High-Level Waste”, *Nuclear Technology*, 125(2): 235-253.
- 12) Cesano, D.* , B. Olofsson, and A.C. Bagtzoglou, 2000, “Parameters Regulating Groundwater Inflows into Hard Rock Tunnels—A Statistical Study of the Bolmen Tunnel in Southern Sweden”, *Tunnelling and Underground Space Technology*, 15(2): 153-166.
- 13) Atmadja, J.* , and A.C. Bagtzoglou, 2001, “Pollution Source Identification in Heterogeneous Porous Media”, *Water Resources Research*, 37(8): 2113-2125.
- 14) Atmadja, J.* , and A.C. Bagtzoglou, 2001, “State of the Art Report on Mathematical Methods for Groundwater Pollution Source Identification”, *Environmental Forensics*, 2(3): 205-214.
- 15) Bagtzoglou, A.C., 2002[#], “Testing a Model for Solute Transport Between Open Channel Flows and Porous Streambeds”, *Acta Universitatis Carolinae Geologica*, 46(2/3): 88-91.
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A.1.2 BOOKS OR MONOGRAPHS (3; 1*)

- 63) Ababou, R., and A.C. Bagtzoglou, 1993, *BIGFLOW: A Numerical Code for Simulating Flow in Variably Saturated, Heterogeneous Geologic Media*, NUREG/CR-6028, Monographic Series ISSN 0278-1670, Washington, DC: United States Nuclear Regulatory Commission (NRC), pp.139.
- 64) Bagtzoglou, A.C., 1994, *Stochastic Analysis of Large-Scale Unsaturated Flow and Transport in Layered, Heterogeneous Media*, CNWRA 94-012, Monographic Series ISSN 1547-3023, San Antonio, Texas: Southwest Research Institute, pp.105.
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A.1.3 ARCHIVAL JOURNAL PAPERS OR BOOK CHAPTERS IN PROGRESS (6; 5*)

(A * after a co-author’s name indicates student or post-doc working under Bagtzoglou’s direct supervision)

- 66) Correa, J.P., J.T. Bushey, E.D. Jackson, C.L. Zimmerman, and A.C. Bagtzoglou, 2011, “Possibility of Consolidated Wetland Mitigation in a Multi-Layered Legislated State”, *Environmental Management* (in review).
- 67) Starn, J.* , A.C. Bagtzoglou, and G. Robbins, 2011, “Methods for simulating solute breakthrough curves in pumping groundwater wells”, *Computers and Geosciences* (under revision after review).
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♦ was placed in the required reading material list of the Petroleum Engineering and Geosciences Program of *Stanford University*

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- 71) Bagtzoglou, A.C., D. Cesano*, and B. Olofsson, 2011, "Quantifying fractured rock hydraulic heterogeneity and predicting tunnel groundwater inflows - A case study", *Environmental Geology* (in preparation).

A.1.4 PEER-REVIEWED CONFERENCE PROCEEDINGS (25; 15p; 12*)

(A^P after the year of a paper published in proceedings indicates that presentation was given by Bagtzoglou)

(A* after a co-author's name indicates student or post-doc working under Bagtzoglou's direct supervision)

- 1) Bagtzoglou, A.C., and A. Pandit, 1987^P, "Stratification Effects on Solute Transport in Porous Media" (in Greek), in *Proc. 3rd National Conference of EYE*, Thessaloniki, Greece, p.733-742.
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- 3) Bagtzoglou, A.C., G.W. Wittmeyer, R. Ababou, and B. Sagar, 1992^P, "Application of a Massively Parallel Computer to Flow in Variably Saturated Heterogeneous Porous Media", in *Numerical Methods in Water Resources*, (T.F. Russell *et al.*, eds.), Computational Mechanics Publications & Elsevier Applied Science, p.695-703.
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- 5) Nedungadi, A., A.C. Bagtzoglou, and B. Sagar, 1994, "A Fuzzy Methodology to Solve the Groundwater Flow Problem in the Presence of Uncertain Hydrogeological Data", in *Applications of Artificial Intelligence in Engineering IX*, (G. Rzevski *et al.*, eds.), Computational Mechanics Publications, Southampton, United Kingdom, p.369-375.
- 6) Bagtzoglou, A.C., and V. Kapoor, 1994^P, "Unsaturated Flow and Advection-Dispersion in Three-Dimensionally Heterogeneous Geologic Media", in *Computational Methods in Water Resources X*, (A. Peters *et al.*, eds.), Kluwer Academic Publishers, Dordrecht, Netherlands, p.415-422.
- 7) Bagtzoglou, A.C., and R.G. Baca, 1994^P, "Probabilistic Calculations of Groundwater Travel Time in Heterogeneous 3D Porous Media", in *Scientific Basis for Nuclear Waste Management XVII*, Vol. 333, p.849-854.
- 8) Bagtzoglou, A.C., A. Nedungadi, and B. Sagar, 1996^P, "A Fuzzy Rule-Based Model for Simulation of Flow in Heterogeneous Aquifers", in *Computational Methods in Water Resources XI*, (A. Aldama *et al.*, eds.), Hidropromociones, A.C., Mexico, p.628-637.
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- 11) Bagtzoglou, A.C., G.I. Ofoegbu, and R.T. Green, 1998^P, "Thermally-Driven Moisture Flow Near the Vicinity of Perched Aquifers in Unsaturated Geologic Media", in *Computational Methods in Contamination and Remediation of Water Resources*, (V. Burganos *et al.*, eds.), Computational Mechanics Publications, Southampton, United Kingdom, p.321-328.
- 12) Bagtzoglou, A.C., T.L. Tolley*, S.A. Stothoff, and D.R. Turner, 2000^P, "Perched Water Aquifers in Arid Environments and Inferences for Recharge Rates", in *Tracers and Modelling in Hydrogeology*, International Association of Hydrological Sciences Publication No. 262, p.401-406.
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- 14) Atmadja, J.*, and A.C. Bagtzoglou, 2000, "Groundwater Pollution Source Identification Using the Backward Beam Equation Method", in *Computational Methods for Subsurface Flow and Transport*, (L. Bentley *et al.*, eds.), Balkema Publishers, Rotterdam, Netherlands, p.397-404.
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- 17) Cornacchiulo, D. *, and A.C. Bagtzoglou, 2002, "The Marching-Jury Backward Plate Equation for Contaminant Plume Spatial Distribution Recovery in Two-Dimensional Heterogeneous Media: Computational Issues", in *Computational Methods for Subsurface Flow and Transport*, M. Hassanizadeh et al. (eds.), Elsevier Publishers, Netherlands, p. 461-468.
- 18) Baun, S.A. *, and A.C. Bagtzoglou, 2004^P, "A Computationally Attractive Approach for Near Real-Time Contamination Source Identification", in *Computational Methods in Water Resources XV* (Vol. II), C.T. Miller et al. (eds.), Elsevier Science Publishers, Netherlands, p. 1263-1271.
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- 22) Bagtzoglou, A.C., E.N. Anagnostou, J.M. Niedzialek *, and F.L. Ogden, 2007^P, "Enhanced Radar Calibration Using Physically Based Image Restoration Methods", in *Inverse Problems, Design and Optimization*, M.J. Colaço, H.R.B. Orlande and G.S. Dulikravich (eds.), Vol. II: 714-721.
- 23) Bagtzoglou, A.C., J.M. Niedzialek *, and F.L. Ogden, 2007^P, "Hydrologic Model Calibration with Particle Tracking as a Groundwater Age Proxy", in *Inverse Problems, Design and Optimization*, M.J. Colaço, H.R.B. Orlande and G.S. Dulikravich (eds.), Vol. II: 707-713.
- 24) Zhou, Z., J.-H. Cui, and A.C. Bagtzoglou, 2008, "Scalable Localization with Mobility Prediction for Underwater Sensor Networks", in *Proceedings of IEEE INFOCOM'08*, CD Proceedings, Phoenix, Arizona, pp. 21.
- 25) Nadim, F., A.C. Bagtzoglou, S. Govindan, and J. Cook, 2009, "Urban Sewage and Stormwater Management in the United States", in *Proceedings of International Conference on Capacity Building in Urban Water Management under Water Scarcity Conditions*, CD Proceedings, Muscat, Sultanate of Oman, pp. 14.

