

CURRICULUM VITAE

**Sabanayagam Thevanayagam, Ph.D., P.E.
(Theva)**

Professor

**Department of Civil, Structural,
and Environmental Engineering
University at Buffalo**

2012

CURRICULUM VITAE

(THEVA) S. THEVANAYAGAM, Ph.D., P.E.

244 Ketter Hall, University at Buffalo, SUNY, Buffalo, NY 14260
(716) 645-4376; theva@buffalo.edu

Professional Interests

Geotechnical Engineering, Earthquake Engineering, Geoenvironmental Engineering.

EDUCATION

1989	Ph.D., Geotechnical Engineering, Purdue University, IN
1985	M.S.C.E., Geotechnical Engineering, Purdue University, IN
1982	B.S., Civil Engrg. (First Class Honors, each year), Peradeniya Univ., Sri Lanka

EMPLOYMENT

ACADEMIA

2009 -	Professor, State Univ. of New York, Buffalo, NY
2004 – 2008	Director of Education, MCEER, State Univ. of New York, Buffalo, NY
1999 - 2009	Assoc. Professor, State Univ. of New York, Buffalo, NY
1996 - 1999	Assistant Professor: State Univ. of New York at Buffalo, NY
1992 - 1996	Assistant Professor: Polytechnic University, New York
1987 - 1988	Teaching Assistant: Purdue University, IN
1984 - 1988	Research Assistant: Purdue University, IN
1984 - 1984	Research Assistant: Univ. of California, Davis, CA
1982 - 1984	Assistant Lecturer: Peradeniya University, Sri Lanka

INDUSTRY

1988 – 1992 Staff Engineer to Senior Project Engineer: Earth Technology Corporation, CA.
Registered Professional Engineer (P.E.) - California (1990-present). (Major projects: LA Metro Rail Subway, Red Line; Port of LA 2020 Plan Pier Development; San Joaquin Valley Transportation Corridor Development)
40-Hour Health and Safety Training for Environmental Engineers (OSHA)

AWARDS & HONORS

- ASCE Certificate of Commendation - For guiding outstanding ASCE student chapter activities in 2005 (by National ASCE)
 - ASCE Letter of Significant Improvement – For leading most improved ASCE student club in 2005 (by National ASCE)
 - Listed in Who is Who in Science & Engineering (1998)
 - Member AAAS - American Assoc. for Adv. of Science (1997)
 - Member, New York Academy of Science (1996)
 - **Research Initiation Award**, NSF (1993)
 - Maple Point Found. Grant (1988), for independent research., Dept. of Civil Eng., Purdue University
 - University Scholarship Award - Senior, School of Eng., Peradeniya Univ., Sri Lanka.
 - E.O.E. Pereira Memorial Prize - Junior, School of Eng., Peradeniya Univ., Sri Lanka.;
 - Brook-Bond Scholarship Award: Ministry of Higher Ed. - Highest Award for the Best Performance in the National Univ. Entrance Exam., Sri Lanka;
- Patents: Method of Interpretation of Electrical Dispersion Data of Porous Media (1995), #5457628

PROFESSIONAL AFFILIATIONS

- ASCE (1985-present); ASEE (1996-1997); American Association for Advancement of Science (1997-1999); New York Academy of Science (1996-1998); Sigma Xi Res. Soc. (1986).
- Associate Editor – ASCE J. Geotechnical and Geoenvironmental Engineering
- Associate Editor - International Journal of Geotechnical Earthquake Engineering
- Organizing Committee - 6th International Conf. Geotechnical Earthquake Engineering.

RESEARCH GRANTS

Received over \$2.4 million in grants for independent research, \$22 million for group research facility development, and \$0.8 million for education/outreach activities.

A. Individual Investigator Grants as PI (or co-PI)

- NSF (2011-2014): NEESR: INDUCED PARTIAL SATURATION (IPS) THROUGH TRANSPORT AND REACTIVITY FOR LIQUEFACTION MITIGATION PI at UB: S. Thevanayagam, **\$135,000**. (100%) (Total Project Funding **\$1,200,000**, with Northeastern U., Univ. of Texas, Austin, Boise State U.; M. Yegian, Proj. Director)
- NEHRP/USGS (2007-2011): "Effect of permeability and compressibility on cone penetration resistance and liquefaction screening", **\$85,000**, PI: S. Thevanayagam, co-PIs: S. Ahmad and P. K. Banerjee.
- NSF (2005-2011): NEESR-SG: Experimental and micromechanical computational study of Lateral Pressures on pile foundations due to sand liquefaction and lateral spreading, PI at UB: S. Thevanayagam, **\$322,500**. (100%) (Total Project Funding **\$1,240,000**, with RPI & UCSD, R. Dobry, Proj. Director)
- NYS (2007-2008): Development of post-earthquake bridge inspection guidelines (PI: J. O'Connor, Research team: M. Bruneau, S. Thevanayagam, R. Aboutaha (Syracuse Univ.), R. Imbsen), **\$200,000**.
- NSF (1999-2004): Relative roles of Inter-granular friction & fines on undrained behavior of silty sands, **\$189,603** S. Thevanayagam, PI.
- NSF (2002-2004): Supplement - Relative roles of Inter-granular friction & fines on undrained behavior of silty sands, **\$10,000**, PI
- NSF (1993-1997): Research Initiation Award: Fundamental Research on Electric Dispersion of Soils and Engineering Interpretations, **\$90,000**, S. Thevanayagam, PI.
- NSF (1997-1999) Pile group under transient impact loading, **\$76,500**, co-PI (w/P.K. Banerjee – PI; S. Thevanayagam, co-PI; J. B. Mander, co-PI)
- NSF (2001-2001): US-Japan Technological Exchange on Shake-Table Hybrid Testing, **\$39,600** (w/ M. Bruneau, A.M. Reinhorn), S. Thevanayagam, co-PI
- NSF & Port of LA (1995-1997): Vacuum Consolidation of Hydraulic Fills - Phase I (**\$25,000**), (S. Thevanayagam, PI; co-PI's: E. Kavazanjian; I. Juran; A. Jacob)
- NEHRP/USGS (2001-2003): Mechanisms causing Liquefaction and slope failures in silty sands, Performance based additional **\$73,000**, S. Thevanayagam, PI.
- NEHRP/USGS (1999-2001): Mechanisms causing Liquefaction and slope failures in silty sands, **\$98,804**, S. Thevanayagam, PI.
- DOD (1995-1996): Integrated Geoenvironmental Immunoassay for In situ Site Characterization - Phase I, **\$80,000**, S. Thevanayagam, PI (subcontractor Prof. R. Santella, Columbia Univ./MR&D)
- NYC-DEP (1996-1998): Seismic Evaluation of NY City DEP Facilities (Water Tunnel & Ward Island) - **\$50,000**, (S. Thevanayagam, PI for Polytechnic University; Prof. Meyers PI for Columbia Univ.)
- UTRC (Region II) (1996-1998): Plastic Piles - **\$105,000**, (S. Thevanayagam, PI for Polytechnic University; A. Maher, PI for Rutgers Univ.)
- Joint FHWA-NY City, NJDOT- NYSDOT (93-95): Solid Waste Processing for Use in Infrastructure Construction Materials, **\$105,000**, (I. Juran, PI; S. Thevanayagam, co-PI; D. Goulias, co-PI).
- FHWA (1994-1996): International Knowledge Database on Ground Improvement Technologies, **\$140,000**, (I. Juran, PI; S. Thevanayagam, co-PI; J. Yoon, co-PI)
- Port of Los Angeles (1989-1992): Pilot Study – Vacuum assisted Consolidation of Hydraulic Fills, S. Thevanayagam, co-PI; E.Kavazanjian, Jr., PI, Earth Tech Corp.) **\$120,000+**
- FHWA/MCEER (2004-2005): Liquefaction Screening and remediation in silty soils - **\$50,000**, S. Thevanayagam, PI
- FHWA/MCEER (2003-2004): Liquefaction Screening and remediation in silty soils - **\$50,000**, S. Thevanayagam, PI.

FHWA/MCEER (2002-2003): Liquefaction mitigation in silty soils using deep dynamic compaction supplemented with wick drains. **\$50,000**, S. Thevanayagam, PI.

FHWA/MCEER (1999-2002): Ground remediation for silty soils using stone columns. **\$100,000**, S. Thevanayagam, PI.

MCEER/NSF/NYS (2001-2002): Soil stabilization and liquefaction remediation. **\$20,000**, S. Thevanayagam, PI.

MCEER/NSF/NYS (2000-2001): Soil stabilization and liquefaction remediation. **\$37,000**, S. Thevanayagam, PI.

MCEER/NSF/NYS (1999-2000): Soil stabilization and liquefaction remediation. **\$37,000**, S. Thevanayagam, PI.

B. Travel Grants

UB UUP Chapter (2012): Faculty career development award, \$200

UB UUP Chapter (2011): Faculty career development award, \$200

UB UUP Chapter (2006): Faculty career development award, \$400

ASCE (2004): ASCE Faculty Advisor Development grant, \$400

UB UUP Chapter (2001): Faculty career development award, \$585

UB UUP Chapter (2000): Faculty career development award, \$450

EERI (NSF) (2000): Travel Grant – 12th Intl. Conf. Earthq. Eng., New Zealand, \$1,000

UB (1997): Travel Grant: Riefler Award, SEAS, UB, \$1,000

C. Education Grants – NSF (as MCEER Director of Education since 2004)

NSF/MCEER Education Grants (2006-07): Education Development, Student Leadership Council \$57,500, PI: S. Thevanayagam

NSF/MCEER Education Grants (2004-05): Education Development, Student Leadership Council \$57,500, PI: S. Thevanayagam

NSF/MCEER Education Grants (2005-06): Education Development, Student Leadership Council \$57,500, PI: S. Thevanayagam

NSF/MCEER Education Grants (2004-07): Research Experiences for Undergraduate students \$169,000, PI: M. Bruneau; co-PI: S. Thevanayagam

NSF/MCEER Education Grants (2004-07): Diversity Research Experience for Undergraduate Students \$150,000, PI: M. Bruneau, co-PI: M. Abdullah (S. Thevanayagam – direction, coordination, promotion, and management).

