

## **H. Keith Moo-Young, Ph.D., P.E., F. AAAS, F. ASCE, BCEE**

Chancellor  
Washington State University Tri-Cities  
2710 Crimson Way  
Richland, WA 99354  
[Keith.mooyoung@tricity.wsu.edu](mailto:Keith.mooyoung@tricity.wsu.edu)  
(509) 372-7258

Marital Status: Married with three children

### **Research Interest**

- Solid and hazardous waste management
  - Recycling and re-utilization of industrial co-product
  - Environmental containment and subsurface barriers
  - Remediation technologies
  - Acid mine drainage
  - Manufactured gas plants and coal tar
  - Sludge and Sediment Dewatering
- Fate and transport in environment
  - Contaminated sediment
  - Flood hazard mitigation
  - Multi-Scale Transport and Heterogeneity of Pore Water Movement

### **Education**

**Certificate** Management Development Program, Harvard University, 2005.  
**M.S.** Executive Masters in Technology Management EMTM, (Management of Technology), University of Pennsylvania, 2004.  
**Ph.D.** Civil and Environmental Engineering Rensselaer Polytechnic Institute, August 1995.  
**M.S.** Civil and Environmental Engineering, Rensselaer Polytechnic Institute, August 1992.  
**B.S.** Civil Engineering, Morgan State University, Valedictorian, Sum cum laude, May 1991.

### **Registration**

Professional Engineer, State of Pennsylvania, License No. PE061090  
Board Certified Environmental Engineering (B.C.E.E.), 2011, American Association of Environmental Engineers

## **Professional Experience**

- 6/13-Present** Chancellor, Washington State University Tri-Cities, Richland, WA
- 8/06-5/13** Dean, California State University, Los Angeles, College of Engineering, Computer Science and Technology, Professor of Civil and Environmental Engineering.
- 4/06-8/06** Acting Dean, Villanova University, College of Engineering.
- 8/04-9/06** Associate Dean of Research and Graduate Studies and Professor, Villanova University, College of Engineering.
- 8/04-9/06** Director of the Interdisciplinary Ph.D. Program and of Management of Technology Program, Professor of Environmental Engineering, Villanova University, College of Engineering.
- 9/01-12/02** American Association for Advancement of Science Environmental Fellow, U.S. Environmental Protection Agency, Office of Radiation and Indoor Air/Office of Solid Waste and Emergency Response.
- 6/02-8/04** Associate Professor, Lehigh University.
- 8/96-6/02** Assistant Professor, Lehigh University Department of Civil and Environmental Engineering.
- 5/97-5/99** Andersen Consulting Faculty Fellow.
- 6/96-8/98** Summer Faculty Researcher, Waterways Experiments Station.
- 9/95-8/96** Assistant Professor, Morgan State University, Department of Civil Engineering.

## **Community and Non-Profit Boards**

- Member, TRIDEC, Tri-Cities Development Council, 2013-Present
- Chair, Task Force on Engineering Access to College, American Society for Engineering Education, 2014 - Present
- Member, U.S. Environmental Protection Agency's Science Advisory Board, 2013-Present
- Member, Great Minds in STEM, 2010-Present
- Member, Hispanic Engineering National Award Achievement Corporation, 2008-Present
- Member, California Education and Training Export Consortium, 2009-Present
- Member, Los Angeles Infrastructure Academy, 2008-Present
- Member, Learning Realization Institute, 2008-Present
- Member, for Students Are Ready Program at Lehigh University, 1999- 2004
- Executive Board Member, Clean and Pure, Inc., Washington, D.C., 1996-2000

## **Honors and Awards**

- Eta Kappa Nu Eminent Member 2014
- AAAS Fellow 2013
- ASCE Fellow 2012

- ASCE Outstanding Faculty Advisor, Metropolitan Los Angeles Branch, 2012
- ASEE Corporate Member Council Excellence in Engineering Education Collaboration Award, 2012
- ASEE Best Paper Award, 2011
- NCEES Engineering Award 2010, 2011
- ABET President's Award, 2007
- American Association for the Advancement of Science Environmental Fellowship, 2001-2002
- U.S. Black Engineer of the Year Award, 2001
- Lehigh University Junior Faculty Award for Distinguished Teaching Award, 1999
- Padnos Design Competition Award, 1998
- General Electric Minority Faculty Fellowship, 1996-1998
- Andersen Faculty Fellowship for Excellence in Education, 1997-1999
- Lindback Minority Faculty Fellowship, 1997
- Bedford Award for Outstanding Dissertation in Civil Eng. At RPI, 1996
- Rensselaer Award of Excellence, 1994
- ASEE Helen T. Carr Graduate Fellowship, 1994-1995
- DoD National Defense Science and Engineering Graduate Fellowship, 1991-1994
- Rensselaer Scholar Fellowship, 1991-1992
- GEM Fellowship, 1991
- Honorable Mentioned National Science Foundation Minority Graduate Fellowship, 1991
- Lehigh University Graduate Fellowship, 1991
- Maryland Distinguished Scholar, 1987-1991
- Morgan State University Honors Scholarship, 1987-1991
- Maryland State Senatorial Scholarship, 1987-1991
- Morgan State University Student Athlete of the Year, 1988-1991

### **Professional Society Membership**

- American Society of Civil Engineers (ASCE)
- American Chemical Society (ACS)
- American Association for Advancement of Science (AAAS)
- American Society for Engineering Education (ASEE)
- Association of Public and Land Grant Universities (APLU)
- American Society of Testing and Material (ASTM)
- Institute for Electrical and Electronic Engineers (IEEE)
- National Society of Black Engineers (NSBE)
- Water Environmental Federation (WEF)
- American Geophysical Union (AGU)
- International Society for Industrial Ecology
- Association for Environmental Health and Sciences
- Soil Science Society of America
- American Association of Environmental Engineering and Science Professors

- International Association for Management of Technology (IAMOT)
- Philadelphia Wharton Alumni Chapter
- International Counsel on Systems Engineering (ICOSE)
- Association for University Technology Managers (AUTM)