A.1.5 PEER-REVIEWED TECHNICAL REPORTS & THESES (7; 2*)

(A * after a co-author's name indicates student or post-doc working under Bagtzoglou's direct supervision)

- 1) Bagtzoglou, A.C., 1984, *Numerical Modeling of an Aquifer's Behavior as a Thermal Energy Storage System* (in Greek), Diploma Thesis, Division of Hydraulics & Environmental Engineering, Department of Civil Engineering, Aristotle University of Thessaloniki, Greece, pp.97.
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- 4) Bagtzoglou, A.C., 1991, "Large Scale Transport in Randomly Heterogeneous Fields", *Report WREE 91-3*, Department of Civil Engineering, University of California, Irvine, pp.40 (peer-reviewed by G. Guymon, and A. Tompson).
- 5) Hill, M. *, A.C. Bagtzoglou, R.T. Green, and P. Angell, 1999, *Microbial Clogging of Pores and Fractures in Tuff: Effects on Repository Hydrological Modeling*, Final Technical Report, Research Project 20-9998, Advisory Committee for Research, San Antonio, Texas: Southwest Research Institute, pp.64 (peer-reviewed by D. Hughson and W. Patrick).
- 6) Warner, G.S., F.L. Ogden, A.C. Bagtzoglou, and P. Parasiewicz, 2006, "Long-Term Analysis of the University of Connecticut's Fenton River Water Supply Wells on the Habitat of the Fenton River", *University of Connecticut*, Final Project Report, pp.211 (peer-reviewed by USGS, CT DEP, DEC & OPM, Naubesatuck Watershed Council, R. Thorson, P. Ritsick).
- 7) Kram, M., G. Robbins, J. Chau *, A.C. Bagtzoglou, D. Eng and N. Jones, 2008, "Detailed Hydraulic Assessment Using

a High-Resolution Piezocone Coupled to the GEOVIS”, *Technical Report TR-2291-ENV*, Engineering Service Center, Naval Facilities Engineering Command, pp. 360 (peer-reviewed by DOD & EPA).

A.2 NON-REFEREED PUBLICATIONS (46; 26*)

A.2.1 CAMERA-READY, FULL PAPER IN CONFERENCE PROCEEDINGS (WITH PEER-REVIEWED ABSTRACT) (31; 17p; 19*)

(A^p after the year of a paper published in proceedings indicates that presentation was given by Bagtzoglou)

(A* after a co-author’s name indicates student or post-doc working under Bagtzoglou’s direct supervision)

- 1) Bagtzoglou, A.C., G. Apostolides, D. Tolikas, and K. Katsifarakis, 1985, “Study of the Effect of Thermal Conductivity on the Exploitation of a Low Enthalpy Aquifer as a Thermal Energy Storage System” (in Greek), in *Proc. 2nd National Conference on Low Enthalpy Energy Resources*, Thessaloniki, Greece, Vol. 1, p.373-380.
- 2) Bagtzoglou, A.C., and J. Halkias, 1987^p, “Thermal Energy Storage in Shallow Aquifers: Potential Utilization in Greece and Preliminary Feasibility Study” (in Greek), in *Proc. Technical Chamber of Greece Symposium on Low Enthalpy Energy Resources*, Volos, Greece.
- 3) Bagtzoglou, A.C., 1988^p, “Numerical Simulation of Heat Transfer from a Flat Solar Collector to an Impinging Water Jet” (in Greek), in *Proc. 3rd National Conference on Low Enthalpy Energy Resources*, Thessaloniki, Greece, Vol. 1, p.307-315.
- 4) Bagtzoglou, A.C., and D.E. Dougherty, 1990^p, “Numerical Solution of Fisher's Equation Using Particle Tracking Methods”, in *Proc. 10th Annual “Hydrology Days”*, (H.J. Morel-Seytoux, ed.), Hydrology Days Publications, Fort Collins, Colorado, p.28-38.
- 5) Khan, M.N., A.C. Bagtzoglou, and G.L. Guymon, 1991, “San Mateo Basin Conjunctive Use Study”, in *Proc. 11th Annual “Hydrology Days”*, (H.J. Morel-Seytoux, ed.), Hydrology Days Publications, Fort Collins, Colorado, p.35-46.
- 6) Bagtzoglou, A.C., B. Sagar, G.W. Wittmeyer, and R. Ababou, 1992^p, “A Step Towards Validating Probabilistic Performance Assessment Models”, in *Proc. Topical Session on Probabilistic Validation of Models, NEA/PSAG/DOC(92)4*, OECD Nuclear Energy Agency, Paris, France, p.49-72.
- 7) Bagtzoglou, A.C., D.E. Dougherty, and A.F.B. Tompson, 1992^p, “Are Particle Methods Only Suited for Modeling Advective Transport? Some Counter-Examples”, in *Proc. 5th International Conference on Solving Ground Water Problems with Models*, NGWA, Dallas, Texas, p.31-44.
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- 9) Bagtzoglou, A.C., A. Nedungadi, S. Seida, and B. Sagar, 1993^p, “Application of a Neuro-Fuzzy Methodology for the Estimation of Hydraulic Conductivity Spatial Distributions and Simulation of Groundwater Flow under Conditions of Limited and Imprecise Parameter Availability”, in *Proc. Topical Session on Treatment of Spatial Variability in Probabilistic Safety Assessments, NEA/PSAG/DOC(93)3*, OECD Nuclear Energy Agency, Paris, France, p.135-157.
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A.2.2 TECHNICAL REPORTS (15; 7*)

(A * after a co-author’s name indicates student or post-doc working under Bagtzoglou’s direct supervision)

- 1) Guymon, G.L., and A.C. Bagtzoglou, 1989, *Hydrologic Model of Santa Margarita River*, Technical Report WREE 89-1, Department of Civil Engineering, University of California, Irvine, pp.106.

- 2) Bagtzoglou, A.C., M.N. Khan, and G.L. Guymon, 1991, *SAILPA: A Simulation Model for Evaluation of Stream-Aquifer Interactions by a Lumped Parameter Approach*, Report WREE 91-2, Department of Civil Engineering, University of California, Irvine, pp.41.
- 3) Bagtzoglou, A.C., and G.L. Guymon, 1991, *Groundwater In-Stream Recharge with Reclaimed Wastewater*, Report WREE 91-1, Department of Civil Engineering, University of California, Irvine, pp.45.
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- 7) Bagtzoglou, A.C., A. Nedungadi, S.B. Seida, and B. Sagar, 1995, *Development of a Neuro-Fuzzy Methodology for Simulation of Flow in Heterogeneous Porous Media with Limited and/or Imprecise Parameters*, Final Technical Report, Research Project 20-9740, Advisory Committee for Research, San Antonio, Texas: Southwest Research Institute, pp.94.
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- 12) Robbins, G.A., J. Chau*, and A.C. Bagtzoglou, 2006, *Rhodamine Tracer Test Simulation for Port Hueneme Test Site*, Technical Report, Project N47408-04-C-7514, pp.18.
- 13) Chau, J.*, and A.C. Bagtzoglou, 2007, *Report on Development and Testing of Groundwater Flow and Tracer Transport Models*, Technical Report, Project N47408-04-C-7514, pp.16.
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- 15) Chrysochoou, M., D. Basu, and A.C. Bagtzoglou, 2010, *Strengthening and Modeling of Earth Embankments under High Loads*, Technical Report DHS-09-01, Project Contract 2008-ST-061-TS0002-01, University of Connecticut, pp. 43.