NSF/MCEER Education Grants (2004-07): Diversity PhD fellowship, \$300,000, PI: M. Bruneau, co-PI: M. Abdullah; (S. Thevanayagam – direction, coordination, promotion, and management).

D. Cooperative Group Research Grants:

NSF (2001-2004): Versatile high performance shake tables facility towards real-time hybrid testing, **\$6,825,323** (PI's: M. Bruneau/A. M. Reinhorn; co-PI's: M. C. Constantinou, S. Thevanayagam, S., and E.Rojas, A. Whittaker)

NSF (2001-2004): Large scale high performance testing facility towards real-time hybrid testing, **\$4,249,716** (PI's: M. Bruneau/A. M. Reinhorn; co-PI's: M. C. Constantinou, S. Thevanayagam, S., and E.Rojas, A. Whittaker)

SUNYCF (2001-2004): Matching Infrastructure Investment for construction of Ketter Hall addition to house UB-Node of NEES Facility (above two grants), (PI's: M. Bruneau/A.M. Reinhorn; co-PIs: Constantinou, M.C., Thevanayagam, S., and E.Rojas, A. W. Whittaker), **\$9,000,000** (\$3,000,000 SEAS Funds).

NSF (2003-2004): Networking of Experimental Facility - NEES Supplemental Grant. (PI: Reinhorn, co-PIs: M. Bruneau, M. C. Constantinou, S. Thevanayagam and A. W. Whittaker), **\$458,540**.

NSF (2005-2014): NEES-Maintenance and Operation Grant (PI: A. M. Reinhorn, co-PI's: M. Bruneau, M.C. Constantinou, A.Filiatrault, and A. W. Whittaker; Operations Team members: S. Thevanayagam, A. Aref, S. Chen, G. C. Lee, T.T. Soong, G. Mosqueda), **\$1,500,000/year**

NSF (2009-2010) Geotechnical Earthquake Engineering Equipment Development (Jointly with SEESL, UB), **\$635,000**.

RPI (2009-2010) Geotechnical Earthquake Engineering Equipment Development (Jointly with SEESL, UB), **\$20,000**.

GRADUATE STUDENT SUPERVISION

	Student	Current Position	Degree	Dissertation / Thesis Title	Date of Completion
As Major Advisor	1. S. Nesarajah	Sen. Engr, URS Corp., CA	Ph.D	Determination of hydraulic Conductivity using Dielectric Dispersion Measurements – An Experimental Evaluation	May 98
	2. T. Shenthnan	Sen. Proj. Engr., Earthscience Inc., CA	PhD	Liquefaction mitigation in silty soils using stone columns supplemented with wick drains	Dec. 05
	3. R. Nashed	Proj. Engr., Ardaman & Assoc., FL	PhD	Liquefaction mitigation of silty soils using dynamic compaction	Dec. 05
	4. T. Kanagalingam	Proj. Engr., URS Corp., CA	PhD	Liquefaction resistance of granular mixes based on contact density and energy considerations	Feb. 06
	5. J. WeiWei	Proj. Engr., MD	PhD	Electro-osmotic grouting technique for liquefaction mitigation of low permeability silty soils	June 06
	6. J. Liang	Engr., Canada	PhD	Intergranular Contacts and Undrained Behavior of Silty Sands – An Exp. study	Submitted Dissertation; Yet to defend.
	7. N. Ecemis	Asst. Prof. Turkey	PhD	Effect of permeability and compressibility on liquefaction screening based on penetration resistance	June 08
	8. Q. Huang		PhD	Behavior of Single Piles subjected to liquefaction-induced Lateral spreading	2012 (exp)
As Co-Advisor	9. S. Drabkin	Res. Assoc., Polytechnic.	Ph.D	Low level vibration induced settlement of granular materials	June 95
	10. M. Choukeir	President, Consulting Business, NJ	Ph.D.	Seismic Analysis of Reinforced earth and Soil nailed Structures	Nov. 95
	11. R. Tao	PRC	PhD		Aug. 02
	12. F. Leyte	Mexico	PhD	Analysis of Dynamically loaded foundations in anisotropic soils	June 02
	13. M. Gonzalez	Vancouver, Canada	PhD	Centrifuge Modeling of pile foundation subjected to lateral spreading	June 08
As Major Advisor	K. Vijayakrishnan		MS	Effect of sand/silt gradation on undrained strength of silty sands	Sept.12(exp)
	Brandon Rhea		MS		June 12
	Ida Oktaviana		MS	Effect of fines on undrained response of sand	Feb. 12
	Yu Tan		MS	Dynamic Earth pressures in buried structures	Aug. 11
	Shanguin Jin		MS	Seismic earth pressures on retaining walls	Aug. 11
	Sheikh Ali		MS		Aug. 11
	Patrick Connelly		MS		Dec. 10
	Jin Xu		MS		Aug. 10
	Ali Seiphoori		MS		June 10
	1. T. Ray	Grad Student	MS	FEM study of Cone Penetration in Silty sands	August 09
	2. R. Bethapudi	CH2M Hill, CA	MS	Mechanisms of liquefaction induced lateral spreading	July 08
	3. D. Lu	Connecticut	MS		June 08
	4. C. Nourse	Colorado			June 08
5. P. Hao	Grad St.	BS/ME	Free field liquefaction testing using large scale laminar box	June 07	
6. G. Soderholm	Adj. Fac., UB	ME	Advising only	June. 06	
7. E. Garini	Greece	MS	Single Pile Response to liquefaction induced lateral spreading	Sept. 05	
8. T. Gourley	President, Engr., PA	MS	Micropiles – Current state of practice review	June 05	
9. R. Tharmendhira	Proj. Engr., CA	MS	Structural and geotechnical design aspects of UB-NEES 2D laminar Box 1-g soil test facility	Aug. 04	
10. A. Klimov		ME	Advising only	June 03	
11. T. Kanagalingam	Engr. CA	MS	Role of intergranular friction on liquefaction behavior of granular mixes	Feb. 03	
12. H. Ahmad	Grad St., FL	MS	Soil stabilization by electrokinetic grouting – An experimental study	Aug. 01	
13. T. Shenthnan	Proj. Engr., CA	MS	Factors affecting liquefaction mitigation in silty soils using stone columns	Aug. 01	

	14. J. Shawn	Proj. Engr, NY	ME	Advising Only	Aug. 00
	15. J. Liang	Engr. Canada	MS	Monotonic undrained behavior of silt-sand mix in triaxial compression	Aug. 99
	16. A. Nichols	Proj. Eng., NY	ME	Advising Only	Aug. 99
	17. M. Fiorillo	Proj. Engr., NY	M.S	Effect of nonplastic fines content on undrained cyclic strength of silty sands	Dec. 99
	18. S. Agrawal	IT Inc., TX	M.S	Electrokinetic Ion Injection to Enhance Bioremediation in Low Permeable Soils	Aug. 97
	19. K. Ravishankar	Engr., NJ.	M.S	Post-Liquefaction Shear Strength of Sandy Soils	Aug. 96
	20. A. Baird	Engr., NJ	M.S	A Geotechnical Evaluation of Recycled Plastic Lightweight Material	Aug. 96
	21. M. Sharawy	Engr, NY	M.S	An International Knowledge Database for Ground Improvement Geosystems	Aug. 96
	22. T. Rishindran	Engr., NY	M.S	Enhancement of Bioremediation in low permeable soils using electrokinetics	May 96
	23. C. C. Wang	Engir., Taiwan	M.S	Shear Strength for post-liquefaction stability analysis	Jan. 95
	24. J. Wang	Engr., NJ	M.S	Eelectrokinetics in Clayey Soils	May 94
As co-Advisor	25. S. Mohan	Proj Engr. CalTrans, CA	M.S	Soil Nailing	May 96
	S. Saki		MS		May 11
	26. V. Rinaldi	Asso. Prof. Argentina	M.S	Interaction of Electromagnetic Waves with Geomedia	May 92