## **Professional Leadership**

- U.S. Council on Competitiveness, Member
- APLU President's Council
- Chairman Environmental Engineering Committee Member, Science Advisory Board, U.S. Environmental Protection Agency (2010-2013)
- Member Charter Science Advisory Board, U.S. Environmental Protection Agency (2010-Present)
- Environmental Engineering Committee Member, Science Advisory Board, U.S. Environmental Protection Agency (2008-2010)
- Consultant, Science Advisory Board, U.S. Environmental Protection Agency (2005-2008)
- Organizing Committee, 2011 ASEE Engineering Deans Institute, Palm Springs, CA.
- Editor Board, International Journal of Environmental and Waste Management (2006-Present)
- National Science Foundation, Workshop on Impact and Diffusion of Transformative Innovations in Engineering Education, 2011
- Member, Global Engineering Dean's Council, (2011-Present)
- Water Environmental Research Foundation (2006), Exploratory Team on Solids Reduction.
- International Society for Environmental Geo-technology. Financial Secretary. (2000-Present)
- Member, Committee of Visitors, Civil and Mechanical Systems Division, National Science Foundation (2004-2007)
- Member, Committee of Visitors, Civil and Mechanical Systems Division, National Science Foundation (2001-2003)
- Department of Defense, SERDP-ESTCP Workshop on Contaminated Sediment, Session Leader on Sediment Stability (August 2004)
- Department of Energy, Workshop on Monitoring of Metals and Radionuclide Contaminated Sites (April 2004)
- Guest Editor, Journal for Environmental Waste Management
- Organizing Committee Member, International Conference on Energy, Environment, and Disasters July 2005
- Organizing Committee Member, International Conference on Infrastructure Development and the Environment, Abuja, Nigeria September 2006
- Organizing Committee Member, First International Conference on Environmental Research, Technology, and Policy on Africa Accra, Ghana 2007

- Organizing Committee Member, 3<sup>rd</sup> International Symposium on Environmental and Sustainable Development. San Diego, CA, 1996
- Organizing Committee Member, 4<sup>th</sup> International Symposium on Environmental and Sustainable Development. Boston, MA. 1998
- Organizing Committee Member, 5<sup>th</sup> International Symposium in Environmental and Sustainable Development. Belo Horizonte, Brazil. 2000
- Organizing Committee Member, 6<sup>th</sup> International Symposium in Environmental and Sustainable Development. Seoul, Korea. 2002
- Organizing Committee Member, 7<sup>th</sup> International Symposium in Environmental and Sustainable Development. Helsinki, Finland. 2004
- Organizing Committee Member, 2<sup>nd</sup> International Workshop Use of Paper Industry Sludge in Environmental Technology and Construction, Troy, NY.
- Organizing Committee Member, 3<sup>rd</sup> 2<sup>nd</sup> International Workshop Use of Paper Industry Sludge in Environmental Construction, Helsinki, Finland

## **Professional Contributions**

### Committee Member

- Committee for Instrumentation, TRB
- Committee for Physicochemical Processes in Soils, TRB
- Committee for Hazardous Waste Management, ASTM
- Lehigh Valley Solid Waste Management Committee

### Journal Reviewer

- Editorial Board Member, International Journal of Environmental and Waste Management
- Journal of Environmental Engineering
- Environmental Science and Technology
- Journal of Hazardous Materials
- Journal of Soil and Sediment Contamination
- International Journal of Integrated Waste Management
- International Journal of Environmental Monitoring and Assessment
- Transportation Research Board Annual Meetings
- Special Technical Publications, ASTM
- Water Research Journal
- Journal of Soil Contamination
- Journal of Environmental Engineering Science

### Conference Reviewer

- 4<sup>th</sup> International Conference for Geosynthetics, IGS
- 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> International Symposium on Environmental Geotechnology and Sustainable Development
- International Containment Technology Conference, Department of Energy
- Session Chairman

- 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> International Symposium on Environmental and Sustainable Development
- International Conference on Energy, Environment, and Disasters

#### Proposal Reviewer

- National Science Foundation
- Department of Energy
- Department of Transportation
- Environmental Protection Agency
- Army Research Office
- Sloan Foundation
- North Carolina State Environmental Research Consortium
- Keck Foundation

#### Consulting

Synthetic Industries  
 Waterways Experiment Station  
 Chrin Brothers Inc.  
 Lehigh County  
 CH2MHill  
 Stone and Webster

D. Garrett and Associates  
 East Coast Atlantic Construction  
 Port of Portland  
 Santa Cruz Port Authority  
 Educational Testing Service  
 EPRI

#### Research

##### Peer Reviewed Journal Articles in Review

1. Ochola, C. and Moo-Young, H.K. (2014). “Spectroscopic Characterization of Hexavalent Chromium Reduction by Reclaimed Limestone Residual RLR (Modified Steel Slag)”. *Journal of Hazardous Materials*. In Review.

##### Peer-Reviewed Journal Publications

1. Begum, J.A.; Menezes, G.B.; Moo-Young, H.K. (2012). Pulp and Paper Mill Effluents Management. *Water Environment Research*, 84(10): 1502-1510.
2. Ochola, C. and Moo-Young, H.K. (2011). “Utilization of Industrial Co-Product Materials as Containment Barriers in Sustainable Environmental Applications.” *Journal of Land Contamination and Reclamation*. Vol. 18, No. 4, pp. 7-17.
3. Menezes, G., Golkar, T., and Moo-Young, H.K. (2011). “Pulp and Paper Effluent Management.” *Water Environment Research*. 83(10): 1523-1530.