B. LIST OF TECHNICAL PRESENTATIONS (99; 38*)

(A^P after the year of a paper published in proceedings – listed in Section A – indicates that presentation was given by Bagtzoglou; These 32 presentations – listed in Section A – are not included in the lists of presentations below)

B.1 INVITED PRESENTATIONS (41; 4*)

(A* after a co-author's name indicates student or post-doc working under Bagtzoglou's direct supervision)

- 1) Bagtzoglou, A.C., 1991, "Reliable Groundwater Pollution Source Identification: Is it Really Feasible?" *Center for Nuclear Waste Regulatory Analyses*, Southwest Research Institute, San Antonio, TX, August 14.
- 2) Bagtzoglou, A.C., 1991, "Particle Methods and their Application to Reliable Groundwater Pollution Source Identification", *Environmental Sciences Division*, Oak Ridge National Laboratory, Oak Ridge, TN, August 27.
- 3) Bagtzoglou, A.C., 1992, "A Step Towards Validating Probabilistic Performance Assessment Models", 13th

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- 4) Bagtzoglou, A.C. and S. Mohanty*, 1993, "Theoretical Prediction and Numerical Determination of the Effective Hydraulic Conductivity of Unsaturated Porous Media", *Workshop VI: Flow and Transport through Unsaturated, Fractured Rocks*, University of Arizona, Tucson, AZ, January 28.
- 5) Bagtzoglou, A.C. and S. Seida, 1993, "Application of an Artificial Neural Network Based Interpolator to the Estimation of Spatial Distributions of Hydraulic Conductivity, Under Conditions of Limited and/or Imprecise Parameter Availability", *14th Radioactive Waste Management Committee Meeting, Organization for the Economic Coordination and Development (OECD), Nuclear Energy Agency, Probabilistic Systems Assessment Group, Santa Fe, NM, January 22.*
- 6) Bagtzoglou, A.C., 1994, "Stochastic Analysis of Flow and Transport Processes at the Subregional Scale", *Department of Energy-Nuclear Regulatory Commission Technical Exchange on Ground-Water Flow and Travel Time*, Denver, CO, December 1.
- 7) Bagtzoglou, A.C., 1994, "Stochastic Analysis of Flow and Transport in Unsaturated, Fractured Media: Project Completion Report", presented to NRC Management and Technical Staff, Washington, DC, May 10.
- 8) Bagtzoglou, A.C., S.P. Neuman, T.J. Nicholson, R.B. Codell, G.W. Wittmeyer, and B. Sagar, 1995, "Strategies for Assessing Heterogeneities Related to the Prediction of Radionuclide Transport in Geologic Media", U.S. NRC Staff and Contractor Team Contribution, *Organization for the Economic Coordination and Development (OECD), Nuclear Energy Agency, GEOTRAP Workshop, Cologne, Germany, April 4.*
- 9) Bagtzoglou, A.C. and S.A. Stothoff, 1995, "Testing Infiltration Models at the Apache Leap Research Site" (invited poster), *American Geophysical Union*, San Francisco, CA, December 11-15.
- 10) Bagtzoglou, A.C., 1995, "Testing an Alternative Conceptual Model of Groundwater Flow at Yucca Mountain", *Evans Workshop VII: Flow and Transport Through Unsaturated Fractured Rock*, Phoenix, AZ, February 2.
- 11) Bagtzoglou, A.C., 1996, "A New Paradigm for Cleanup of Contaminated Sites: Are we Ready for Health Risk-Based Approaches?" *Department of Civil Engineering & Engineering Mechanics, Columbia University, New York, NY, August 1.*
- 12) Bagtzoglou, A.C., 1996, "Prediction of Perched Water Occurrence in Unsaturated Rock: Infiltration, Geological Structure, and Heterogeneity as Causative Mechanisms", *Department of Geological Sciences Invited Lecture Series, University of South Carolina, Columbia, SC, January 15.*
- 13) Bagtzoglou, A.C., 1998, "Solute Transport in Turbulent Fracture Flows and Porous Matrix", *CNWRA Dripping Workshop, Center for Nuclear Waste Regulatory Analyses, Southwest Research Institute, San Antonio, TX, December 22.*
- 14) Bagtzoglou, A.C., 1999, "Dripping Into the Potential Yucca Mountain Repository: Past Experience and Future Research Needs to Improve Hydrologic Assessments", Center for Nuclear Waste Regulatory Analyses, Southwest Research Institute, San Antonio, TX, September 25.
- 15) Bagtzoglou, A.C., 1999, "Thermally-Driven Moisture Flow Near the Vicinity of Perched Aquifers in Unsaturated Geologic Media", Division of Hydraulics & Environmental Engineering, Department of Civil Engineering, Aristotle University of Thessaloniki, Greece, March 12.
- 16) Bagtzoglou, A.C., 1999, "Solute Transport in Turbulent Open Channel Flows and Porous Beds", Department of Civil Engineering, University of Thessaly, Greece, March 15.
- 17) Bagtzoglou, A.C., 2001, "Chaotic Advection and its Role in the Water Quality of the Lower Hudson River Estuary", Department of Civil & Environmental Engineering, *University of Connecticut*, Storrs, CT, December 20.
- 18) Bagtzoglou, A.C., 2001, "The Onset of Chaotic Advection in Porous Media and its Implications Regarding Aquifer Remediation", Division of Earth & Physical Sciences, University of Texas, San Antonio, TX, April 5.
- 19) Bagtzoglou, A.C., 2001, "The Onset of Chaotic Advection in Porous Media and its Implications Regarding Aquifer Remediation", Division of Land and Water Resources, Department of Civil and Environmental Engineering, Kungl Tekniska Högskolan (Royal Institute of Technology), Stockholm, Sweden, February 20.
- 20) Bagtzoglou, A.C., 2001, "Simulating Dripping in a Rough, Multi-Segmented Fracture Set", Svensk Kärnbränslehantering AB (Swedish Nuclear Fuel & Waste Management Co.), Äspölaboratoriet (Äspö Hard Rock Laboratory), Sweden, February 21.
- 21) Bagtzoglou, A.C., 2002, "Hydrologic Inversion for Pollution Source Identification", *Environmental Scholars Colloquium*, University of Connecticut, Storrs, CT, November 22.
- 22) Bagtzoglou, A.C., 2002, "Overview and Application of Inverse Groundwater Models for Contaminant Source