PUBLICATIONS

A. Patents

S. Thevanayagam, (1995) "Method of Interpretation of Electrical Dispersion Data of Porous Media", US Patent #5457628

B. Peer Reviewed Papers

Refereed Papers

1. Thevanayagam, S., Agrawal, G. and Altschaeffl, A.G. (1989) "A new basis for the earthwork specifications for clay soils", ASCE, J. Geotech. Eng. Div., 115(11). 1599-1616..
2. Thevanayagam, S. (1990) "Undrained behavior of Ko consolidated clays", Journal of Geotechnical Eng. Society, Sri Lanka, 1(1), 62-83.
3. Thevanayagam, S. and Chameau, J-L. (1992) "Modelling anisotropy of clays at critical state", ASCE, J. Eng. Mech. Div., 118(4), 786-806.
4. Thevanayagam, S. (1993) "Electrical response of two-phase soils: theory and geotechnical applications", ASCE, J. Geot. Engrg Div., 119(8), 1250-1275.
5. Thevanayagam, S. Chameau, J-L and Altschaeffl, A.G. (1994) "Some aspects of pressuremeter test interpretation in clays" Geotechnique, 44(2), 319-334.
6. Jacob, A., Thevanayagam, S., and Kavazanjian, E., (1994) "Vacuum assisted consolidation of a hydraulic landfill", ASCE Geot. Spec. Pub. 40, Eds. A. T. Yeung and G. Y. Felio, 1249-1261.
7. Thevanayagam, S., Kavazanjian, Jr. E., and Jacob, A., (1994) "Prospects of vacuum-assisted geosystems for ground improvement of hydraulic fills", ASCE Geotech. Spec. Publ. 45, Ground Improvement, Ed. K. M. Rollins, 90-105.
8. Yoon, C.J. Thevanayagam, S., and Juran, I. (1994) "International Knowledge Database for ground improvement geosystems", ASCE Spec. Publ., Computing in Civil Engineering, Ed. K. Khozeimeh, 277-284.
9. Cognon, J.M., Juran, I., and Thevanayagam, S., (1994) "Vacuum assisted consolidation – Principles, technology and field experience", ASCE Geotech. Spec. Pub. 40., Eds. A. T. Yeung and G. Y. Felio. 1237-1248.
10. Thevanayagam, S. (1995) "Soil-structure characterization using electromagnetic waves," Intl. J. Particulate Sc. & Tech., 12(3), 281-298.
11. Thevanayagam, S. (1995) "Frequency domain analysis of electrical dispersion of soils", ASCE, J. Geotech. Eng., 121(8), 618-628.
12. Thevanayagam, S. (1995) "Environmental soil characterization using electrical dispersion", Geo-Environment 2000, ASCE Geotech. Spec. Publ.46, Eds. Y. B. Acar and D. E. Daniel, 137-150.

13. Thevanayagam, S., Ravishankar, K. and Mohan, S., (1996) "Steady state strength, relative density, fines content relationship for sands", *Transp. Res. Rec.* 1547, NRC, Wash. DC, 61-67.
14. Thevanayagam, S., Kavazanjian, Jr., E., Jacob, A., and Nesarajah, S. (1996) "Probabilistic and deterministic analysis of preload design at a hydraulic fill site", *ASCE, Geotech. Spec. Publ.* 58, Eds. S.D. Shackelford, P. P. Nelson, and M. J. S. Roth, 1417-1431.
15. Thevanayagam, S., Wang, C.C. and Ravishankar, K. (1996) "Determination of post-liquefaction strength: Steady state strength vs Residual strength", *ASCE, Geotech. Spec. Publ.* 58, Eds. S.D. Shackelford, P. P. Nelson, and M. J. S. Roth, 1210-1224.
16. Thevanayagam, S. (1997) "Vacuum-assisted Consolidation of dredge fills", *ASCE Geotech. Spec. Publ.* 65, Eds. J. N. Meegoda et al., 67-86.
17. Thevanayagam, S., Mohan, S. and Ravishankar, K. (1997) "Effect of fines on steady state strength", *ASTM Geotechnical Testing Journal*, 20(4), 394-406.
18. Thevanayagam, S. (1997) "Dielectric dispersion in porous media as a fractal phenomenon", *J. Appl. Phys., Am. Inst. Phys.*, 82(5), 2538-2547.
19. Thevanayagam, S. and Nesarajah, S. (1998) "Fractal model for flow through saturated soils", *ASCE, J. Geotech. Eng.*, 124(1), 53-66.
20. Thevanayagam S., and Rishindran, T. (1998) "Injection of nutrients and TEAs in clayey soils using electrokinetics", *ASCE J. Geotech. Eng.*, 124(4), 330-338.
21. Thevanayagam, S. (1998) "Large strain undrained shear strength of silty sands", *Transp. Research Record, National Research Council, TRB77, CD ROM, Washington D.C.*
22. Thevanayagam, S. (1998) "Effect of fines and confining stress on steady state strength of silty sands", *ASCE, J. Geotech. Eng.*, 124(6), 479-491.
23. Thevanayagam, S., Fiorillo, M., and Liang, J. (2000) "Effect of non-plastic fines on undrained cyclic strength of silty sands", *ASCE Geotech Spec. Publ.* 107, Eds. R.Y.S. Pak and J. Yamamura, 77-91.
24. Thevanayagam, S. and Mohan, S. (1998) "Intergranular void ratio – steady state strength relations for silty sands", *ASCE Special Publ.* 75, Eds. P. Dakoulas et al., 349-360.
25. Thevanayagam, S. and Mohan, S. (2000) "Intergranular state variables and stress-strain behaviour of silty sands", *Geotechnique*, 50(1), London, 1-23.
26. Thevanayagam, S., Shenthana, T., Mohan, S. and Liang, J. (2002), "Undrained fragility of sands, silty sands and silt", *ASCE, J. Geotech. & Geoenv. Eng.*, 128(10), 849-859.
27. Thevanayagam, S. and Martin, G. R., (2002) "Liquefaction in silty soils: screening and remediation issues", *J. Soil Dyn. & EQ Eng.*, vol. 22, 1035-1042.
28. Thevanayagam, S. and Jia, W. (2003) "Electro-osmotic grouting for liquefaction mitigation in silty soils", *ASCE Geotechnical Special Technical Publication* 120. Eds. L. F. Johnsen, et al., 1507-1517.
29. Shenthana, T., Nashed, R., Thevanayagam, S., and Martin, G.R. (2004) "Liquefaction mitigation in silty soils using composite stone columns and dynamic compaction", *J. Earthquake Eng. and Eng. Vibrations*, 3(1), 39-50.
30. Kanagalingam, T. and Thevanayagam, S. (2006) "Energy dissipation and liquefaction assessment in sands and silty soils", *ASCE, Geotechnical Engineering in the Information Age*, Eds. D. J. DeGroot et al., 10-7844-0803-3.
31. Nashed, R., Thevanayagam, S., and Martin, G.R. (2006) "Simulation of dynamic compaction processes in saturated silty soils", *ASCE, Geotechnical Engineering in the Information Age*, Eds. D. J. DeGroot et al., 0-7844-0803-3.
32. Shenthana, T., Thevanayagam, S., and Martin, G.R. (2006) "Numerical simulation of soil densification using vibro-stone columns", *ASCE, Geotechnical Engineering in the Information Age*, Eds. D. J. DeGroot et al., 0-7844-0803-3.
33. S. Thevanayagam, S. (2007) "Intergrain contact density indices for granular mixes I - Framework", *J. Earthquake Engineering and Engineering Vibrations*, Vol. 6(2), 123-134.
34. S. Thevanayagam, S. (2007) "Intergrain contact density indices for granular mixes- II: Liquefaction resistance", *J. Earthquake Engineering and Engineering Vibrations*, Vol. 6(2), 135-146.
35. Thevanayagam, S. and Ecmis, N. (2008) "Effects of permeability on liquefaction resistance and cone resistance", *ASCE Geotechnical Special Publication* 181, *Geotechnical Earthquake Engineering and Soil Dynamics*, 11p.
36. Abdoun, T., Bennett, V., Dobry, R., Thevanayagam, S., and Danisch, L. (2008) "Full-scale laboratory tests using a shape-acceleration array system", *ASCE Geotechnical Special Publication* 181, *Geotechnical Earthquake Engineering and Soil Dynamics*. 9p.
37. Nashed, R., Thevanayagam, S., and Martin, G. R. (2009) "Densification and Liquefaction Mitigation of Saturated Silty Soils by Dynamic Compaction – Design" *Ground Improvement Journal* 162(G12),

- Institute of Civil Engineers, UK, p69-80.
38. Thevanayagam, S., Nashed, R., and Martin, G. R. (2009) "Densification and Liquefaction Mitigation of Saturated Silty Soils by Dynamic Compaction – Theory", *Ground Improvement Journal*, 162(G12), Institute of Civil Engineers, UK. p57-68.
 39. Nashed, R., Thevanayagam, S., and Martin, G. R. (2009) "Densification and Liquefaction Mitigation of Saturated Silty Soils by Dynamic Compaction – Numerical Simulation", *Ground Improvement Journal*, 162(G12), Institute of Civil Engineers, UK. p81-91.
 40. Bennett, V., Abdoun, T., Danisch, L., Shantz, T., Jang, D., and Thevanayagam, S. (2009) "Design and Characterization of a Compact Array of High-Resolution MEMS Accelerometers for Instrumenting Soil and Soil-Structure Systems", *J. Smart Structures and Systems*, 5(6).
 41. Thevanayagam, S., Kanagalingam, T., Reinhorn, A., Tharmendhira, R., Dobry, R., Pitman, M., Abdoun, T., Elgamal, A., Zeghal, M., Ecemis, N., and El Shamy, U. (2009) "Laminar box system for 1-g physical modeling of liquefaction and lateral spreading", *ASTM Geotechnical Testing Journal*, 32(5), 438-449.
 42. Thevanayagam, S., and Shenthan, T. (2010) "Cyclic pore pressure generation, dissipation, and densification in granular mixes", *International Journal of Geotechnical Earthquake Eng.*, Vol. 1.
 43. El Shamy, U., Zeghal, M., Dobry, R., Thevanayagam, S., Elgamal, A., Abdoun, T., Medina, C., Bethapudi, R., and Bennett, V., (2010), "Micromechanical aspects of earthquake-induced lateral spreading," *ASCE International J. of Geomechanics*, 10(5), 190-201.
 44. Dobry, R., Thevanayagam, S., Medina, C., Bethapudi, R., Elgamal, A., Bennett, V., Abdoun, T., Zeghal, M., El Shamy, U. and Mercado, V.M. (2011) "Mechanics of lateral spreading in full-scale shake test", *ASCE J. Geotechnical and Geoenvironmental Engineering*, 137(2), 115-129.