4. Menezes, G., Moo-Young, H.K., and Ward A. (2011). "Unsaturated Flow in Anisotropic Heterogeneous Media: A Centrifuge Study". *International Journal of Hydrology Science and Technology*. Vol. 1, No. 1, pp. 43-51.
5. Menezes, G, De Galvão, T. Cassia Brito, and Moo-Young, H.K. (2010). "Pulp and Paper Effluent Management." *Water Environment Research, Literature Review*, pp. 1560-1567.
6. Moo-Young, H.K. (2009). "Investigation of Coal Tar Mobility at a Former MGP Site." *ASCE Journal of Hydrologic Engineering*. Vol. 14, No. 11, pp. 1221-1234.
7. Menezes, G. and Moo-Young, H.K. (2009). "Pulp and Paper Effluent Management." *Water Environment Research, Literature Review*, pp. 1687-1695.
8. Moo-Young, H.K. (2007). "Pulp and Paper Effluent Management." *Water Environment Research, Literature Review*, pp. 1733-1741.
9. Mo, X, and Moo-Young, H.K. (2007). "Using Geotextile Tubes for Dewatering and Beneficial Use of High Water Content Solid Waste: Design Charts and Verifications." *International Journal of Environmental and Waste Management*. Vol. 1, No. 2/3, pp. 205-227.
10. Ochola, C. and Moo-Young, H.K. (2007). "A Novel Approach to Remediating Contaminated Groundwater by Reusing Industrial Co-Products ". *International Journal of Environmental Waste Management*. *International Journal of Environmental and Waste Management*. Vol. 1, No. 2/3, pp. 228-248.
11. Moo-Young, H.K. Ochola, C. and Clark, C.J. (2007). Special Issue: Recycling and Reuse of Industrial Co-Product materials for Sustainable Development: Editorial. *International Journal of Environmental and Waste Management*. Vol. 1, No. 2/3, pp. 105.
12. Sellasie, K., Lloyd, T., and Moo-Young, H.K. (2007). "Determination of the Thermal Conductivity of Shredded Tires By Utilizing a Hot Plate Apparatus." *International Journal of Environmental and Waste Management*. Vol. 1, No. 2/3, pp. 171-191.
13. Moo-Young, H.K. and Ochola, C. (2007). "A Review of Paper Clay in the Solid Waste Industry: Physical and Chemical Properties." *International Journal of Environmental and Waste Management*. Vol. 1, No. 2/3, pp. 192-204.
14. Ochola, C. and Moo-Young, H.K. (2006). "Pulp and Paper: 2006 Literature Review." *Water Environmental Federation*. Vol. 16, pp. 1717-1732.
15. Brown, D.G., Gupta, L, Kim, T.-H., Moo-Young, H.K., and Coleman, A.J. ( 2006). "Comparative assessment of coal tars obtained from 10 former manufactured gas plant sites in the eastern United States." *Chemosphere*, No. 65, Vol. 9, pp. 1562-1569.
16. Brown, D., Gupta, L., Moo-Young, H.K. and Coleman, A. (2005). "Raoult's Law-Based Method for Determination of Coal Tar Average Molecular Weight." *Journal of Toxicology and Environmental Chemistry*. Vol. 24, No. 8., pp. 1886-1892..
17. Ochola, C.E., and Moo-Young, H.K. (2005). "Pulp and Paper." *Water Environment Research*, Vo. 77, No. 6, pp. 1928-1978.
18. Ochola, C. E., and Moo-Young, H. K., (2004). Establishing and Elucidating Reduction as the Removal Mechanism of Cr (VI) by Reclaimed Limestone Residual RLR (Modified Steel Slag). *Environmental Science & Technology*. Vol. 38, No. 22, pp. 6161-6165
19. Sellasie, K., Lloyd, T., and Moo-Young, H.K. (2004). "Determination of the Initial Exothermic Reaction of Shredded Tyres with Wire Content." *Waste Management and Research*. Vol. 22, pp. 364-370.

20. Moo-Young H.K. , Johnson B.; Johnson A., Carson D.; Lew C., Liu S.; Hancock K. (2004). "Characterization of Infiltration Rates from Landfills: Supporting Groundwater Modeling Efforts." *Environmental Monitoring and Assessment*, Vol. 96, No. 1-3, pp. 283-311.
21. Ochola, C., and Moo-Young, H.K. (2004). "Evaluation of Metal Attenuation through Paper Clay Utilized for the Containment of Contaminated Groundwater." *ASCE Journal of Environmental Engineering*. Vol. 130 (8) pp. 873-880.
22. Moo-Young H.; Myers T.; Tardy B.; Ledbetter R.; Vanadit-Ellis W.; Kim T.-H. (2003). "Centrifuge simulation of the consolidation characteristics of capped marine sediment beds." *Engineering Geology*, Vol. 70, No. 3, pp. 249-258.
23. Moo-Young, H.K., Sellasie, K. and Sabnis, G. (2003). "Laboratory Assessment of the Physical and Chemical Properties of Tire Shred for Use in Construction of Embankments." *ASCE Journal of Environmental Engineering*, Vol. 129, No. 10, pp. 921-929.
24. Moo-Young, H.K. and Al-Attar, M. (2003). "Site Selection Process for Brownfields Re-Development" *Journal of Solid Waste Technology and Management*. Vol. 29, No. 1, pp. 62-70.
25. Moo-Young, H.K. and Odi, H. (2002). "Diversity and Technology: The Impact of Diversity on the Role of Civil and Environmental Engineers In Bridging the Digital Divide." *ASCE Leadership and Management in Engineering Journal*. Vol. 2, No. 4, pp. 34-37.
26. H.K. Moo-Young, W.R. Tucker, Evaluation of vacuum filtration testing for geotextile tubes, *Geotextiles and Geomembranes* 20 (3) (2002) pp. 191-212.
27. Moo-Young, H.K., Myers, T., Tardy, B., Ledbetter, R., Ellis, W.(2002). "Modeling Contaminant Transport Through Capped Sediment Using a Centrifuge." *Journal of Soil and Sediment: Protection, Risk Assessment and Remediation*, Vol. 2, No. 3, pp. 117-128.
28. Moo-Young, H.K., D.A. Gaffney, X. Mo. (2002). " Testing Procedures to Assess the Viability of Dewatering with Geotextile Tubes." *Geotextiles and Geomembranes*. Vol. 20, No. 5, (2002) pp. 289-303.
29. Moo-Young, H.K., Myers, T., Tardy, B., Ledbetter, R., Ellis, W., and Sellasie, K. (2001). "Determination of the Environmental Impact of Consolidation Induced Convective Transport Through Capped Sediment Using a Research Centrifuge." *Journal of Hazardous Materials*. Vol. 85, pp. 53-72.
30. Ochola, C. and Moo-Young, H.K. (2002). "Slurry Wall Construction with Paper Clay for Containment of Contaminated Groundwater." *International Journal of Soil and Sediment Contamination*. Vol. 11, No. 2, pp. 183.
31. Moo-Young, H. K., Gallagher, M. J., Amadon, A. J., Polaski, J., and Wolfe, M. (2000). "Use of Paper Clay as a Barrier for Treatment of Contaminated Ground Water." *American Society for Testing and Materials STP 1374*. pp. 108-122.
32. Moo-Young, H.K. and Ochola, C. (1999). "Non-Destructive Testing of Fine Grained Soil Behavior Utilizing the Environmental Scanning Electron Microscope." *American Society for Testing and Materials STP 1350*. pp. 29-42