- Identification”, Keynote Lecture, Environmental Forensics: Advanced Techniques, *An International Society of Environmental Forensics Workshop*, Santa Fe, NM, September 23.
- 23) Bagtzoglou, A.C., 2003, “Chaotic Advection in Tidally-Dominated Estuarine Systems and its Potential for Water Quality Restoration”, *Seminars in Oceanography*, Department of Marine Sciences, University of Connecticut, Avery Point, CT, December 12.
 - 24) Bagtzoglou, A.C., S.A. Baun* and D. Cornacchiulo*, 2003, “Near Real-Time Water Resource Contamination Event Identification” (invited poster), *International Conference on Advanced Technologies for Homeland Security*, Storrs, CT, September 25-26.
 - 25) Bagtzoglou, A.C., J.W. Lane, D. Cornacchiulo*, and K. Ergun, 2003, “Improved Reconstruction of Two-Dimensional Resistivity Field Data Using Geostatistics”, *AGU/EGS/EUG Joint Assembly*, Nice, France, April 8.
 - 26) Bagtzoglou, A.C., 2003, “Fractured Rock Contaminant Hydrology”, *DPH Community Advisory Panel*, Cheshire, CT, March 10.
 - 27) Bagtzoglou, A.C., 2003, “The Pont-Ventoux Tunnel Fiasco: Could Fracture Rock Hydrology Have Prevented It?” *Fractured Rock Hydrology Mini-Symposium*, Department of Geology and Geophysics, University of Connecticut, Storrs, CT, March 8.
 - 28) Baun, S.A.*, A.C., Bagtzoglou, and G.S. Dulikravich, 2004, “Optimization Approaches for Near Real-Time Contamination Event Identification” (invited poster), *2nd International Conference on Advanced Technologies for Homeland Security*, Storrs, CT, August 12-13.
 - 29) Bagtzoglou, A.C., 2004, “Efficient Uncertainty Assessment for Satellite Rainfall Observations with Application to Flood Prediction”, Department of Atmospheric Sciences, Instituto de Astronomia, Geofísica e Ciências Atmosféricas, *Universidade de São Paulo*, March 19.
 - 30) Bagtzoglou, A.C., 2004, “Progress Towards Developing a Radar Calibration Method for Improved Rainfall Estimation”, Department of Atmospheric Sciences, Instituto de Astronomia, Geofísica e Ciências Atmosféricas, *Universidade de São Paulo*, March 18.
 - 31) Warner, G.S. and A.C. Bagtzoglou, 2005, “Long-Term Impact Analysis of the University of Connecticut’s Fenton River Water Supply Wells on Habitat of the Fenton River”, *UConn Environmental Policy Advisory Council*, Storrs, CT, December 15.
 - 32) Bagtzoglou, A.C., 2005, “Ground Water Modeling and Pumping Management for the Fenton River Well-Field”, *Final Project Presentation to Technical Advisory Group*, Storrs, CT, December 5.
 - 33) Bagtzoglou, A.C., 2005, “Reverse-Time Modeling for Pollution Event Reconstruction and Identification of Contaminant Sources in Natural Media”, *Seminars in Earth and Atmospheric Sciences*, Department of Earth and Atmospheric Sciences, *City College, City University of New York*, New York, NY, May 13.
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 - 36) Bagtzoglou, A.C., 2006, “Chaotic Flows and their Application to Different Environmental Media for Enhanced Remediation”, *Institut National Polytechnique de Toulouse, Ecole Nationale Supérieure d’Electrotechnique, d’Electronique, d’Informatique, d’Hydraulique et des Télécommunications*, Toulouse, France, June 26.
 - 37) Bagtzoglou, A.C., 2006, “Advanced Environmental Forensics”, *Groupe d’Etudes sur les Milieux Poreux, Institut de Mecanique des Fluides de Toulouse*, Toulouse, France, June 19.
 - 38) Bagtzoglou, A.C., 2006, “Groundwater Modeling of the Fenton River Well Field”, *The Fenton River Study Seminar Series, CT Institute of Water Resources*, Storrs, CT, March 22.
 - 39) Li, B., and A.C. Bagtzoglou, 2008, “Environmental Challenges of Nanoparticles and Research Opportunities”, *Nanotechnology Research Forum*, Storrs, CT, March 5.
 - 40) Malla, R., A.C. Bagtzoglou, B. Cetegen and T. Barber, 2008, “An Innovative Small Scale, Environmentally Friendly, Low-Head Hydropower Concept,” *Energy Forum*, University of Connecticut, Storrs, CT, November 4.
 - 41) Bagtzoglou, A.C. and S. Govindan, 2011, “Academic and Business Partnerships: Working Together to Accelerate Success,” T262A, *American Society for Engineering Education*, 118th Annual Conference and Exposition, Vancouver, BC, June 28.

B.2 PUBLISHED ABSTRACTS (58; 34*)

(Not overlapping with conference proceedings abstracts when a full paper was published)

(A^P after the year of an abstract published in proceedings indicates that presentation was given by Bagtzoglou)
(A^{*} after a co-author's name indicates student or post-doc working under Bagtzoglou's direct supervision)

- 1) Bagtzoglou, A.C., 1986^P, "An Experimental Study of the Dispersion Coefficient's Dependence on Aquifer Thickness", *FS/AWWA-FPCA Conference on Environmental Science and Engineering*, Orlando, FL.
- 2) Dougherty, D.E., A.C. Bagtzoglou, and A.F.B. Tompson, 1989, "Particle Methods for Reactive Transport: Review and Consistent Formulation", *EOS: Transactions of the AGU*, 70(43), p.1078.
- 3) Tompson, A.F.B., D.E. Dougherty, and A.C. Bagtzoglou, 1989, "Particle Methods for Reactive Transport: Vector & Parallel Implementation and Examples", *EOS: Transactions of the AGU*, 70(43), p.1078.
- 4) Tompson, A.F.B., D.E. Dougherty, R.B. Knapp, and A.C. Bagtzoglou, 1989, "Simulation of Reactive Transport in Natural Porous Media Using Particle Methods", *SIAM Conference on Mathematical and Computational Issues in Geophysical Fluids and Solid Mechanics*, Houston, TX.
- 5) Bagtzoglou, A.C., R. Ababou, and B. Sagar, 1992^P, "Effects of Some Common Geological Features on 2-D Variably Saturated Flow", *Materials Research Society Fall Meeting*, p.613.
- 6) Mohanty, S.^{*}, A.C. Bagtzoglou, and A. Nedungadi, 1993, "Efficient Calculation of Effective Hydraulic Conductivities for Unsaturated, Fractured Porous Media", *EOS: Transactions of the AGU*, 74(43), p.308.
- 7) Seida, S., A.C. Bagtzoglou, and B. Sagar, 1993^P, "Application of a Neural Network Methodology for the Estimation of Petrophysical Property Spatial Distributions under Conditions of Qualitative Parameter Availability", *EOS: Transactions of the AGU*, 74(43), p.303.
- 8) Bagtzoglou, A.C., R. Ababou, S. Mohanty^{*}, and R.G. Baca, 1993^P, "Conditional Simulation and Estimation of Gauss-Markov Random Fields for Massively Parallel Architectures", Minisymposium on Parallel Computation in Applications, 2nd *SIAM Conference on Mathematical & Computational Issues in Geosciences*, Houston, TX.
- 9) Stothoff, S.A. and A.C. Bagtzoglou, 1995, "Estimation of Recharge at Yucca Mountain, Nevada", *EOS: Transactions of the AGU*, 76(46), p. F242-F243.
- 10) Bagtzoglou, A.C. and S.A. Stothoff, 1995^P, "Testing Infiltration Models at the Apache Leap Research Site", *EOS: Transactions of the AGU*, 76(46), p. F252.
- 11) Green, R.T., G.W. Wittmeyer, and A.C. Bagtzoglou, 1995^P, "Uncertainty Reduction in the Implementation of a Geologic High Level Waste Repository Performance Regulation Using Subsurface Flow Models", *EOS: Transactions of the AGU*, 76(17), p. S110-S111.
- 12) Tolley, T.L.^{*}, and A.C. Bagtzoglou, 1996, "Perched Water Bodies in Arid Environments and Inferences for Recharge Rates", *EOS: Transactions of the AGU*.
- 13) Bagtzoglou, A.C., and T.L. Tolley^{*}, 1996^P, "Perched-Water Bodies in Arid Environments: Inferences for Recharge Rates", *Symposium on Unsaturated Zone Hydrology*, GSA Annual Meeting, Austin, Texas, March 12.
- 14) Mankiewicz, P.S., J.A. Mankiewicz, F.H. Griffis, A.C. Bagtzoglou, A. van Geen, and R.J. Versteeg, 1998, "Should Salt-Marshes be Constructed with Dredged Sediments?" *Proceedings of Marsh Conference '98*.
- 15) Oates, P.^{*}, A.C. Bagtzoglou, and R. Chevray, 2000^P, "Chaotic Advection Enhanced Natural Attenuation", *EOS: Transactions of the AGU*, 81(48), p. F453.
- 16) Bertetti, F.P., M.E. Hill^{*}, A.C. Bagtzoglou, S.J. Birnbaum, and L.P. McAllister, 2000, "Experiences in Laboratory Studies of the Effects of Bioclogging of Porous Media", Abstract with Programs, 32(7), p. A-354, *GSA Annual Meeting*, Reno, NV.
- 17) Cesano, D.^{*} and A.C. Bagtzoglou, 2000, "How Much Heterogeneous Can a Fracture Network Be?", *EOS: Transactions of the AGU*.
- 18) Atmadja, J.^{*} and A.C. Bagtzoglou, 2000, "Groundwater Pollution Source Identification Using the Backward Beam Equation Method", *EOS: Transactions of the AGU*.
- 19) Gorokhovich, Y., N. Themelis, and A.C. Bagtzoglou, 2000, "Curriculum Development of an Introductory Course in GIS for Engineering Schools", *American Society for Photogrammetry and Remote Sensing Conference*, Washington, DC.
- 20) Bagtzoglou, A.C., F. El-Habel^{*}, and P. Oates^{*}, 2001^P, "Quantification of Transport of Solutes across the Porous Bed-Stream Water Interface with Tracer Tests", *EOS: Transactions of the AGU*, 82(47), p. F402.
- 21) Bagtzoglou, A.C., and F. El-Habel^{*}, 2001, "Pore Water Flow and Transport of Solutes Across the Porous Bed – Stream Water Interface", *International Association of Hydrogeologists, International Groundwater Conference on Balancing the Groundwater Budget*, Darwin, Northern Territory, Australia.