Refereed Journal Discussion Articles

45. Leonards, G.A., Alarcon, A., Frost, J.D., Mohamedzein, Y.E., Santamarina, J.C., Thevanayagam, S., Thomaz, J.E., and Tyree, J.L. (1986) "Dynamic penetration resistance and prediction of the compressibility of a fine-grained sand - A laboratory study", *Disc., Geotechnique*, 36(2), 275-279.
46. Prapaharan, S. and Thevanayagam, S. (1989) "Rate effects in pressuremeter tests in clays", *Disc., ASCE, J. Geotech. Eng. Div.*, 115(5), 749-752.
47. Thevanayagam, S. and Prapaharan, S. (1989) "Compression and extension of K_0 consolidated kaolin clay", *Disc., ASCE, J. Geotech. Eng. Div.*, vol. 115(8), 1173-1175.
48. Thevanayagam, S. and Prapaharan, S. (1990) "Study of S_u predicted by pressuremeter test", *Disc., ASCE, J. Geotech. Eng. Div.*, 116(8), 1275-1276.
49. Thevanayagam, S. (1991) "Level ground soil-liquefaction analysis using in situ properties: I", *Disc., ASCE, J. Geotech. Eng. Div.*, 117(2), 364-367.
50. Thevanayagam, S. (1999) "Effect of fines and confining stress on steady state strength of silty sands", *Closure, ASCE, J. Geotech. Eng.*, 125(11).
51. Kanagalingam, T. and Thevanayagam, S. (2005) "Contribution of fines to the compressive strength of mixed soils", *Discussion, Geotechnique*.

Refereed Journal Papers in Review (Large group NEES Research papers)

1. Abdoun, T., Gonzalez, M., Thevanayagam, S., Dobry, R., Zeghal, M., Mercado, V.M., Elgamal, A., El Shamy, U., (2010) "Physical Modeling of Field Sand Liquefaction and Lateral Spreading Using Centrifuge and Full Scale Tests", *ASCE J. Geotechnical and Geoenvironmental Engineering*, in review.

Journal Papers in preparation (Large group NEES Research papers)

1. Thevanayagam, S., Dobry, R., Bethapudi, R., Abdoun, T., Elgamal, A., El Shamy, U., Zeghal, M., Bennett, V., Ubilla, J., Medina, C., and Reinhorn, A. (2011) "1-g physical modeling of liquefaction and lateral spreading of gentle slopes" *ASCE J. Geotechnical and Geoenvironmental Engineering*.
2. Abdoun et al. (2011) "Centrifuge Modeling of 1-g Tests of Soil Liquefaction and Lateral Spreading," *ASCE Journal of Geotechnical and Geoenvironmental Engineering*.
3. Dessalegn et al. (2008) "Numerical Model of 1g Lateral Spreading Test by Discrete Element Method," *Geotechnique*
4. Elgamal et al. (2011) "Numerical Model of 1g Lateral Spreading Test by Finite Element Method," *Geotechnique*

5. Elmekati et al. (2011) "System Identification Analysis of Data from 1g and Centrifuge Tests of Liquefaction and Lateral Spreading," ASCE Journal of Geotechnical and Geoenvironmental Engineering.
6. Gonzalez et al. (2011) "Centrifuge Modeling of the Effect of Liquefiable Soil Permeability Using Particle Size Reduction on Pile Foundation Response to Lateral Spreading," Intl. Journal of Physical Modeling.
7. Gonzalez et al. (2011) "Effect of Soil Compressibility on the Response of Pile Foundation Subjected to Liquefaction-induced Lateral Spreading," ASCE Journal of Geotechnical and Geoenvironmental Engineering
8. Medina et al. (2011) "Use of Video Recordings and Motion Tracking Analysis for Monitoring Large-scale Testing of Lateral Spreads," ASTM Geotechnical Testing Journal
9. Zeghal et al. (2011) "DEM Numerical Simulation of Soil-pile response during Lateral Spreading," Canadian Geotechnical Journal.

C. Refereed Conference Proceeding Papers

52. Thevanayagam, S. (1994) "Mechanism of failure during pressuremeter testing in clays", Proc. XIII Int. Conf. Soil Mech. Found. Engrg., Vol. 1. Oxford & IBH Publ., 135-138.
53. Thevanayagam, S. and Wang, J. (1994) "Flow enhancement techniques for effective electrokinetic soil decontamination", Proc. 1st Intl. Congress on Env. Geotech., ISSMFE, BiTech Publ., Canada.
54. Yoon, C.J., Thevanayagam, S., and Juran, I. (1994) "An International Knowledge Database for ground improvement technologies", Proc. 8th Intl. Conf. on Comp. Meth. & Adv. in Geomech.
55. S. Thevanayagam, S., Martin, G.R., Shenthana, T. and Liang, J. (2001) "Post-liquefaction pore pressure dissipation and densification in silty soils", Proc. 4th Intl. Conf. Soil Dynamics & Earthq. Eng., San Diego, Paper 4.28.
56. Thevanayagam, S. and Liang, J. (2001) "Shear wave velocity relations for silty and gravely soils", Proc. 4th Intl. Conf. Soil Dynamics & earthq. Eng., San Diego.
57. Thevanayagam, S., Kanagalingam, T. and Shenthana, T. (2003) "Intergrain friction, contact density, and cyclic resistance of sands", Proc. 4th Pacific Conf. On Earthq. Eng., New Zealand Society for Earthquake Engineering, Paper#115, 1-8.
58. Shenthana, T., Thevanayagam, S. and Martin, G.R. (2003) "Analysis of densification during composite stone column installation in silty soils" Proc. Soil-Rock America, Panamerican Conf., MIT. ed. P.J.Culligan, H. H. Einstein, and A. J. Whittle, 1051-1058.
59. Thevanayagam, S., Kanagalingam, T., Shenthana, T. (2003) "Intergrain friction, contact density, and cyclic resistance of silty sands", Proc. Soil-Rock America, Panamerican Conf., MIT., ed. P.J.Culligan, H. H. Einstein, and A. J. Whittle, 1007-1012.
60. Thevanayagam, S. Ecemis, N., Kanagalingam, T., and Martin, G. R. (2006) "Liquefaction screening of silty soils using cone penetration tests" Proc. 8th National Conf. Earthq. Eng., San Francisco, CA. Paper# 8NCEE-1418.
61. Nashed, R., Thevanayagam, S., and Martin, G. R. (2006) "A design method for liquefaction mitigation in silty soils using dynamic compaction", Proc. 8th National Conf. Earthq. Eng., San Francisco, CA. Paper# 8NCEE-1408.
62. Kanagalingam, T. and Thevanayagam, S. (2006) "Energy based liquefaction assessment in sands and silty sands" Proc. 8th National Conf. Earthq. Eng., San Francisco, CA. Paper# 8NCEE-1414.
63. Shenthana, T., Thevanayagam, S., and Martin, G. R. (2006) "Soil densification using vibro-stone columns supplemented with wick drains", Proc. 8th National Conf. Earthq. Eng., San Francisco, CA. Paper# 8NCEE-2029.
64. Thevanayagam, S. and Ecemis, N. (2007) "Effects of permeability and compressibility on liquefaction screening using cone penetration resistance", Proc. 8th Pacific Conference in Earthquake Eng., Singapore, Paper# 217.
65. Nurhan, E., Thevanayagam, S., (2009) "Influence of consolidation characteristics on CPT resistance and liquefaction resistance in silty soils" Proc. AGU Conference, San Francisco, Dec. 2009.
66. Thevanayagam, S. (2010) "Liquefaction, screening, and remediation of silty sands", 6th International Conf. Geotechnical Earthquake Engineering, Invited Lecture and Paper, 6th International Conf. Geotechnical Earthquake Engineering. San Diego, CA.
67. El Shamy, U., Zeghal, M., Dobry, R., Abdoun, T., Thevanayagam, S., and Elgamal, A. (2010) "DEM simulations of liquefaction-induced lateral spreading" 6th International Conf. Geotechnical Earthquake Engineering. San Diego, CA.
68. Nurhan, E., Thevanayagam, S., and Onlap, A. "Effects of permeability and compressibility on CPT

cone resistance in silty soils" (2010), IAEG 2010 Conference, new Zealand, (Abstract submitted).

69. Medina, C., Dobry, R., Zeghal, M., Thevanayagam, S., Abdoun, T., Elgamal, A. Elshamy, U., and Bennett, V. (2011) "Monitoring large-scale shaking table tests using video recording and motion tracking analysis", Proc. 5th International Conf. Earthquake Geotechnical Engineering, Santiago, Chile, Jan. 10-13.

D. Proceedings Edited

70. Thevanayagam, S. and Nesarajah, S. (1997) Proc. International workshop on technology transfer for vacuum-induced consolidation: engineering and practice, 309p, sponsored by NSF, Port of LA, and ISSMFE TC-17.

E. Book Reviewed

71. Thevanayagam, S. and Altschaeffl, A.G. (1988) "Soil Plasticity - Theory and Implementation" by Chen, W.F. and Baladi, G.Y., Developments in Geotechnical Engineering, vol. 38, Elsevier Science, Book review, Geoderma, 42, pp 369-373.