33. Moo-Young, H.K. and LaPlante, C. (1999). "Non-Destructive Analysis of Fine-Grained Soils Utilizing Medical Imaging." American Society for Testing and Materials STP 1350. pp. 95-109.
34. Pervizpour, M., Pamukcu, S. and Moo-Young, H. (1999). "Magnetic Resonance Imaging of Hydrocarbon Contaminated Porous Media." ASCE Journal of Computing in Civil Engineering. American Society of Civil Engineering. Vol. 13. No. 2. pp 96-102.
35. Moo-Young, H.K., LaPlante, C., and Zimmie, T.F. (1999). "Field Measurement of Frost Penetration into Landfill Covers That Use Paper Mill Sludge." American Society of Testing and Materials STP 1358, pp. 191-205.
36. Moo-Young, H.K., Myers, T., Townsend, D., and Ochola, C. (1999). "Contaminant Migration Through Geo-Containers Used in Dredging Operations." Engineering Geology. Vol. 53. No. 2. pp. 167-176.
37. Moo-Young, H.K., and Zimmie, T.F. (1998). "Discussion: Geotechnical properties of paper mill sludges for use in landfill covers." ASCE Journal of Geotechnical and Geoenvironmental Engineering. Vol. 124. No. 10. pp. 1043.
38. Moo-Young, H.K., and Zimmie, T.F. (1997). "Utilizing a Paper Sludge Barrier Layer in a Municipal Landfill Cover in New York." American Society of Testing and Materials STP 1275. pp. 125-140.
39. Moo-Young, H.K. and Zimmie, T.F. (1997). "Waste Minimization and Reuse of Paper Mill Sludges as Landfill Covers: A Case Study." Journal of Waste Management and Research. Vol 15. No. 6. pp. 593-605.
40. Moo-Young, H.K. and Zimmie, T.F. (1996). " Properties of Paper Mill Sludges for Use in Landfill Covers." ASCE Journal of Geotechnical and Geoenvironmental Engineering. Vol. 122. No. 9. pp. 768-775.
41. Moo-Young, H.K. and Zimmie, T.F. (1996). "Effects of Freezing and Thawing on the Hydraulic Conductivity of Paper Mill Sludges Used As Landfill Covers." Canadian Geotechnical Journal. Vol. 33. No. 5. pp. 783-792.
42. Zimmie, T.F. and Moo-Young, H.K. (1994). "Instrumentation of Landfill Covers to Measure the Depth of Frost Penetration." Transportation Research Record. No. 1432. pp. 44-50

## Books

1. Moo-Young, H.K. and Fortner, T. (2004). Goal Oriented Learning Environments: E-Learning Strategies for the Classroom. Trafford P.C., Victoria, BC. ISBN #1-4120-0890-5.
2. Menezes, G., Moo-Young, H.K., Khachikian, C., and de Brito Galvão, C. (2012). Proceeding for XII International Symposium for Environmental Geotechnology, Energy, and Sustainable Development: Unveiling Pathways to Global Sustainability. Volume 1. Environmental Geotechnology. Los Angeles, CA. pp. 1-486. ISBN: 978-0-9856219-0-2.
3. Menezes, G., Moo-Young, H.K., Khachikian, C., and de Brito Galvão, C. (2012). Proceeding for XII International Symposium for Environmental Geotechnology, Energy, and Sustainable Development: Unveiling Pathways to Global Sustainability. Volume 2. Energy and the Environment. Los Angeles, CA. pp. 1-236. ISBN: 978-0-9856219-1-9.

4. Menezes, G., Moo-Young, H.K., Khachikian, C., and de Brito Galvão, C. (2012). Proceeding for XII International Symposium for Environmental Geotechnology, Energy, and Sustainable Development: Unveiling Pathways to Global Sustainability. Volume 3. Water Sustainability. Los Angeles, CA. pp. 1-325. ISBN: 978-0-9856219-2-6.

### **Edited Proceedings**

1. Menezes, G., Moo-Young, H.K., Khachikian, C., and Prof. de Brito Galvão, C. (2012). Proceeding of Roundtable Discussions for XII International Symposium for Environmental Geotechnology, Energy, and Sustainable Development: Unveiling Pathways to Global Sustainability. Los Angeles, CA. pp. 1-76.

### **Book Chapters and Special Editions**

1. Moo-Young, H.K. (2009). "Neutralization Potential of Reclaimed Limestone Residuals." *Appropriate Technologies for Environmental Protection in the Developing World*. E. Yanful. (Ed.), Springer, Chapter 23, pp. 230-239.
2. Moo-Young, H.K. and Zimmie, T.F. (2005). "Paper Sludge." *Innovative Barriers*. Shackleford, C. (Ed.) ISSMGE Report. TC-5 Committee.
3. Borns, D.J., Eddy-Dilek, C., Moo-Young, H.K. Serrato, M. (2004). "Verification of Subsurface Based Methods of Containment." *Performance and Verification of Barriers through Prediction and Monitoring*. C. Chen, H. Inyang, and S. Chamberlain (Eds.). Wiley Interscience.
4. Inyang, H., Piet, S., Moo-Young, H.K. (2004). "Damage and System Performance Prediction." *Performance and Verification of Barriers through Prediction and Monitoring*. C. Chen, H. Inyang, and S. Chamberlain (Eds.). Wiley Interscience.
5. Moo-Young, H.K., Ochola, C.E., and Clark, C. (2006). *Special Edition on ReUse and Recycled Industrial Co-Product Materials*. *Journal of Environmental and Waste Management*.

### **Editorial**

1. Menezes, G.B., Moo-Young, H.K., Galvão, T.C., Khachikian, C.S. 2102. The Role of Environmental Geotechnology in the 21st century. *Proceedings of the XII International Symposium on Environmental Geotechnology, Energy and Global Sustainable Development*, Los Angeles, CA, Vol. 1, 1-2.
2. Galvão, T.C., Moo-Young, H.K., Menezes, G.B., Khachikian, C.S. 2012. *Water Sustainability*. *Proceedings of the XII International Symposium on Environmental Geotechnology, Energy and Global Sustainable Development*, Los Angeles, CA, Vol. 3, 1-2.

3. Moo-Young, H.K. 2012. Energy Sustainability. Proceedings of the XII International Symposium on Environmental Geotechnology, Energy and Global Sustainable Development, Los Angeles, CA, Vol. 2, 1-2.