- 22) Chevray, R., A.C. Bagtzoglou, and P. Oates*, 2001, "Chaotic Advection in Groundwater and Implications Regarding Aquifer Remediation", *5th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics*, Thessaloniki, Greece.
- 23) Cesano, D.* and A.C. Bagtzoglou, 2001^P, "Dripping from Rough Multi-Segmented Fracture Sets into Unsaturated Rock Underground Excavations", *EOS: Transactions of the AGU*, 82(20), p. S186.
- 24) Atmadja, J.* and A.C. Bagtzoglou, 2001^P, "The Marching-Jury Backward Beam Equation and Quasi-Reversibility Inverse Methods for Contaminant Plume Spatial Distribution Recovery", *EOS: Transactions of the AGU*, 82(20), p. S202.
- 25) Bagtzoglou, A.C., J.W. Lane, D. Cornacchiulo*, and K. Ergun, 2003^P, "Improved Reconstruction of Two-Dimensional Resistivity Field Data Using Geostatistics", *Geophysical Research Abstracts*, Vol. 5, p.176.
- 26) Bagtzoglou, A.C., and A. Novikov*, 2003^P, "Chaotic Advection in Tidally-Dominated Estuarine Systems and its Potential for Water Quality Restoration", *Geophysical Research Abstracts*, Vol. 5, p.389.
- 27) Bagtzoglou, A.C., P. Oates*, and E. Loehmann*, 2004^P, "Chaotic Advection Enhanced Remediation", *Proceedings of AWRA 2004 Annual Water Resources Conference*, Nix, S.J. (Editor), American Water Resources Association, Middleburg, Virginia, TPS-04-3, CD-ROM.
- 28) Niedzialek, J.M.*, F.L. Ogden, and A.C. Bagtzoglou, 2004, "Implementation of Particle Tracking to a Physically Based Hydrologic Model and Implications for Calibration", *EOS: Transactions of the AGU*, 85(47), p. F706.
- 29) Bagtzoglou, A.C., S.A. Baun*, and E.N. Anagnostou, 2004, "A Radar Calibration Method for Improved Rainfall Estimation", *Geophysical Research Abstracts*, Vol. 6, 1607-7962: 05934.
- 30) Bagtzoglou, A.C., F. Hossain*, E.N. Anagnostou, 2004, "Uncertainty Assessment for Satellite Rainfall Observations with Latin Hypercube Sampling", *Geophysical Research Abstracts*, Vol. 6, 1607-7962: 05873.
- 31) Hossain, F., A.C. Bagtzoglou, B. Sivakumar, and S. Shahid, 2005, "A Low-cost and Non-structural Simulation Approach for Prevention of Arsenic Contaminated Water Supply in a Rural Setting: The Case of Bangladesh," *EPSCor Environmental Summit*, Tennessee Technological University, TN.
- 32) Hossain, F., J. Hill, B. Sivakumar, and A.C. Bagtzoglou, 2005, "Linear Stochastic and Non-linear Deterministic Paradigms for Improved Spatial Interpolation of Groundwater Contamination in a Rural Setting: Implications for Management of Arsenic Contamination in Bangladesh", *EOS: Transactions of the AGU*, 86(52), p. F1042.
- 33) Bagtzoglou, A.C., 2005^P, "Chaotic Mixing and Enhanced Biological Growth: Implications for Wastewater Treatment", *Proceedings of XIV International Material Research Congress, Symposium on Ecomaterials*, p. 17/4-5.
- 34) Nadim, F.*, A.C. Bagtzoglou, F.L. Ogden, and G.S. Warner, 2005, "Sustainable Pumping Strategy for the University of Connecticut Well Field During Drought Periods", *Abstract Proceedings of Science for Sustainable Water Resources Conference*, University of Massachusetts Water Resources Center.
- 35) Nadim, F.*, A.C. Bagtzoglou, F.L. Ogden, and G.S. Warner, 2005, "Management of the University of Connecticut Well Field During Drought Periods", *Proceedings of AWRA 2005 Annual Water Resources Conference*, Steward, C. (Editor), American Water Resources Association, Middleburg, Virginia, TPS-05-3, CD-ROM.
- 36) Kram, M., G.A. Robbins, N. Jones, A.C. Bagtzoglou and J. Chau*, 2006, "Detailed Hydraulic Assessment Using a High-Resolution Piezocone and 3D Conceptual Models", *Groundwater Resources Association of California 2nd Symposium on High Resolution Site Characterization & Monitoring*, Long Beach, California.
- 37) Kram, M., N. Jones, G.A. Robbins, and A.C. Bagtzoglou, 2006, "Understanding GW Flow Pathways, Gradients, and Contaminant Fluxes", *SERDP/ESTCP Partners in Environmental Technology Technical Symposium & Workshop*, Washington, DC.
- 38) Cornacchiulo, D.F.*, and A.C. Bagtzoglou, 2006, "Multi-Dimensional Marching Jury Backwards Beam Equation Method with Uncertainty in Transport Parameters: Influence of Non-Gaussianity and Sampling Network on Pollution Event Reconstruction", *Natural Gas Technologies 2006: Energy and the Environment*, Lake Buena Vista, Florida.
- 39) Dahmani, M.A., K. Huang, and A.C. Bagtzoglou, 2006, "Case Study of Natural In-Situ Catalysis of Sodium Persulfate for the Treatment of Chlorinated Ethenes", *5th International Conference on Remediation of Chlorinated and Recalcitrant Compounds*, Monterey, California (Paper #3 in B6 – Chemical Treatment with Persulfate).
- 40) Warner, G.S., A.C. Bagtzoglou, L. Liu, and F.L. Ogden, 2007, "Hydrologic Impact of Water Supply Wells on the Fenton River, Storrs, Connecticut", *Connecticut Conference on Natural Resources*, Storrs, Connecticut.
- 41) Rahman, S.*, A.C. Bagtzoglou, L. Yarbrough, and F. Hossain, 2007, "Investigating Satellite Rainfall Based Flood Modeling in Anticipation of GPM: Understanding the Worth of Spatial Downscaling and Satellite Rainfall Uncertainty", *EOS: Transactions of the AGU*, 88(52), Abstract IN43B-1176.