F. Other National and International Conference Proceedings Papers (without rigorous review)

72. Altschaeffl, A.G. and Thevanayagam, S. (1988) "Characterization of Clay-Fabric", Microstructure of fine-grained sediments, Eds. R. H. Bennet, et al., Springer-Verlag Pubs., 291-295.
73. Thevanayagam, S. (1993) "Soil-pore fluid characterization using electromagnetic waves", Proc. Colloque Intl., Environment et Geotechnique, ENPC, Paris, 285-292.
74. Thevanayagam, S. (1995) "An Electrical dispersion technique for soil characterization", ASCE Spec. Publ., NSF sponsored Research Transformed Into Practice, Eds. J. Colville and A. M. Amde, 198-209.
75. Thevanayagam, S. (1997) "Minimum density-residual strength relation for densification by dynamic compaction", Proc. 3rd Intl. Conf. Ground Improvement., London, Institution of Civil Engineers.
76. Thevanayagam, S., Nesarajah, S. and Thevanayagam, V. (1997) "Electrokinetic-enhanced bioremediation in clayey Soils", Proc. 11th Annual Conf. On Contaminated Soils, Chapter 29, Amherst Publishers, MA.
77. Thevanayagam, S., Rishindran, T. and Thevanayagam, V. (1997) "Electrokinetic-enhanced bioremediation of PAHs in Clayey Soils", Proc. Fourth Intl. Symposium on Insitu and On-site bioremediation, Battelle Press, OH.
78. Thevanayagam, S. (1999) "Role of intergrain contact, friction and interactions on undrained behavior of granular mixes", *Physics and Mechanics of Liquefaction*, eds. P. V. Lade, and J. Yamamura, Balkema Publishers, p67-78.
79. Thevanayagam, S. (1999) "Intergrain contacts and shear modulus of non-plastic granular mixes", CD-ROM Proc. 13th ASCE Conf. on Eng. Mechanics, eds. N. Jones and R. Ghanem.
80. Thevanayagam, (2000) "Liquefaction potential and undrained fragility of silty sands", Proc. 12th International Conf. Earthquake Engineering, New Zealand.
81. Thevanayagam, S., Shenthan, L., and Liang, J. (2000) "A contact index for liquefaction potential analysis of silty/gravelly soils", Proc. ASCE EMD Conf., ed. Tassoulas., Austin, TX.
82. H. Ahmad, D. Leszczynska, S. Thevanayagam. (2001) Waste Containment by Soil Stabilization. Proc. 2001 International Containment & Remediation Technology Conference and Exhibition. on CD, 8 p.
83. Thevanayagam, S. Kanagalingam and Shenthan, T. (2002) "Contact density – confining stress – energy to liquefaction", Proc. 15th ASCE Eng. Mech Conf. Columbia Univ., www.columbia.edu/Paper#428.
84. Bruneau, M., A.M. Reinhorn, M.C. Constantinou, S. Thevanayagam, A.S. Whittaker, S. Chu, M.C. Pitman, K. Winter (2002) The University at Buffalo Node of the NEES Network – A versatile high performance testing facility towards real-time dynamic hybrid testing" 12th European Conf. Earthq. Eng., London.
85. Reinhorn, A. M., Bruneau, M., M.C. Constantinou, S. Thevanayagam, A.S. Whittaker, S. Chu, M.C. Pitman, K. Winter (2002) "A versatile high performance testing facility towards real-time dynamic hybrid testing" 7th US National Conf. Earthq. Eng., Boston.
86. Bruneau, M., Reinhorn, A.M., Constantinou, M.C., Theva, S., Thevanayagam, Whittaker, A.S., Chu, S.C., Pitman, M., Winter, K. (2002), "Versatile Shake Tables and Large-Scale High-Performance Testing Facility Towards Real-Time Hybrid Seismic Testing", *Proc. of ASCE Structures Congress*, Denver April, 2002.

87. Whittaker, A., Bruneau, M., Reinhorn, A., Constantinou, M., Thevanayagam, S., Pitman, M., Sivaselvan, V., Liang, Z., Winter, K. (2003), "Real-Time Dynamic Hybrid Testing", NCREE/JRC Workshop on International Collaboration on Earthquake Disaster Mitigation Research, Taipei, Taiwan, May 7-9 2003.
88. Nashed, R., Thevanayagam, S., Martin, G.R., and Shenthan, T. (2004) "Liquefaction mitigation in silty soils using dynamic compaction and wick drains" Proc. 13th World conference in earthquake engineering, Vancouver, Canada.
89. Shenthan, T., Thevanayagam, S., and Martin, G.R.(2004) "Densification of saturated silty soils using composite stone columns for liquefaction mitigation", Proc. 13th World conference in earthquake engineering, Vancouver, Canada.
90. T. Shenthan, R. Nashed, S. Thevanayagam, and G. R. Martin (2004) "Liquefaction mitigation in silty soils using composite stone columns and dynamic compaction" MCEER Research Accomplishments, 2004. University at Buffalo, 205-220.
91. Bruneau, M., Reinhorn, A., Whittaker, A., Constantinou, M., Thevanayagam, S., Sivaselvan, M., Shao, X., Hanley, J., Pitman, M.C., Albrechtski, T., (2004) "The new UB-NEES Versatile Earthquake Engineering Facility for Real-Time Dynamic Hybrid Testing (RTDHT)", *Invited paper, ASCE 17th Engineering Mechanics Conference*, Delaware, June 2004.
92. Bruneau, M., Reinhorn, A., Constantinou, M., Whittaker, A., Thevanayagam, S., (2004) "The UB-NEES Versatile High Performance Testing Facility", 13th World Conference on Earthquake Engineering, Vancouver, Canada, August 2004 - CD-ROM paper #1577.
93. Thevanayagam, S. et al. (2005) "Liquefaction of silty soils and remediation", Invited Paper, Proc. Bridge Research Conference 2005, California Transportation Department, Sacramento, CA.
94. Reinhorn, A.M., Albrechtski, T., Filiatrault, A., Thevanayagam, S., Shao, X., Pitman, M. Hanley, J., and Josipovic, G. (2006)"The UB-NEES Site: Pushing Experimental Boundaries and Large Scale Structural and Non-Structural Hybrid Testing", NEES Annual Conference, June 21-23.
95. Thevanayagam, S., Dobry, R., Abdoun, T., Elgamal, A., Zeghal, M., ElShamy, U., and Reinhorn, A. (2007) "Large Scale Laminar Box Experimental Simulation of Liquefaction and Effects on Pile Foundations" NEES Annual Conference, Utah, June.
96. Dobry, R., Thevanayagam, S., Abdoun, T., Elgamal, A., ElShamy, U., Zeghal, M., Medina, C. (2007) "Study of Pile response to Lateral Spreading using physical testing and computational modeling", 4th Intl Conf. on earthquake Geotechnical Engineering, Greece, June 2007.
97. Dobry, R., Medina, C., Abdoun, T., and Thevanayagam, S. (2007) "Pile response to lateral spreading: Field observations and current research" Keynote lecture, 4th Intl Conf. on earthquake Geotechnical Engineering, Greece, June 2007.
98. Dobry, R., Abdoun, T., Elgamal, A., El Shamy, U., Thevanayagam, S., Zeghal, M., (2009), Experimental and Micromechanical Computational Study of Pile Foundations Subjected to Liquefaction-Induced Lateral Spreads," Abstract and Poster, Proc. 7th Annual NEES Meeting, Honolulu, June.
99. Thevanayagam, S. (2011) "Recent liquefaction experiments using 1-g large-scale laminar box system at UB-NEES" SAGEEP Conference, South Carolina, April 12, 2011.
100. Thevanayagam, S. (2011) "Liquefaction experiments using 1-g large-scale laminar box system at UB-NEES", Quake Summit 2011, Buffalo, NY, June 10, 2011

G. National and International workshop Proceedings (Not Refereed)

101. Dobry, R., C. Medina, T. Abdoun, and S. Thevanayagam, (2007). "Pile Response to Lateral Spreading: Field Observations and Current Research," 15th Buchanan Lecture, published by Texas A&M University, November.
102. Thevanayagam, S., and Shenthan, (2005) "Soil Densification Based on Vibratory and Earthquake Energy Considerations", Proc. Joint JGS – ASCE Geo-Institute 2005 US-Japan Workshop on Ground Improvement, New Applications & Challenging Soils for Ground Improvement, Kyoto, Japan, Sept. 8-10, 2005. ed. H. Miki and J. I. Baez. Geo-Institute.
103. Thevanayagam, S. (2005) "UB Laminar Box Geotechnical Shaking Table", US-Japan NEES-NIED Workshop, RPI, NY, Nov. 18, 2005.
104. Thevanayagam, S. (2005) "UB NEES Facility", Proc. US-India Workshop, Mumbai, India, Jan. 2005.
105. Thevanayagam, S. (2004) US-Japan NEES-NIED workshop, NSF, Washington DC, July 2004.
106. Shenthan, T., Thevanayagam, S. and Jia, W. (2002) "Recent Advances in Liquefaction Mitigation in Sands and Silty Soils" Proc. KEERC-MCEER Joint Seminar on retrofit strategies for critical Structures, Buffalo, NY July 2002.