### **Peer-Reviewed Publications**

1. Moo-Young, H.K. (2005). "Crossing the Chasm: Nanoparticle Applications." IAMOT 2005. Vienna, Austria. Pp. 1-10.
2. Mo, X., Waterman, R., and Moo-Young, H.K. (2005). "Investigation of Coal Tar Mobility in a Former MGP." International Conference on Energy, Environment, and Disaster. Charlotte, NC. Pp. 1-15.
3. Mo, X., and Moo-Young, H.K., (2005). "Application of woven synthetic for disposal of high water content waste," International Conference on Energy, Environment, and Disaster. Charlotte, NC. Pp. 1-29.
4. Ochola, C.E., and Moo-Young, H.K. (2005). Reclaimed limestone residuals (rlr) for the treatment of acid mine drainage. International Conference on Energy, Environment, and Disaster. Charlotte, NC. Pp. 1-29.
5. Ochola, C.E. and Moo-Young, H.K. (2005). "Utilization of Industrial Co-Product Materials as Containment Barriers in Sustainable Environmental Applications." International Conference on Energy, Environment, and Disaster. Charlotte, NC. Pp. 1-22.
6. Moo-Young, H.K. (2004). Engineering Bulletin for Permeable Reactive Barriers (PRB) for Radionuclides. U.S. EPA, Washington, D.C.
7. Moo-Young, H.K. and Bentley, S. (2004). "Sediment Stability." SERDP and ESTCP Expert Panel Workshop on Research and Development Needs for the in situ Management of Contaminated Sediment." Department of Defense, Washington, D.C. pp. 5-12.
8. Borns, D., Beck, C., Moo-Young, H.K., Scanlon, B., Serrato, M., Springer, E., and Wilhelm, R. (2002). "Monitoring and Sensors Roadmap for Long Terms Stewardship." Long Term Stewardship Science and Technology Roadmap. Department of Energy. Office of Long Term Stewardship. Washington, D.C., pp. 29-36.
9. Moo-Young, H.K., Anibal Valiente, and Thomas McMonigle. "Recycling of Leachate into a Municipal Landfill.", 5<sup>th</sup> International Symposium on Environmental Geotechnology, Seoul, Korea, 2002. pp. 441-448.
10. Moo-Young, H.K. (2001). "Advective Transport Through Marine Sediment Caps." Third International Conference on Geoenvironmental Engineering-Contaminated Ground: Fate of Pollution and Remediation. pp. 1-8.
11. Moo-Young, H.K. and Bronack, S. (2001). "Problem-based Design Experience in Engineering and Education Schools via Computer Based Training Development for Lucent Technologies." Proceeding of ASEE National Conference. Albuquerque, NM.
12. Moo-Young, H.K., Ochola, C., and Gallagher, M. (2000). "Laboratory Determination of Slurry Wall Construction with Paper Clay." Environmental Geotechnics. T.F. Zimmie (Ed.). ASCE Geotechnical Special Publication 105. pp. 73-92.

13. Moo-Young, H.K. and Ochola, C. (2000). "The Recovery and Reuse of Pig Iron from Iron Rich Material Utilizing the Cokeless Cupola." 5<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development. T.C. de Brito Galvao and H.I. Inyang (Eds.). pp. 121-127.
14. Moo-Young, H.K., Fowler, J., and Ochola, C. (2000). "Remediation of Contaminated Dredged Sediment Utilizing Geosynthetic Fabric Containers." 4<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development. H.I. Inyang and V.O. Ogunro (Eds.). UMass Lowell, pp. 525-535.
15. Moo-Young, H.K. and Gaffney, D.A. (2000). "Dewatering Highly Organic Fine-Grained Dredged Material Using Geotextile Tubes." Proceeding of the Western Dredging Association Twentieth Technical Conference. R.E. Randall (Ed.). Center for Dredging Studies: Texas A&M University, pp. 179-189.
16. Moo-Young, H.K. and Ochola, C. (1999). "Laboratory Evaluation of Geosynthetic Fabric Containers for Contaminant Migration." Environmental Engineering '99. G.C. Schafran. Ed. American Society of Civil Engineers. Reston, VA. pp. 141-151.
17. Moo-Young, H.K. and Ochola, C. (1999). "Strain Effects on the Filtration Properties of Geotextiles." Geosynthetics '99. Industrial Fabrics Association International. Roseville, MN. pp. 757-768.
18. Moo-Young, H.K., Fortner, T.J., Sabnis, G., and Glass, C. (2000). "A Web Based Design Course in Civil Engineering." Proceeding of the Middle Atlantic Regional Conference of American Society of Engineering Education. A. Bandyopadhyay (Ed.). ASEE. pp. 18-24.
19. Glass, C., Sabnis, G., and Moo-Young, H.K. (2000). "Teaching Web-Assisted Courses in Civil Engineering." Proceeding of the Middle Atlantic Regional Conference of American Society of Engineering Education. A. Bandyopadhyay (Ed.). ASEE. pp. 118-121.
20. Sabnis, G., Glass, C., and Moo-Young, H.K. (2000). "Increasing the Visibility of Civil Engineering for K-12 Students." Proceeding of the Middle Atlantic Regional Conference of American Society of Engineering Education. A. Bandyopadhyay (Ed.). ASEE. pp. 49-52.
21. Moo-Young, H.K. and Payne, I.D. (1999). "Educating Underrepresented Engineers Utilizing a Goal Oriented Learning Environment." Proceedings 1999 Technical Professional Conference: Engineering Pathways into the 21<sup>st</sup> Century: 25<sup>th</sup> Annual National Convention of National Society of Black Engineers. D.F. Jackson. Ed. National Society of Black Engineers. Alexandria, VA. pp. 31-38.
22. Floess, C.H., Moo-Young, H.K., Zimmie, T.F., and Harris, W.A. (1998). "A Municipal Landfill Cover with a Paper Sludge Barrier Layer." Fourth International Conference on Case Histories in Geotechnical Engineering. S. Prakash, Ed. pp. 1009-1017.
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### **Conference Proceeding Publications**

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2. Moo-Young, H.K., Jones, P. (2010). "Industry Sponsored Professional Practice Program." Capstone Design Conference 2010. pp. 1-2.
3. Moo-Young, H.K. (2007). "Neutralization Potential of Reclaimed Limestone Residuals." First International Conference on Environmental Research, Technology, and Policy on Africa, Accra, Ghana, pp. 1-10.
4. Moo-Young, H.K. and Bowen, S. (2006). "Review of Bauxite Mining in the Caribbean." International Conference on Infrastructure Development and the Environment, Abuja, Nigeria. Pp. 1-10.
5. Ochola, C.E. and Moo-Young, H.K. (2005). "Reclaimed Limestone Residuals for Sequestration of Heavy Metals." SERDP-ECSTP Annual Meeting. Pp. 184.
6. Moo-Young, H.K. and Ochola, C.E. (2005). "A Novel Treatment for Acid Mine Drainage Utilizing Reclaimed Limestone Residuals." University Coal Research Contractors Review Meeting. Pittsburgh, PA., pp. 39-41.

