

Curriculum Vitae

Patricia J. Culligan

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Research/Professional Interests

Dr. Culligan's principal fields of interest include geo-environmental engineering, porous media flow and transport, urban sustainability and geotechnical centrifuge modeling. Her current research focuses on experimental and theoretical modeling of problems involving subsurface non-aqueous phase liquid (NAPL) transport and remediation, colloid transport in porous media, unsaturated flows and alternative strategies for urban water and wastewater management.

Education

<u>University</u>	<u>Degree</u>	<u>Date</u>
University of Leeds	B.Sc.	1982
Cambridge University	M.Phil.	1985
Cambridge University	Ph.D.	1989
Université d'Aix-Marseille III	Diplome de Langue, Litterature et Civilization	1993

Ph.D. Thesis Title: *Accelerated Physical Modelling of Transport Processes in Soil.*

Professional Registration: Chartered Engineer with the UK Engineering Council (Reg. No. 436148)

Career History

<u>Employer</u>	<u>Position</u>	<u>Beginning</u>	<u>Ending</u>
C.H. Dobbie & Partners	Graduate Engineer	Sept 1982	April 1984
Cambridge University	Research Assistant	May 1984	Feb 1989
City University	Research Fellow	March 1989	Nov 1989
University of Western Australia	University Research Fellow	Dec 1989	July 1992
Massachusetts Institute of Technology	Assistant then Associate Professor	July 1994	July 2003
Columbia University	Associate Professor	August 2003	June 2005
Columbia University	Professor	June 2005	present

Professional Society Membership

International Society of Soil Mechanics and Foundation Engineering
American Society of Civil Engineers (full member)
American Society of Engineering Educators
American Geophysical Union
Geological Society of America

Awards Received

British Institution of Civil Engineers Prize for “outstanding undergraduate work”	1982
University of Western Australia Postdoctoral Research Fellowship	1989-1992
British Council Academic Links Award for Research Collaboration	1994
University of Western Australia Mosey Visiting Fellowship	1996
Whiting Foundation Travel Fellowship	1996
M.I.T Edgerton Career Development Chair	1996
M.I.T. Arthur C. Smith Award for Undergraduate Service	1999
National Science Foundation CAREER Award	1999
Idaho National Laboratory ACE Faculty Fellowship	2001
Columbia School of Engineering and Applied Science Distinguished Faculty Teaching Award	2006
Columbia School of Engineering and Applied Science Diversity Service Award	2006
Columbia University Presidential Award for Outstanding Teaching	2007
ASCE Journal of Geotechnical and Geo-Environmental Engineering, Editorial Board Member of the Year	2007

ASCE Geo-Institute Activities

ASCE Geo-environmental Engineering Committee	July 1995 - present
Co-Chair, 12th Panamerican Conference on Soil Mechanics and Geotechnical Engineering, 37th U.S. Rock Mechanics Symposium and Annual GI Conference, Soil & Rock America 2003, Cambridge, USA, June 22 – 26, 2003	June 2000 - June 2003
Editorial Board Member, ASCE Journal of Geotechnical and GeoEnvironmental Engineering	Oct 2000 – Feb 2007
Co-organizer and Session Chair: Advances in Insitu Remediation Technologies, ASCE Geo Frontiers Conference, Austin, Texas, Jan 24 – 26, 2005.	June 2003 – Feb 2005
Co-organizer and Session Chair: Advances in Waste Containment and Transport, ASCE Geo Denver Conference, Denver, Colorado Feb, 18 th – 21 st 2007.	June 2006 – Feb 2007
Organizing Committee, GeoCongress 2008: The Challenge of Sustainability in the Geo-environment, New Orleans, Louisiana, March 9 – 12 th , 2008	Nov 2006 - present
Co-organizer and Session Chair: Coupled Transport Processes, ASCE GeoCongress 2008, New Orleans, Louisiana, March 9 – 12 th , 2008	Feb 2007 - present
Chair, ASCE Geo-Institute Awards Committee	Aug 2008 - present

Student Theses Supervised: PhD 10 (4 in progress); Master’s degree 24.

Publications: Author or co-author of 2 books, 3 book chapters, 60 refereed journal articles/ conference papers and 37 other major publications (National Academy Reports; Specialty Publications; Professional Periodicals, etc.)