107. Thevanayagam, S. and Shenthana, T. (2002) "Liquefaction mitigation techniques for silty soils", Proc. 18th US-Japan Bridge Eng. Workshop, St Louis, Oct. 2002.
108. Thevanayagam, S. and Martin, G. R., "Liquefaction in silty soils: screening and remediation issues", Proc. 11th Intl. Conf. *Soil Dyn. & EQ Eng.*, Oct. 7-9, 2001
109. Thevanayagam, S. "Versatile high performance shake tables facility towards real-time hybrid testing, National Academy of Science, Washington, March 25, 2002
110. Thevanayagam, S. and Jia, W. "Liquefaction remediation in silty soils" Proc. MEDAT-2 Workshop, MCEER, Las Vegas, Dec. 2000
111. Thevanayagam, S. "Liquefaction in silty soils – Considerations for screening and retrofit strategies" Proc. 2nd international workshop on mitigation of seismic effects on transportation structures, Taipei, Taiwan, Sept. 2000
112. Thevanayagam, S. "Liquefaction and shear wave velocity characteristics of silty/gravelly soils", Proc. 15th US-Japan Workshop on Bridge Engineering., Tokyo, Japan, Nov. 1999.
113. Thevanayagam, S. "Wick drain design – Effects of soil variability in hydraulic fills", Proc. International Workshop on Tech. Transfer for vacuum-induced consolidation: Engineering and Practice, Nov. 1996.
114. Juran, I., Thevanayagam, S., and Sharawy, M. (1995) "International Database for Ground Improvement Geosystems", Phase-I, presented at the TC-17 Workshop, 11th European Conf. Soil Mech., Copenhagen
115. Thevanayagam, S., and Juran, I. (1995) "Vacuum Consolidation", TC-17 Workshop, 11th European Conf. Soil Mech., Copenhagen, Denmark.
116. Thevanayagam, S. (1993) "Efficiency of Electrokinetic Soil Decontamination", Proc. ASCE/ASME/SES Specialty Conf., Ed. Herakovich, C.T. and Duva, M., Univ. of Virginia.
117. Thevanayagam, S. (1993) "Electrical Response of Multi-Phase Soils", Proc. ASCE/ASME/SES Meeting 93, Ed. Herakovich, C.T. and Duva, M., Univ. of Virginia, p654.
118. Thevanayagam, S. (1993) "Geotechnical Site Characterization Using Electromagnetic Waves", Proc., NSF Workshop on Geophys. Tech. for Site and Material Characterization, Atlanta, 111-114.
119. Thevanayagam, S. (1992) "Soil Structure Characterization Using Electromagnetic Waves", Proc. Symposium on Electron microscopy, X-Ray Microanalysis and image Analysis, Las Vegas, July 13-17, 1992.
120. Thevanayagam, S., Altschaeffl, A.G., and Chameau, J-L. (1989) "An Anisotropic Cam-Clay Model with Applications to Pressuremeter Testing", 3rd ASME/EMD Conf., San Diego, July 9-11.
121. Altschaeffl, A.G. and Thevanayagam, S. (1988) "Characterization of Clay-Fabric", Invited Lecture, Clay Microstructure Workshop, National Space Technology Laboratories, Bay St. Louis, MS, 4-7 Oct., *Frontiers in Sedimentary Geology*, Springer-Verlag.
122. Arulanandan, K. and Thevanayagam, S. (1984) "A Model for a priori Prediction of Porepressure Generation and Dissipation During and after an Earthquake", presented in the Intl Symp. on Recent Adv. Centrifuge Modeling, Univ. of California, Davis, CA 95616, 19-20 July.

H. Presentations

At National/International Conferences and workshops

123. "Liquefaction experiments using 1-g large-scale laminar box system at UB-NEES", Quake Summit 2011, Buffalo, NY, June 10, 2011.
124. "Recent liquefaction experiments using 1-g large-scale laminar box system at UB-NEES" SAGEEP Conference, South Carolina, April 12, 2011.
125. "Liquefaction, screening, and remediation in silty soils" 5th Intl. cong Geotech earthquake engineering, May 29, 2010
126. "Effects of permeability on liquefaction resistance and cone resistance", Geotechnical Earthquake engineering and Soil Dynamics, Sacramento, May 19, 2008.
127. "Introduction to earthquake engineering", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.
128. "Soil liquefaction and liquefaction screening", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.
129. "Cyclic strength of silty sands – Effects of fines", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.
130. "Effects of fines on liquefaction resistance and CPT resistance", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.

131. "Ground improvement techniques for liquefaction mitigation in sands and silty sands – Dynamic compaction", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.
132. "Ground improvement techniques for liquefaction mitigation in sands and silty sands – vibrostone columns", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.
133. "Introduction to Network for Earthquake Engineering Simulations Laboratory at UB", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.
134. "Large scale laminar box experimental simulation of liquefaction and effects on piles", Workshop on Soil Liquefaction and Geotechnical Earthquake engineering, Griffith University, Australia, Dec. 14, 2007.
135. "Effects of permeability and compressibility on liquefaction screening using cone penetration resistance", 8th Pacific Conference in Earthquake Eng., Singapore, Dec. 5, 2007, Oral presentation by S. Thevanayagam.
136. "Study of Pile response to Lateral Spreading using physical testing and computational modeling", 4th Intl Conf. on earthquake Geotechnical Engineering, Greece, June 28, 2007, Oral presentation by S. Thevanayagam.
137. "Large Scale Laminar Box Experimental Simulation of Liquefaction and Effects on Pile Foundations" NEES Annual Conference, Utah, June 20, 2007, Oral presentation by S. Thevanayagam.
138. NEESR-SG Research on piles subjected to lateral spreading" – US-Japan NEES/E-Defense Workshop, Osaka, Japan, Sept. 27-30, 2006, Oral presentation by S. Thevanayagam
139. "Interdisciplinary Work: A Brave New World for (Geotechnical) Engineers?", Lovell Symposium, Purdue University, Indiana, October 5, 2006 – Oral presentation by S. Thevanayagam
140. "Liquefaction behavior, screening, and remediation of silty soils", NZ Earthquake Engineering Society, presented at Victoria University of Wellington, New Zealand - Aug. 18, 2006 – Oral presentation By S. Thevanayagam
141. "Liquefaction and mitigation in silty soils", Institute for Engineering Mechanics, Harbin, China, May 31, 2006 – Oral presentation by S. Thevanayagam
142. "Liquefaction screening of silty soils using Cone penetration tests", 8th National Conf. on Earthquake Eng., San Francisco, April 19, 2006 – Oral presentation by S. Thevanayagam
143. "A design method for liquefaction mitigation in silty soils using dynamic compaction", 8th National Conf. on Earthquake Eng., San Francisco, April 19, 2006 – Oral presentation by T. Shenthan
144. "Energy based liquefaction assessment in sands and silty sands" 8th National Conf. Earthq. Eng., San Francisco, CA. April 20, 2006. - Oral presentation by S. Thevanayagam
145. "Soil Densification Using Vibro-Stone Columns Supplemented with Wick Drains", 8th National Conf. Earthq. Eng., San Francisco, CA. April 20, 2006. – Poster presentation by S. Thevanayagam
146. "Numerical simulation of soil densification using vibro-stone columns", ASCE Geocongress, Atlanta, 2006, Feb. 2006. – Poster presentation by S. Thevanayagam
147. "Energy Dissipation and Liquefaction Assessment in Sands and Silty Soils", ASCE Geocongress, Atlanta, GA, Feb. 28, 2006 - Presented by S. Thevanayagam
148. "Simulation of Dynamic Compaction Processes in Saturated Silty Soils", ASCE Geocongress, Atlanta, GA Feb. 28, 2006 - Oral presentation by R. G. Nashed
149. "Liquefaction of silty soils and remediation", Caltrans Bridge research Conference, California Transp. Dept., Sacramento, CA. Nov. 1, 2005. - Oral presentation by S. Thevanayagam
150. "UB Laminar Box Geotechnical Shaking Table", US-Japan NEES-NIED Workshop, RPI, NY, Nov. 18, 2005 - Oral presentation by S. Thevanayagam
151. "UB NEES Facility & Research Opportunities", US-India NSF Workshop, Mumbai, India, Jan. 3-5, 2005 - Oral presentation by S. Thevanayagam
152. "Soil Densification Based on Vibratory and Earthquake Energy Considerations", Joint JGS – ASCE Geo-Institute 2005 US-Japan Workshop on Ground Improvement, Kyoto, Japan, September 8-10, 2005 - Oral presentation by S. Thevanayagam
153. "Liquefaction mitigation in silty soils using dynamic compaction and wick drains" 13th WCEE, Vancouver, Canada, Aug. 2, 2004 - Oral presentation by S. Thevanayagam
154. "Densification of saturated silty soils using composite stone columns for liquefaction mitigation", 13th WCEE, Vancouver, Canada, Aug. 2, 2004 - Oral presentation by S. Thevanayagam
155. "Analysis of Densification During Composite Stone Column Installation in Silty Soils" Soil-Rock America, Panamerican Conf., MIT, Boston, June 2003 - Oral presentation by S. Thevanayagam