- 42) Dathe, A., P. Zhang, and A.C. Bagtzoglou, 2007, "Verification of Chaotic Advection Enhanced Mixing in Porous Media Using Real Time Imaging", *EOS: Transactions of the AGU*, 88(52), Abstract H42C-05.
- 43) Zhou*, Z., J.-H. Cui, and A.C. Bagtzoglou, 2007, "Scalable Localization with Mobility Prediction for Underwater Sensor Networks", *2nd ACM International Workshop on Underwater Networks, 13th Annual International Conference on Mobile Computing and Networking*, Montreal, Canada.
- 44) Kram, M., N. Jones, J. Chau*, G. Robbins, and A.C. Bagtzoglou, 2008, "Mass Flux Distribution Using the High-Resolution Piezocone and GMS", *6th International Conference on Remediation of Chlorinated and Recalcitrant Compounds*, Monterey, California (Paper in D3 – Innovative Site Assessment and Performance Monitoring Tools).
- 45) Kram, M., N. Jones, J. Chau*, G. Robbins, A.C. Bagtzoglou, J. Farrar, and T. Dalzell, 2008, "Mass Flux Distribution Using the High-Resolution Piezocone and GMS and Innovative Cost-Effective Ground-Water Monitoring Well Design", *North American Environmental Field Conference and Exposition*, Tampa, Florida (Paper in Advances in Environmental Site Characterization, Monitoring, Sampling & Remediation Technology).
- 46) Chau, J.*, A.C. Bagtzoglou, and M. Willig, 2008, "Measuring Soil Bacteria Diversity across a Range of Soil Textures", *Connecticut Conference on Natural Resources*, Storrs, Connecticut.
- 47) Cornachiulo, D.F. and A.C. Bagtzoglou, 2008, "Multi-Dimensional Marching-Jury Backwards Beam Equation Method with Uncertainty in Transport Parameters", *NGWA Conference on Eastern Regional Ground Water Issues*, Ronkonkoma, New York.
- 48) Chau*, J.F., A.C. Bagtzoglou, and D. Or, 2008, "Simulating Isolated Bacterial Microhabitats in Unsaturated Soil", *International Conference on Computational Methods in Water Resources XVII*, San Francisco, CA.
- 49) Bagtzoglou, A.C., J.F. Chau*, M. Kram, G. Robbins, 2008, "Evaluation of High-Resolution Piezocone Methods for Site Characterization and Groundwater Modeling", *International Conference on Computational Methods in Water Resources XVII*, San Francisco, CA.
- 50) Chau*, J.F., A.C. Bagtzoglou, and D. Or, 2008, "Relating Bacterial Diversity to Soil Texture", *ASM General Meeting*, Boston, MA.
- 51) Kram, M., N. Jones, J. Chau*, G. Robbins, A.C. Bagtzoglou, J. Farrar, and T. Dalzell, 2008, "Hydraulic Parameter and Mass Flux Distribution Using the High-Resolution Piezocone and GMS", *Triad Investigations: New Approaches and Innovative Strategies*, University of Massachusetts, Amherst.
- 52) Malla, R., B. Shrestha*, J. Drasdis and A.C. Bagtzoglou, 2009, "Lift Force Generated by a Reciprocating, Small Scale, Low-Flow Rate Hydropower Model," *ASCE-ASME-SES Joint Conference on Mechanics and Materials*, Blacksburg, VA, June 24-27.
- 53) Chau*, J.F., A.C. Bagtzoglou, and M. Willig, 2009, "Effect of Soil Texture on Bacterial Richness and Diversity", *ASM General Meeting*, Boston, MA.
- 54) Anagnostou, E.N., E.I. Nikolopoulos, A. Papadopoulos and A.C. Bagtzoglou, 2010, "Using High-Resolution Satellite Rainfall Products to Nowcast Major Flash-Flood Inducing Storms," *EOS: Transactions of the AGU*, Abstract H32D-02.
- 55) Dahal G., K. Brown, C. Granda-Carvajal, M. Chrysochoou, N. Garrick, K. Segerson, and A.C. Bagtzoglou, 2010, "Reversing Urban Sprawl: A Reclaimability Approach to Reviving Downtown Brownfields," *International Conference on Green Remediation*, University of Massachusetts, Amherst, June 15-17.
- 56) Chrysochoou M., N. Garrick, K. Segerson, A.C. Bagtzoglou, G. Dahal, K. Brown, and C. Granda-Carvajal, 2010, "Reversing Urban Sprawl: A Reclaimability Approach to Reviving Downtown Brownfields," *University Transportation Center Conference on Transportation for Livable Communities*, Washington DC, October 18-19.
- 57) Malla, R.B, Shrestha, B. and A.C. Bagtzoglou, 2010, "Energy Generation using Reciprocating Small Scale Hydropower System," Book of Abstracts/Proceedings, Joint ASNEng/CAN-USA Annual Conference, organized by Am. Soc. of Nepalese Engineers and Computer Assoc. of Nepal-USA, Boston, MA, July 3-4.
- 58) Chrysochoou M., G. Dahal, N. Garrick, K. Brown, K. Segerson, C. Granda-Carvajal, and A.C. Bagtzoglou, 2011, "Prioritizing Brownfields for Development: A GIS Tool and Indexing Scheme for Environmental, Socioeconomic and Smart-Growth Factors," *Transportation Research Board 90th Annual Meeting*, Washington DC, January 23-27.

Teaching Experience* :

*: Numbers in parentheses in regular and bold font indicate number of times the course has been offered and, when available, average course teaching evaluations, respectively

^g, ^u: indicate graduate and undergraduate course, respectively
^{at}: indicates graduate course offered as guided study on advanced topics

University of Connecticut Applied Mechanics (3^u 9.6/10), Civil Engineering Systems (1^u NA), Foundations of Engineering (4^u 9.5/10), Groundwater Flow Modeling (2^g 9.7/10), Subsurface Contaminant Transport Modeling (1^g 9.4/10), Environmental Quantitative Methods (3^g 9.5/10), Environmental Transport Phenomena (2^g 9.1/10), Introduction to Engineering (1^u 8.6/10), Environmental Engineering Colloquium (1^g 9.7/10), Environmental Engineering Design (7^u 9.1/10), Environmental Modeling (2^u 9.0/10), Civil Engineering Design (3^u 9.6/10), Vadose Zone Hydrology (1^g 9.9/10)

Taught or co-taught **31** courses in **9** years with average median teaching evaluation of **9.3/10** (department and university average medians are **8.6/10** and **8.9/10**, respectively)

Columbia University Environmental Fluid Mechanics (1^g 4.33/5), Environmental Engineering (1^u 4.67/5), Fluid Mechanics (5^u 4.18/5), Surface & Subsurface Engineering Hydrology (5^u 3.96/5), Flow in Porous Media (3^g 4.75/5), Geoenvironmental Engineering (6^g 4.62/5), Contaminant Transport in Subsurface Systems (2^g 4.79/5), GIS Applications to Environmental Problems (coordinator and lecturer) (3^u), Stochastic Geohydrology (1^{g, at}), Undergraduate Design Project (1^u 5/5)

Taught or co-taught **28** courses in **5** years with average teaching evaluation of **4.43/5** (department average in 1997-98 was **3.36/5**)

University of Texas at San Antonio Geostatistical Simulation for Earth Scientists (1^{g, at})

University of California at Irvine Water Resources Supply (1^u), Hydraulic Structures Design (2^u), Numerical Methods in Engineering (1^u), Groundwater Hydrology (2^u), Surface Hydrology (2^u), Water Quality Laboratory (1^u), Engineering Economy (2^u)

Florida Institute of Technology Soil Mechanics Laboratory (1^u), Fluid Mechanics Laboratory (2^u)

Community Outreach:

1. Member of Indoor Environmental Quality for *Dodd Middle School* (2010-2012)
2. Series of lectures on careers in engineering at *Dodd Middle School*, Cheshire, CT (November 2010)
3. Member of Indoor Environmental Quality for *Norton Elementary School* (2008-2010)
4. Laboratory workshop to *Northeast Regional Science Bowl* students (March 2006)
5. Presentation and workshop to *Engineering 2000* students (June 2004, 2005)
6. Presentation and workshop to *Fairfield High School* seniors and juniors in Environmental Sciences on 04/29/2004
7. Presentation and workshop to *Bridgeport Central High School* seniors and juniors on 05/04/2004
8. Presentation to *Brian McMahon High School* seniors and juniors through the UConn Speakers' Bureau on 5/8/2003
9. Presentation for the *Center for Talented Youth* of Johns Hopkins University, held at the

University of Connecticut Avery Point campus (2002)

10. Laboratory tour and presentation for the *Center for Talented Youth* of Johns Hopkins University (2001) at Columbia University

11. Laboratory tour and presentation for the *Society of Women Engineers* (2001)

12. Series of presentations on the science behind Scuba Diving as part of the *Horizons Program* for students of Columbia University (1999)

13. Series of presentations on careers in science and engineering at the *Southwest Enrichment Center*, Southwest Independent School District, San Antonio, Texas (1996)

Student & Research Associate

Advising as Sponsor or Major Advisor:

(63)

Post-Doctoral/Research Associates (5)

- 1) Juan Stella, Post-doctoral Research Associate (2011-2012); Civil & Environmental Engineering Department, University of Connecticut
- 2) Daniele Cesano, Post-doctoral Research Associate (2001); Civil Engineering Department, Columbia University
- 3) Luca Liberti, Research Associate (2000-2001); Civil Engineering Department, Columbia University
- 4) Bohumil Juza, Post-doctoral Research Associate (1997-1999); Civil Engineering Department, Columbia University
- 5) Sitakanta Mohanty, Post-doctoral Research Associate (1992-1993); Center for Nuclear Waste Regulatory Analyses, Southwest Research Institute

Doctoral Students (14)

- 6) Amir Beyabanaki, Ph.D. in Environmental Engineering, University of Connecticut
- 7) Lawrence J. Marcik, Jr., Ph.D. in Civil Engineering (Ph.D. Candidate), University of Connecticut
- 8) Jeff Starn, Ph.D. in Environmental Engineering (Ph.D. Candidate), University of Connecticut (co-advisor: G. Robbins)
- 9) Anthony Benoit, Ph.D. in Environmental Engineering (Ph.D. Candidate), University of Connecticut
- 10) Jessica Chau, Ph.D. in Environmental Engineering (August 2009), University of Connecticut
- 11) Daniel Cornacchiulo, Ph.D. in Civil Engineering (October 2006); Columbia University
- 12) Farhad Nadim, Ph.D. in Environmental Engineering (August 2006), University of Connecticut
- 13) Sandrine Baun, Ph.D. in Environmental Engineering, University of Connecticut (on maternity leave; withdrew from program upon expecting her 2nd child)
- 14) Elsa Loehmann, Ph.D. in Environmental Engineering, University of Connecticut, *NSF Graduate Fellowship Honorable Mention Award* (withdrew from program upon expecting her 2nd child)
- 15) Andrei Novikov, Eng.Sc.D. in Civil Engineering (October 2004); Columbia University
- 16) Don Kim, Eng.Sc.D. in Earth & Environmental Engineering (February 2003); Columbia University
- 17) Daniele Cesano, Ph.D. in Civil and Environmental Engineering (February 2001); Royal Institute of Technology, Stockholm, Sweden (research was conducted in residence at Columbia University)
- 18) Juliana Atmadja, Eng.Sc.D. in Civil Engineering (February 2001); Columbia University
- 19) Fawaz El-Habel, Ph.D. in Civil Engineering (February 1999); Columbia University

M.S. Students (all with a Thesis option unless otherwise indicated) (17)

- 20) Refika Akkoca, M.S. in Environmental Engineering, University of Connecticut
- 21) David Payne, M.S. in Environmental Engineering, University of Connecticut
- 22) Daniel Brockmeyer, M.S. in Environmental Engineering (December 2011), University of Connecticut
- 23) Alyssa Midget, M.S. in Environmental Engineering (May 2011), University of Connecticut (co-advisor: R. Parnas)
- 24) Juan-Pablo Correa, M.S. in Environmental Engineering (May 2011), University of Connecticut (co-advisor: J.

Bushey)

- 25) Zhao Xue, M.S. in Environmental Engineering (August 2010), University of Connecticut (co-advisor: M. Gebremichael)
- 26) David Granucci, M.S. in Environmental Engineering (May 2009), University of Connecticut (co-advisor: D. Miller)
- 27) Sayma Rahman, M.S. in Environmental Engineering (May 2008), University of Connecticut
- 28) Binay Sharma, M.S. in Environmental Engineering (December 2007), University of Connecticut
- 29) Eric Kenney, M.S. in Environmental Engineering (December 2005), University of Connecticut
- 30) Sandrine Baun, M.S. in Environmental Engineering (December 2004), University of Connecticut
- 31) Eric Rosenberg, M.S. in Civil Engineering (May 2004); Columbia University (non Thesis)
- 32) Joe Menzer, M.S. in Civil Engineering (May 2001); Columbia University (non Thesis)
- 33) Daniel Cornacchiulo, M.S. in Civil Engineering (May 2000); Columbia University (non Thesis)
- 34) Brian Tracey, M.S. in Earth & Environmental Engineering (May 2000); Columbia University
- 35) Yan Yang, M.S. in Civil Engineering (December 1999); Columbia University (non Thesis)
- 36) Timothy Tolley, M.S. in Hydrogeology (December 1996); Division of Earth and Physical Sciences, University of Texas at San Antonio

B.S. Students (Senior Thesis) (27)

- 37) Jenabay Hupman, B.S. in Environmental Engineering (May 2011); University of Connecticut (co-supervised with John Lane)
- 38) Jackie Oakes, B.S. in Environmental Engineering (May 2011); University of Connecticut (co-supervised with Marisa Chrysochoou)
- 39) Michael Podany, B.S. in Environmental Engineering (May 2010); University of Connecticut
- 40) Brian Colonnese, B.S. in Environmental Engineering (May 2010); University of Connecticut
- 41) Michelle Przbylek, B.S. in Environmental Engineering (May 2009); University of Connecticut (*University of Michigan Fellowship*)
- 42) Lisa Sarubbi, B.S. in Environmental Engineering (May 2009); University of Connecticut (*University of Rhode Island Fellowship*)
- 43) Paul Johnson, B.S. in Environmental Engineering (May 2009); University of Connecticut
- 44) Amanda Ziegler, B.S. in Environmental Engineering (May 2009); University of Connecticut
- 45) Christopher Palmer, B.S. in Environmental Engineering (May 2008); University of Connecticut
- 46) David Harrington, B.S. in Environmental Engineering (May 2008); University of Connecticut
- 47) Ryan Neilan, B.S. in Environmental Engineering (May 2008); University of Connecticut (co-supervised with Baikun Li)
- 48) Christopher Shores, B.S. in Environmental Engineering (May 2007); University of Connecticut
- 49) Dustin Bytautas, B.S. in Environmental Engineering (May 2006); University of Connecticut
- 50) Jennie Watson-Lamprey, B.S. in Earth & Environmental Sciences (May 2002); Columbia University (*University of California Berkeley Fellowship*)
- 51) Catherine Marcinkevage, B.S. in Earth & Environmental Engineering (May 2001); Columbia University (*NSF Graduate Fellow; University of Illinois Urbana Champaign*)
- 52) Peter Oates, B.S. in Earth & Environmental Engineering (May 2000); Columbia University (*NSF Graduate Fellow; EPA STAR Fellow; MIT*)
- 53) Brandon Gallagher, B.S. in Earth & Environmental Engineering (May 2000); Columbia University
- 54) Hyun Chae, B.S. in Civil Engineering (May 2000); Columbia University
- 55) Frank Rinaldi, B.S. in Civil Engineering (May 1999); Columbia University
- 56) Nicholas Stark, B.S. in Civil Engineering (May 1999); Columbia University
- 57) Lisa Sarma, B.S. in Civil Engineering (May 1999); Columbia University (*Stanford University Fellowship*)
- 58) Jeremy Bak, B.S. in Civil Engineering (May 1999); Columbia University
- 59) Michael Puma, B.S. in Civil Engineering (May 1998); Columbia University (*Princeton University Fellowship*)
- 60) Michael Bowdoin, B.S. in Civil Engineering (May 1997); Columbia University
- 61) Jennifer Kehoe, B.S. in Civil Engineering (May 1997); Columbia University
- 62) Charles Landry, B.S. in Civil Engineering (May 1997); Columbia University