7. Moo-Young, H.K. and Ochola, C.E. (2004). "A Novel Treatment for Acid Mine Drainage Utilizing Reclaimed Limestone Residuals." University Coal Research Contractors Review Meeting. Pittsburgh, PA., pp. 39-41.
8. Coleman, A., Saroff, S., Moo-Young, H.K., and Nackles, D. (2005). "Free Coal Tar Non-Aqueous Phase Liquid at Manufactured Gas Plant Sites." EnviroExpo and Conference. Boston, MA. pp. 13.
9. Moo-Young, H.K. (2004). "Collaborative-Large Scale Engineering Assessment Networks for Environmental Research: The Overview." American Geophysical Union. Montreal, CN. P. 90.
10. Moo-Young, H.K. and R. Wilhelm. (2004). "Inventory of Performance Monitoring Tools for Subsurface Monitoring of Radionuclide Contaminants". Proceeding of the Joint Workshop on Long Term Performance Monitoring of Metals and Radionuclides in the Subsurface: Strategies, Tools, and Case Studies. Florida State University, Tallahassee, FL, pp. 1-20.
11. Moo-Young, H.K. (2003). "Partnering with Government and Corporation for CLEANER." Proceeding of the Third Workshop for Collaborative Large-Scale Environmental Assessment Network for Environmental Restoration. D. Reckhow, (Ed.), Duke University. Durham, NC.
12. Moo-Young, H.K. (2002). "Air sheds and Air Monitoring for a CLEANER Observatory." Proceeding of the Second Workshop for Collaborative Large-Scale Environmental Assessment Network for Environmental Restoration. P. Brezonik, (Ed.), University of Minnesota, Minneapolis, MN.
13. H. K. Moo-Young, et al. (2002). Determination of the Environmental Impact of Consolidation Induced Convective Transport of Radiolabeled Contaminants through Capped Sediment Using a Research Centrifuge". 18<sup>th</sup> Annual International Conference on Contaminated Soil, Sediment, and Water. October 21-24, 2002. Amherst, MA. pp. 139.
14. Moo-Young, H.K. and Ochola, C. (2000). "Application of Paper Mill Biosolids in Civil Engineering Construction." Twenty-Second Annual Biosolids Conference. Water Environmental Federation. pp. 1-8.
15. Moo-Young, H.K. and Alattar, M. (2000). "Site Selection Process for Brownfield Redevelopment." Geotechnology for Urban Renewal and Redevelopment. N. Yesiller (Ed.). Wayne State University. pp. 48-62.
16. Zimmie, T.F., Quiroz, J.D., and Moo-Young, H.K. (1999). "Paper Mill Sludge Applications in Geotechnical Construction." Hazardous & Industrial Wastes-Proceedings of the 31<sup>st</sup> Mid-Atlantic Industrial Waste Conference. Techmonic, Lancaster, PA. pp. 551-560.
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  20. Moo-Young, H.K. (1997). "Non-Destructive Testing In Geo-Environmental Engineering." Proceeding of Second NSF Civil and Mechanical Systems Workshop for the Advancement and Retention of Underrepresented and Minority Engineering Educators. A. Flatau. Ed. National Science Foundation. Arlington, VA. pp. 1-2.
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  22. Moo-Young, H.K. and Zimmie, T.F. (1996). "A Municipal Landfill Cover with a Paper Sludge Barrier Layer." Hazardous & Industrial Wastes-Proceedings of Twenty-Eight Mid-Atlantic Industrial Waste Conference. Buffalo, NY. Techmonic, Lancaster, PA. pp. 696-703.
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### **Peer Reviewed Technical Publications**

1. EPA Science Advisory Board. (2012). "Science Advisory Board Comments on the President's Requested FY 2013 Research Budget. EPA-SAB-12-006. Environmental Protection Agency, Washington, D.C.
2. EPA Science Advisory Board. (2011). "Science Advisory Board Comments on the President's Requested FY 2012 Research Budget. EPA-SAB-11-006. Environmental Protection Agency, Washington, D.C.
3. EPA Science Advisory Board. (2009). "Aging Drinking Water and Wastewater Infrastructure Research Initiative: Final Report ." EPA-SAB-09-016. U.S. Environmental Protection Agency, Washington, D.C. pp. 1- 17.
4. EPA Science Advisory Board. (2008). "Pollution Prevention (P2) Program – Performance Measures: Final Report." EPA-SAB-09-005. U.S. Environmental Protection Agency, Washington, D.C. pp. 1-17.
5. EPA Science Advisory Board. (2006). "Superfund Benefits Analysis: Final Report." EPA-SAB-ADV-06-002, U.S. Environmental Protection Agency, Washington, D.C. pp. 1-46.



6. Moo-Young, H.K. (2003). "Multi-Regional Reactive Transport Due to Strong Anisotropy in Unsaturated Soils with Evolving Scales of Heterogeneity." EMSP-86952—2003. US Department of Energy. Office of Science. Washington, D.C.
7. Moo-Young, H.K. and Ochola, C. (2004). "A Novel Treatment for Acid Mine Drainage Utilizing Reclaimed Limestone Residual." Technical Report, FG26-03NT41805. US Department of Energy. National Energy Technology Laboratory. Pittsburgh, PA.
8. Moo-Young, H.K. and Mo, X. (2006). "Multi-Regional Reactive Transport Due to Strong Anisotropy in Unsaturated Soils with Evolving Scales of Heterogeneity." Final Report. DOE/ER/63512. U.S. Department of Energy Office of Science. Washington, D.C.
9. Moo-Young, H.K. (2003). Benchmarking of Vapor Intrusion Models for Radon Transport. Office of Radiation and Indoor Air. U.S. EPA, Washington, D.C.
10. Saroff, S. and Moo-Young, H.K. (2006). Application of the EPRI Coal Tar Residual Saturation (Res-SAT™) Tool at the Waterbury South Manufactured Gas Plant Site, Waterbury, Connecticut. EPRI # 1010138. Palo Alto, CA.
11. Moo-Young, H.K., Brown, D., and Kim, T.Y. (2004). Leaching Potential of Coal Tar at a MGP Site: A Laboratory Assessment. EPRI 1010948. Palo Alto, CA.
12. Moo-Young, H.K. Brown, D., Waterman, R. (2004). "Residual Saturation Device. EPRI, Palo Alto, CA.
13. Moo-Young, H.K., Ochola, C., Sellasie, K., Zeroka, D., Sabnis, G., Glass, C., and Thornton, O., (2001). Guidance Document on Utilization of Scrap Tires in Embankment. Final Report. Pennsylvania Department of Transportation.
14. Sabnis, G., Moo-Young, H.K., and Sharma, B. (2001). Guidance Document for Reclaimed Portland Cement Concrete. Final Report. Pennsylvania Department of Transportation.
15. Moo-Young, H.K., Myers, T.E., Tardy, B., Ledbetter, R. and Vandadit-Ellis, W. (2000). "Centrifuge Simulation of Contaminant Migration Through Capped Dredged Material." Technical Report EL-XX. U.S. Army Engineer Waterways Experiment Station. Vicksburg, MS.
16. Moo-Young, H.K. (1997). "Super-Centrifuge Simulation of Contaminant Migration through Capped Dredged Material." Final Report DAAHO4-96-C-0086. Submitted to Battelle and the Department of Defense. Scientific Services Program. Research Triangle Park, NC.
17. Moo-Young, H.K. (1996). "Use of Geosynthetic Fabric Containers in the New York Harbor." Final Report DAAL03-91-C-0034. Submitted to Battelle and Department of Defense. Scientific Services Program. Research Triangle Park, NC.
18. Moo-Young, H.K. (1995). Evaluation of Paper Mill Sludges As Landfill Covers. Ph.D. Thesis. Rensselaer Polytechnic Institute. Troy, NY.
19. Moo-Young, H.K. (1992). Evaluation of the Geotechnical Properties of a Paper Mill Sludge For Use in Landfill Covers. Masters of Science Thesis. Rensselaer Polytechnic Institute. Troy, NY.