156. "Intergrain Friction, Contact Density, and Cyclic Resistance of Silty Sands", Soil-Rock America, Panamerican Conf., MIT, Boston, June 2003 - Oral presentation by S. Thevanayagam
157. "Intergrain friction, contact density, and cyclic resistance of sands", 4th Pacific Conf. On Earthq. Eng., New Zealand, Feb. 2003 - Oral presentation by S. Thevanayagam
158. "Contact density – confining stress – energy to liquefaction", 15th ASCE Eng. Mech Conf. Columbia Univ., New York, June 2003 – Oral presentation by T. Kanagalingam
159. "The University at Buffalo Node of the NEES Network – A versatile high performance testing facility towards real-time dynamic hybrid testing" Physical Modeling in Geotechnical Engineering, St Johns, Newfoundland, Canada, July 2002 - Oral presentation by S. Thevanayagam
160. "Recent Advances in Liquefaction Mitigation in Sands and Silty Soils" KEERC-MCEER Joint Seminar on retrofit strategies for critical Structures, Buffalo, NY July 2002 - Oral presentation by S. Thevanayagam
161. "Liquefaction mitigation techniques for silty soils", 18th US-Japan Bridge Eng. Workshop, St Louis., Oct. 2002 - Oral presentation by S. Thevanayagam
162. "Post-liquefaction pore pressure dissipation and densification in silty soils", 4th Intl. Conf. Soil Dynamics & Earthq. Eng., San Diego, March 2001 – Poster presentation by S. Thevanayagam
163. "Shear wave velocity relations for silty and gravelly soils", 4th Intl. Conf. Soil Dynamics & earthq. Eng., San Diego, March 2001 – Poster presentation by S. Thevanayagam
164. "Liquefaction remediation in silty soils" MEDAT-2 Workshop, MCEER, Las Vegas, Dec. 2000 – Oral presentation By S. Thevanayagam
165. " Effect of non-plastic fines on undrained cyclic strength of silty sands", ASCE Conf. GeoDenver 2000, Denver, Aug. 2000 - Oral presentation by S. Thevanayagam
166. "Liquefaction in silty soils – Considerations for screening and retrofit strategies" 2nd international workshop on mitigation of seismic effects on transportation structures, Taipei, Taiwan, Sept. 2000 – Oral presentation by S. Thevanayagam
167. "Liquefaction potential and undrained fragility of silty sands", 12th International Conf. Earthquake Engineering, New Zealand, Jan. 2000 – Poster presentation by S. Thevanayagam
168. "Liquefaction and shear wave velocity characteristics of silty/gravelly soils", 15th US-Japan Workshop on Bridge Engineering., Tokyo, Japan, Nov. 1999 - Oral presentation by S. Thevanayagam
169. "Intergrain contacts and shear modulus of non-plastic granular mixes", 13th ASCE Conf. on Eng. Mechanics, Baltimore, Maryland. June, 1999 - Oral presentation by S. Thevanayagam
170. "Role of intergrain contact, friction and interactions on undrained behavior of granular mixes", NSF sponsored International Workshop on *The Physics and Mechanics of Liquefaction*, Baltimore, Sept.11-13, 1998 - Oral presentation by S. Thevanayagam
171. "Intergranular Void Ratio-Steady State Strength Relations for Silty Sands", Illrd Conf. Soil Dynamics & Earthquake Eng., Seattle, Aug.3-6, 1998 - Oral presentation by S. Thevanayagam
172. "Large strain undrained shear strength of silty sands" - Determination of liquefaction hazard and mitigation techniques, Transportation Research Board, National Research Council, Washington, D.C., Jan. 12, 1998 - Oral presentation by S. Thevanayagam
173. "Vaccum-assisted Consolidation of dredge fills", National Conf. Geo-Institute, ASCE, Logan, Utah, July 97 - Oral presentation by S. Thevanayagam
174. "Vacuum assisted consolidation – pier 300 experience", International workshop on vacuum assisted consolidation – Engineering practice, sponsored by the Port of LA and NSF, Los Angeles, Nov.22-23, 1996 - Oral presentation by S. Thevanayagam
175. "Determination of Post-Liquefaction Strength: Steady state strength vs Residual Strength", Uncertainty in the Geologic Environment, ASCE Geotech. Congress, Madison, Wisconsin, Aug. 96 - Oral presentation by S. Thevanayagam
176. "Probabilistic and Deterministic analysis of preload design at a hydraulic fill site", Uncertainty in the Geologic Environment, ASCE Geotech. Congress, Madison, Wisconsin, Aug. 96 - Oral presentation by S. Thevanayagam
177. "International Knowledge Database for Ground Improvement Geosystems - *Computer Demonstration*", ISSMFE TC-17 Meeting - IS-Tokyo'96, Tokyo, May 1996 - Oral presentation by S. Thevanayagam
178. "Immunoassay for Geoenvironmental Site Characterization" – Tyndall AFB, Panama City, Florida, Jan. 96 - Oral presentation by S. Thevanayagam
179. "An Electrical dispersion technique for soil characterization", NSF-Research Transformed into Practice - Workshop & Conf., Washington, D.C., June 95 - Oral presentation by S. Thevanayagam.

180. "International Database for Ground Improvement Geosystems", TC-17 Workshop, 11th European Conf. Soil Mech., Copenhagen, Denmark, May 95 - Oral presentation by S. Thevanayagam
181. "Vacuum Assisted Consolidation of A Hydraulic Landfill", Settlement 94, ASCE Spec. Conf., College Station, Texas, June 94 - Oral presentation by S. Thevanayagam
182. "Prospects of Vacuum-assisted geosystems for ground improvement of hydraulic fills", ASCE Convention, Atlanta, GA, Nov. 94 - Oral presentation by S. Thevanayagam
183. "Efficiency of Electrokinetic Soil Decontamination", ASCE/ASME/SES Meeting, Univ. of Virginia, VA, June 93 - Oral presentation by S. Thevanayagam
184. "Electrical Response of Multi-Phase Soils", ASCE/ASME/SES Meeting 93, Univ. of Virginia, VA, June 93 - Oral presentation by S. Thevanayagam
185. "Soil-Pore Fluid Characterization Using Electromagnetic Waves", Int. Conf. on Environment and Geotechnics, Organized by the Ecole nationale des Ponts Chasses, Paris, April 93
186. "An Anisotropic Cam-Clay Model with Applications to Pressuremeter Testing", 3rd ASME/EMD Conf., San Diego, July 89 - Oral presentation by S. Thevanayagam
187. "Characterization of Clay-Fabric", Clay Microstructure Workshop, National Space Technology Laboratories, Bay St. Louis, MS, Oct., 88 - Oral presentation by S. Thevanayagam

Research Collaboration and Cooperation

Researchers

UB: S. Ahmad, P. K. Banerjee, C. Bloebaum, M. Bruneau, M.C. Constantinou, A. Filiatrault, A. M. Reinhorn, M. Sheridan, E. Sternberg, A. Whittaker

External: T. Abdoun (RPI), J. Baez (Hayward Baker, Inc., Geosolutions, Inc. CA), R. Dobry (NAE Member, RPI), A. Elgamal (UCSD), U. El Shamy (Tulane), B. Jeremic (UC Davis), I. Juran (Polytechnic Univ), S. Helwani (U. Wisconsin), E. Kavazanjian (Arizona State Univ.), J. B. Mander (Texas A&M Univ.), G. R. Martin (USC), S. Nikalo (Muser Rutledge, Inc, NY), R. Santella (Columbia Univ.), S. Sritharan (Iowa State Univ.), S. Brena (U Mass), A. Porbaha (CSU, Sacramento), M. Zeghal (RPI), A. Bobet (Purdue U).

Former Faculty Advisors

A. G. Altschaeffl (Retired, Purdue), J-L. Chameau (President, CalTech), R. Holtz (Univ. of Washington), W. Lovell (Retired, Purdue), K. Arulanandan (deceased, UC Davis)

International Research Study Tours and Research Exchanges

- Australia – Sabbatical Visits and Seminar: Griffith University, James Cook University, and Monash University, Dec. 2007.
- US-Japan Tri-Center Field Mission (sponsored by MCEER, PEER and MAE); July 21-28, 2007.
- US-Japan NEES/E-Defense Workshop, Osaka, Japan, Sept. 27-30, 2006.
- US-New Zealand Study Tour on Earthquake Engineering – New Zealand, Sponsored by MCEER/NSF, Aug. 15-23, 2006.
- US-China Study Tour on Earthquake Engineering – Harbin, Beijing and Shanghai, China, Sponsored by NSF, May 27-June 7, 2006
- US-Japan NIED: NEES-Collaboratory in Geotechnical Earthquake engineering, RPI, NY, Nov. 18, 2005, jointly sponsored by NIED-NEESR Research Project, NSF.
- US-India NEES-Collaboratory Development, IIT, Mumbai, India, Sponsored by NSF, Jan. 3-5, 2005.
- US-Japan: Workshop and study Tour on Ground Improvement, New Applications & Challenging Soils for Ground Improvement, Kyoto, Japan, sponsored by Japanese Geotechnical Society-ASCE Geo-Institute, September 8-10, 2005
- US-Japan NEES-Collaboratory Development, NSF, Washington, D.C., sponsored by NSF, July 2003
- US-Japan Earthquake Simulation Research Facilities Study Tour, Japan, sponsored by NSF, May 2001
- US-Taiwan workshop and study Tour: Mitigation of seismic effects on transportation structures, Taipei, Taiwan, Sept. 2000
- US-Japan workshop and study tour on Bridge Engineering., Tokyo, Japan, sponsored by MCEER/NSF, Nov. 1999.
- US-France workshop and study tour on Urban Studies, Orleans, France, sponsor: NSF, Oct. 1992.