63) Margaret Lee, B.S. in Civil Engineering (May 1997); Columbia University

**Associate Advisor
or Committee Member:
(48)**

Doctoral Students (25)

- 1) Rory Henderson, Ph.D. in Geosciences, University of Connecticut (advisor: J. Lane)
- 2) Dawit Zeweldi, Ph.D. in Civil Engineering (December 2010), University of Connecticut (advisor: M. Gebremichael)
- 3) Thymios Nikolopoulos, Ph.D. in Environmental Engineering (May 2010), University of Connecticut (advisor: E. Anagnostou)
- 4) Angelos Lampousis, Ph.D. in Earth and Atmospheric Sciences (February 2009), Graduate Center of City University of New York (advisor: P. Kenyon)
- 5) Cary Talbot, Ph.D. in Environmental Engineering (November 2008), University of Connecticut (advisor: F. Ogden)
- 6) Yingge Qu, Ph.D. in Environmental Engineering (withdrew from program in 2008), University of Connecticut (advisor: B. Holmen)
- 7) Alemu Tadesse, Ph.D. in Civil Engineering (December 2007), University of Connecticut (advisor: E. Anagnostou)
- 8) Juan Stella, Ph.D. in Natural Resources Management and Engineering (August 2007), University of Connecticut (advisor: G. Warner)
- 9) Justin Niedzialek, Ph.D. in Civil Engineering (May 2007), University of Connecticut (advisor: F. Ogden)
- 10) Yuzhou, Luo, Ph.D. in Environmental Engineering (August 2006), University of Connecticut (advisor: X. Yang)
- 11) Tao Long, Ph.D. in Environmental Engineering (August 2006), University of Connecticut (advisor: D. Or)
- 12) Christopher Burke, Ph.D. in Civil Engineering (September 2004), Columbia University (advisor: H. Ling)
- 13) Faisal Hossain, Ph.D. in Civil Engineering (August 2004), University of Connecticut (advisor: M. Anagnostou)
- 14) Jeng-Wen Lin, Ph.D. in Civil Engineering (October 2001); Columbia University (advisor: R. Betti)
- 15) Jinsong Pei, Ph.D. in Civil Engineering (September 2001); Columbia University (advisor: A. Smyth)
- 16) Hanwei Zhang, Ph.D. in Earth & Environmental Engineering (August 2001); Columbia University (advisors: N. Themelis and A. Vardell)
- 17) Mingyong Chen, Ph.D. in Mechanical Engineering (April 2001); Columbia University (advisor: V. Modi)
- 18) Yanhui Wang, Ph.D. in Civil Engineering (February 2001); Columbia University (advisor: C. Meyer)
- 19) Dongyi Yue, Ph.D. in Earth & Environmental Engineering (February 2001); Columbia University (advisor: H. Ling)
- 20) Qian Chen, Ph.D. in Mechanical Engineering (December 1999); Columbia University (advisor: V. Modi)
- 21) Victor Stickel, Ph.D. in Mechanical Engineering (May 1999); Columbia University (advisor: R. Chevray)
- 22) Amitabha Mukherjee, Eng.Sc.D. in Mineral Resources Engineering (February 1999); Columbia University (advisor: T. Yegulalp)
- 23) Ahmed Kamal Shehata, Ph.D. in Mechanical Engineering (February 1999); Columbia University (advisors: V. Modi and A. West)
- 24) Qin Xu, Ph.D. in Mechanical Engineering (August 1998); Columbia University (advisor: R. Chevray)
- 25) Stephanie Dunkle-Shapiro (December 1997); Ph.D. in Earth & Environmental Sciences, Lamont-Doherty Earth Observatory of Columbia University (advisor: P. Schlosser)

MS Students (23)

- 26) Mohammed Dis, M.S. in Civil Engineering (August 2011), University of Connecticut (advisor: M. Anagnostou)
- 27) Aditi Misra, M.S. in Civil Engineering (December 2010), University of Connecticut (advisor: D. Basu)
- 28) Aaron Ting, M.S. in Environmental Engineering (May 2010), University of Connecticut (advisor: M. Chrysochoou)
- 29) Lara Aniskoff, M.S. in Environmental Engineering (December 2009), University of Connecticut (advisor: J.

Bushey)

- 30) Kelly Dregler, M.S. in Environmental Engineering (December 2008), University of Connecticut (advisor: M. Chrysochoou)
- 31) Dawit Zeweldi, M.S. in Civil Engineering (December 2008), University of Connecticut (advisor: M. Gebremichael)
- 32) Rory Henderson, M.S. in Environmental Engineering (August 2008), University of Connecticut (advisor: L. Liu)
- 33) Feyera Hirpa, M.S. in Environmental Engineering (December 2009), University of Connecticut (advisor: M. Gebremichael)
- 34) Xiaoming Sun, M.S. in Environmental Engineering (August 2007), University of Connecticut (advisor: G. Wang)
- 35) Anthony Quirk, M.S. in Civil and Environmental Engineering (May 2007), University of Connecticut (advisor: N. Garrick)
- 36) Linda Li, M.S. in Environmental Engineering (May 2007), University of Connecticut (advisor: A. MacKay)
- 37) Derek Dilaj, M.S. in Environmental Engineering (withdrew from program in 2006), University of Connecticut (advisor: F. Ogden)
- 38) Yongping Chen, M.S. in Environmental Engineering (August 2006), University of Connecticut (advisor: D. Or)
- 39) Sachin Phutane, M.S. in Environmental Engineering (withdrew from program in 2006), University of Connecticut (advisor: D. Or)
- 40) Zhe Zheng, M.S. in Environmental Engineering (August 2006), University of Connecticut (advisor: G. Wang)
- 41) Jason Keener, M.S. in Environmental Engineering (December 2006), University of Connecticut (advisor: L. Liu)
- 42) Jessica Chau, M.S. in Environmental Engineering (December 2005), University of Connecticut (advisor: D. Or)
- 43) Benjamin Cagle, M.S. in Geology (August 2005), University of Connecticut (advisor: G. Robbins)
- 44) John Bean, M.S. in Oceanography (May 2005), University of Connecticut (advisor: T. Torgersen)
- 45) Anthony Benoit, M.S. in Civil and Environmental Engineering (May 2005), University of Connecticut (advisor: F. Ogden)
- 46) David Vail, M.S. in Civil and Environmental Engineering (May 2005), University of Connecticut (advisor: B. Holmen)
- 47) Michael J Rogalus III, M.S. in Civil and Environmental Engineering (December 2004), University of Connecticut (advisor: F. Ogden)
- 48) Jonathan Zahner, M.S. in Civil and Environmental Engineering (August 2004), University of Connecticut (advisor: F. Ogden)