## Workshop Reports

1. Mirmiran, A., Milani, M., Moo-Young, H.K., Shoephoester, R., and Kilpatrick, P. (2013). "Building Partnerships and Pathways to Address the Foundational Grand Challenge for Engineering Education Part II: Concrete Steps Towards Broadening Participation." Miami, Fl. Pp. 1-10.
2. Mirmiran, A., Milani, M., Moo-Young, H.K., Shoephoester, R., and Kilpatrick, P. (2012). "Building Partnerships and Pathways to Address the Foundational Grand Challenge for Engineering Education: Concrete Steps Towards Broadening Participation." Miami, Fl. Pp. 1-23.

### **Patents**

1. U.S. Patent No. 7,393,689 "Method and Apparatus for Characterizing Coal Tar in Soils."

### **Magazines Publications**

1. Moo-Young, H.K. (2008). U.S. Black Engineer and Information Technology Magazine. March/April, p. 33
2. Moo-Young, H.K. (2001). U.S. Black Engineer and Information Technology Magazine. March/April, p. 33.
3. Canning, K. and Moo-Young, H.K. (1999). "Innovations Address Industry Waste Streams." Pollution Engineering. Vol. 31, No. 6. pp. 62-63.
4. Moo-Young, H.K. (1998). "Waste Paper Mill Sludges as Reactive Semi-Permeable Barrier Slurry Walls." Ground Water Currents. U.S. EPA. Solid Waste and Emergency Response. Environmental Protection Agency 542-N-98-10. No. 30. pp. 3-4.

### **Congressional Testimony**

Moo-Young, H.K., Mirmiran, A., Shoephoester, R., and Kilpatrick, P. (2012). Congressional Brief on "Building Partnerships and Pathways to Address the Foundational Grand Challenge for Engineering Education - Concrete Steps toward Broadening Participation." September 12, 2012, on Capitol Hill sponsored: Frederica Wilson, D-Fla.; Silvestre Reyes, D-Texas; Mario Diaz-Balart, R-Fla.; and Judy Chu, D-Calif.

### **Invited Lectures**

1. Moo-Young, H.K. (2014). "Developing an Innovation Economy in Eastern Washington." Tri Cities Economic Development Council. Kennewick, WA.
2. Moo-Young, H.K. (2014). "Increasing STEM Graduates in Eastern Washington." Tri-Cities IEEE Engineering Banquet. Kennewick, WA.
3. Moo-Young, H.K. (2014). "Increasing College Participation in the State of Washington." Eastern Washington GEAR-UP College Access Day. Walla Walla Community College, Walla Walla, WA. January 31, 2014.

4. Moo-Young, H.K. (2013). "Broadening the Participation in STEM". Hispanic National Achievement Awards Conference. Senior Executive Session. Orlando, Fl. October 3, 2013.
5. Moo-Young, H.K. (2013) "The Eight Design Principles of a 21<sup>st</sup> Century Honors University." Oakland University, Rochester, MI.
6. Moo-Young, H.K. (2013) "The Eight Design Principles of a 21<sup>st</sup> Century Urban University." Cleveland State University, Cleveland, OH.
7. Moo-Young, H.K. (2013) "The Eight Design Principles of a 21<sup>st</sup> Century Research University." Washington State University, Richland, WA.
8. Moo-Young, H.K. (2012). "Future of Environmental Sustainability". XII International Symposium on Environmental Geotechnology, Energy and Global Sustainable Development, Los Angeles, CA.
9. Moo-Young, H.K. (2012). "Future of Higher Education in Nevada". University of Nevada, Las Vegas.
10. Moo-Young, H.K. (2012). "Higher Education Perspectives for Private Technology Universities". Lawrence Technological University. Detroit, MI.
11. Moo-Young, H.K. (2012). "Professional Practice at CSULA". ASEE National Meeting. Plenary Session. San Antonio, TX.
12. Moo-Young, H.K. (2012). "Faculty Development in Engineering Education: Cal State L.A.'s Leadership Model." ASEE Engineering Dean's Institute. Kauai, HI.
13. Moo-Young, H.K. (2012). "Conversation with Non-Doctoral Universities Breakout Session." ASEE Engineering Dean's Institute. Kauai, HI.
14. Moo-Young, H.K. (2011). "Innovative Instruction for Engineering Education." ASEE Engineering Dean's Institute. Palm Springs, CA.
15. Moo-Young, H.K. (2011). "Globalization and Outreach-Service Learning in Engineering Education." ASEE Engineering Dean's Institute. Palm Springs, CA.
16. Moo-Young, H.K. (2011). "Future of Applied Research." Purdue University. West Lafayette, IN.
17. Moo-Young, H.K. (2011). "Future of Applied Research." Rochester Institute of Technology. Rochester, NY.
18. Moo-Young, H.K. (2011). "Global Outreach Activities." Sessions Chair at 2011 Engineering Deans Institute.
19. Moo-Young, H.K. (2011). "Engineering Curriculum Innovation." Session Chair at 2011 Engineering Deans Institute. Palm Springs, CA.
20. Moo-Young, H.K. (2010). "Industry Sponsored Professional Practice Program." Capstone Design Conference 2010, Boulder, CO.
21. Moo-Young, H.K. (2010). "CSULA Engineering Innovation Hub." Pratt Whitney Rockadyne Technical Conference. Woodland Hill, CA.
22. Moo-Young, H.K. (2009). "Engineering Innovation for Business Success." Boeing Corporation, Small Business Workshop. Huntington Beach, CA.
23. Moo-Young, H.K. (2009). "Success of HPC in Small Business Competiviness." California Space Authority Supplier Forum. El Segundo, CA.
24. Moo-Young, H.K. (2009). "Engineering Innovation Through Energy Efficiency." Southern California Edison Corp., City of Industry, CA.