SERVICE, EDUCATION, AND OUTREACH ACTIVITIES

Departmental and University Service

University Service

- Faculty personal promotions committee (2010-present)
- UUP Individual Development Awards Committee (2010-present)
- UB Senate (2002-2004)
- Participant – UB2020 Strategic Planning on Extreme Events – Mitigation and Response
- Participant – UB Preview days
- Participant – UB Open House days
- Coordination of Laboratory Safety Issues with SEAS & EHS

Departmental Service

- Civil Eng. Open House (1997-2002)
- Faculty Meeting Reporter (1997-1998)
- Laboratory Development Committee – Service to Industry Program (1992-1994)
- Lab. Committee (1999-2004)
- Faculty Search Committee (1998, 2000, 2003, 2006)
- TIRC (1999-present)
- Undergraduate Studies Committee (2004)
- Graduate Studies Committee (1999-2007)
- Ketter Hall Safety Coordinator: (2003-2007)

Departmental Student Club Advising

- ASCE Faculty Advisor (2003-2006)
- Member – ASCE Buffalo Section Board (2003-2006)
- MCEER Student Leadership Council (2004-2008)
- Undergraduate Student Advisor (1996-present)

University and MCEER

- Served as Director of Education at MCEER (2004-2008)
- Direct and coordinate Education and Outreach programs at MCEER
- Coordinate Education & Outreach activities with NSF
- Coordinate Education activities with PEER, MAE, and NEES
- Coordinate diversity programs at MCEER
- Seek and obtain funding to support education and outreach activities
- MCEER team member for NSF site review visits
- Organize REU symposium on earthquake engineering.

NEES Facility

- Served as a co-PI for Facility development (2000-2004)
- Serving as Facility Operations Team member (2005-present)
- Help coordinate REU activities (2006, 2007)

Professional Services at Review Panels and Boards

Research Proposals

- NSF Geomechanics Program
- NSF International Program
- NSF SBIR Program.

Journal Papers

- ASCE J. Geotech. Eng.
- ASCE J. Eng. Mech.
- Canadian Geotech. J.
- Trans. Res. Board, National Research Council

- ASTM - J. Geot. Testing
- J. Appl. Phys. - Am. Inst. Phys.
- J. Environmental Science and Technology
- Waste Management
- Intl. J. Ground Improvement
- Geotechnique

Conference Articles

Numerous conferences. Some examples are as follows:

- Geotechnical Earthquake Eng. and Soil Dynamics III – ASCE Geo-Institute Conf., Aug. 1998
- First Intl. Conf. Containment Technology, Florida, Feb. 97.
- ASCE GeoLogan 97, First Intl Conf, ASCE Geoinstitute, July 97.
- ISSMFE Conf. Grouting & Deep Mixing, IS-Tokyo 96, May 96.
- ASCE Geoenvironment 2000, Feb. 95
- ASCE Settlement 94 Conference, June 94
- ISSMFE First Intl. Congress on Environmental Geotechnics, July 94

Proceedings Edited

Proc. International workshop on technology transfer for vacuum-induced consolidation: engineering and practice (1997), 309p, sponsored by NSF, Port of LA, and ISSMFE TC-17.

Coordinated a Joint Session on Geophysical Testing at the Structure Congress (1995, Chicago).

Book Reviewed

"Soil Plasticity - Theory and Implementation" (1988) by Chen, W.F. and Baladi, G.Y., Developments in Geotechnical Engineering, vol. 38, Elsevier Science, Book review, Geoderma, 42, pp 369-373.

Professional Service at National & International Committees

Committees

- ASCE Geophys. Eng. Committee (1992-2002)
- ISSMFE TC-17 (1993-1997)
- Technical Director: ISSMFE International database on Ground Improvement Technologies (1994-1996)
- Member (1992-1997)- ISSMFE International Technology Transfer Center for Ground Improvement Geosystems. Initiated the establishment of the center, developed an International Knowledge Database for Ground Improvement Geosystems, and initiated an International Journal for Ground Improvement (Thomas Telford)
- Active member of the organizing committee for ISSMFE TC-17 in preparing for international workshops and symposia (1993 - Paris, 1994 - New Delhi & Edmonton, 1995 - Copenhagen, 1996 - Tokyo, 1996 - Los Angeles, 1997 - London)
- Advisory Panel: 5th National FHWA Seismic Bridge Engineering Conference (2006)
- Workshop/Conference organizing committees. Served as chair, moderator, etc.

US Team Member - International Research Study Tours

- US-Japan, NSF NEES/E-Defense Collaboratory Development, Kyoto, Japan, Sept. 2006
- Leader and Organizer - US-New Zealand Study Tour on Earthquake Engineering – New Zealand, Sponsored by MCEER/NSF, Aug. 15-23, 2006.
- US-China Study Tour on Earthquake Engineering – Beijing and Shanghai, China, Sponsored by NSF, scheduled for May 27-June 7, 2006
- US-India NEES-Collaboratory Development, IIT, Mumbai, India, Sponsored by NSF, Jan. 3-5, 2005.
- US-Japan: Workshop and study Tour on Ground Improvement, Kyoto, Japan, sponsored by Japanese Geotechnical Society-ASCE Geo-Institute, September 8-10, 2005
- US-Japan NEES-Collaboratory Development, NSF, Washington, D.C., sponsored by NSF, July 2003
- US-Japan Earthquake Simulation Research Facilities Study Tour, Japan, sponsored by NSF, May 2001
- US-Taiwan workshop and study Tour: Mitigation of seismic effects on transportation structures,

- Taipei, Taiwan, Sept. 2000
- US-Japan workshop and study tour on Bridge Engineering., Tokyo, Japan, sponsored by MCEER/NSF, Nov. 1999.
- US-France workshop and study tour on Urban Studies, Orleans, France, sponsored by NSF, Oct. 1992.

Participant at Other Workshops

- Caltrans Workshop, California Transportation Department, Sacramento, CA. Nov. 2005.
- US-Japan NEES-NIED Workshop, RPI, NY, Nov. 18, 2005.
- US-Korea: KEERC-MCEER Joint Seminar on retrofit strategies for critical Structures, Buffalo, NY July 2002.
- 18th US-Japan Bridge Eng. Workshop, St Louis, Oct. 2002.
- MEDAT-2 Workshop, MCEER, Las Vegas, Dec. 2000
- Geotechnical earthquake engineering workshop, ISSMFE TC-4, Hamburg, Germany, Sept. 1997.
- Active member of the organizing committee preparing for the Franco-American Workshop on Use of Processed Waste for Infrastructure Constr. Materials, Nov. 3-4., 1994.
- NSF Workshop on Geophys. Tech. for Site and Material Characterization, Atlanta, 1993.
- Clay Microstructure Workshop, National Space Technology Laboratories, Bay St. Louis, MS, 1988.

Workshops Organized

- Organized and chaired International Workshop on Tech. Transfer for vacuum-induced consolidation: Engineering and Practice, Los Angeles, CA, Nov. 1996.
- Organized TC-17 Workshop at the 11th European Conf. Soil Mech., Copenhagen, 1995, Copenhagen, Denmark.

Teaching

Courses Taught at UB

1. CIE 334: Soil Mechanics
2. CIE 476: Design and Construction of Earth Structures
3. CIE 531: Design and Construction of Earth Structures
4. CIE 458: Introduction to Geoenvironmental Engineering
5. CIE 535: Introduction to Geoenvironmental Engineering
6. CIE 530: Mechanical behavior of Materials
7. CIE 533: Advanced Foundation Design
8. CIE 630: Laboratory and Insitu Testing of Soils
9. CIE 437: Pavement Materials and Design
10. CIE 529: Pavement Materials and Design
11. CIE 207: Statics
12. CIE 362: Civil Engineering Laboratory
13. CIE 415: Professional Practice in Civil Engineering

EngiNet Distance Learning Courses developed at UB

14. CIE 531Z: Design and Construction of Earth Structures
15. CIE 535Z: Introduction to Geoenvironmental Engineering

Courses Taught at Previous Institution

16. Soil Mechanics
17. Foundations
18. Advanced Foundation Engineering
19. Soil Dynamics and earthquake Engineering
20. Probability and Statistics for Civil Engineers
21. Soil Behavior
22. Stability Analysis and Seepage
23. Ground Improvement

Teaching Laboratories Developed at UB

- Undergraduate Geotechnical Teaching Laboratory

- Graduate Geotechnical Teaching Laboratory

Other Service, Education, and Outreach Activities

Some of the Most Recent Examples – past two years:

- Organized ASCE Student Club Regional Competition (about 12 colleges) – Upstate NY Region 2004
- Lead UB ASCE Student Chapter to National Recognition Award 2005
- Lead UB ASCE Student Chapter to Recognition by National ASCE as 'most improved chapter' 2005
- Lead UB ASCE Club – 2004-present
- Direct Student Leadership Council – 2004-present
- Organized MCEER REU Program at UB for Year 2005
- Organized MCEER REU Program at UB for Year 2006
- Organizing Diversity aspects of REU and PhD programs in earthquake engineering – 2006.
- Helped organize Tri-Center REU Symposium 2005
- Helped organize Tri-Center REU Symposium 2006
- Helped organize NEES-REU program 2006
- Helped organize Tri-center Field Mission on Earthquake Engineering to Greece – 2005
- Organizing Tri-Center Field Mission on Earthquake Engineering to New Zealand – 2006
- Organized MCEER Student Paper Competition 2006
- Organized Education & Outreach session at the 8th National Conference in Earthquake Engineering - 2006
- Organized MCEER Student participation at the 8th National Conference in Earthquake Engineering – 2006
- Help organize education outreach to area schools and science fairs in WNY area (2004-2006)
- Helped organize 1st Annual Undergraduate Seismic Design Competition at UB – 2005
- Organized 2nd Annual Undergraduate Seismic Design Competition at UB – 2006
- Helped organize national tri-center undergraduate seismic design competition – 2006
- Helped organize 5th National FHWA Seismic Bridge Engineering Conference - 2006