25. Moo-Young, H.K. (2008). "Engineering Innovation using Management of Technology." Raytheon Corporation. El Segundo, CA.
26. Moo-Young, H.K. (2008). "Small Business Innovation using Super Computers." California Space Authority Supplier Forum. Panel on Small Business Innovation. El Segundo, CA.
27. Moo-Young, H.K. (2003). "Partnering with Government and Corporation for CLEANER." Proceeding of the Third Workshop for Collaborative Large-Scale Environmental Assessment Network for Environmental Restoration. D. Reckhow, (Ed.), Duke University. Durham, NC.
28. Moo-Young, H.K. (2002). "Air sheds and Air Monitoring for a CLEANER Observatory." Proceeding of the Second Workshop for Collaborative Large-Scale Environmental Assessment Network for Environmental Restoration. P. Brezonik, (Ed.), University of Minnesota, Minneapolis, MN.
29. Moo-Young, H.K. "Reclaimed Limestone Residuals." Temple University. December 2002.
30. Moo-Young, H.K. "Recycled Materials in Environmental Remediation." University of South Florida. April 2003.
31. Moo-Young, H.K. "Fate and Transport of Hydrocarbons in Sediment: a Research Centrifuge Study." Michigan State University, April 2001.
32. Moo-Young, H.K. and R. Wilhelm. "Inventory of Performance Monitoring Tools for Subsurface Monitoring of Radionuclide Contaminants" Arlington, VA, April 2004.
33. Moo-Young, H.K. "Future Trends in Recycling for the Paper Industry." Keynote Lecture. 5<sup>th</sup> International Workshop on the Use of Paper Sludge in Environmental Geotechnology and Construction. Manilla, Philippines. May 26-29, 2001.
34. Moo-Young, H.K. and Johnson, B. "Surface Impoundment Study." Department of Energy Workshop on Performance and Verification of Barriers through Prediction and Monitoring. June 2002.
35. Moo-Young, H.K. and Wilhelm, R. "Fry Canyon PRB." Department of Energy Workshop on Performance and Verification of Barriers through Prediction and Monitoring. June 2002.
36. Moo-Young, H.K. "Determination of the Environmental Impact of Consolidation Induced Convective Transport of Radiolabeled Contaminants through Capped Sediment Using a Research Centrifuge". 18<sup>th</sup> Annual International Conference on Contaminated Soil, Sediment, and Water. October 21-24, 2002
37. Moo-Young, H.K. "Laboratory Determination of Paper Clay as a Slurry Wall." Transportation Research Board Meeting. Washington, D.C. January 12, 2000.
38. Moo-Young, H.K. "The Recovery and Reuse of Pig Iron from Iron Rich Material Utilizing the Cokeless Cupola." 5<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development. August 23, 2000.
39. Moo-Young, H.K. and Ochola, C. "The Future of Paper Industry Waste Management." Keynote Lecture. Invited Keynote Lecture. Third International Workshop on the Use of Paper Industry Sludges in Environmental Geotechnology and Construction. Helsinki, Finland. June 1-4, 1999.
40. Moo-Young, H.K. "Utilization of Steel Slag for Treatment of AMD." American Institute for Steel and Iron. Cleveland, Ohio, July 15, 1999.

41. Moo-Young, H.K. "Graduate Recruiting of Minorities to Lehigh University." U.S. Black Engineering of the Year Award Conference. Baltimore, MD. February 12-14, 1999.
42. Moo-Young, H.K. "Graduate Recruiting of Minorities to Lehigh University." 26<sup>th</sup> Annual Convention of the National Society of Black Engineers. March 26, 1999.
43. Moo-Young, H.K. "Graduate Recruiting of Minorities to Lehigh University." Morgan State University. Baltimore, MD. October 11, 1999.
44. Moo-Young, H.K. Bronack, S., Biedler, P. "Reports from the Lilly Conference on Teaching" Lehigh Development Lunch, January 28, 1999.
45. Moo-Young, H.K. "Barrier Technologies in Civil Engineering." Presentation to the Cosmos Society at Lehigh University. Bethlehem, PA. November 14, 1999.
46. Moo-Young, H.K. "Adaptation of Goal Based Learning to the Department of Civil and Environmental Engineering at Lehigh University." Presentation to Andersen Consultants. Lehigh University. Bethlehem, PA. March 2, 1999.
47. Moo-Young, H.K. "Utilizing Geosynthetic Fabric Containers to Remediate Contaminated Sediment." Rensselaer Polytechnic Institute. Troy, NY. February 19, 1998.
48. Moo-Young, H.K. "Overview of the Use of Paper Sludge in Landfill Construction in the Northeastern U.S." Invited Keynote Lecture. 2<sup>nd</sup> International Workshop Use of Paper Industry Sludge in Environmental Geotechnology and Construction, Rensselaer Polytechnic Institute. Troy, NY. June 1, 1998.
49. Moo-Young, H.K. "Andersen Consultant Experience." Lehigh University Faculty Enhancement Seminar. Bethlehem, PA. October 12, 1997.
50. Moo-Young, H.K. "Honors Program Legacy Series. What it takes to become an Engineer." Morgan State University, Baltimore, MD, December 9, 1997.
51. Moo-Young, H.K. "Utilization of Geosynthetics in Environmental Engineering", Waterways Experiments Station. Vicksburg, MS. August 15, 1996.
52. Moo-Young, H.K. "Short Course on Designing Landfills with Paper Sludge." Rensselaer Polytechnic Institute. Troy, NY. December 12, 1996.

### **Conference Presentations**

1. Moo-Young, H.K. and Ochola, C.E. (2005). "A Novel Treatment for Acid Mine Drainage Utilizing Reclaimed Limestone Residuals." University Coal Research Contractors Review Meeting. Pittsburgh, PA.
2. Moo-Young, H.K. and Ochola, C.E. (2004). "A Novel Treatment for Acid Mine Drainage Utilizing Reclaimed Limestone Residuals." University Coal Research Contractors Review Meeting. Pittsburgh, PA.
3. Coleman, A., Saroff, S., Moo-Young, H.K., and Nackles, D. (2005). "Free Coal Tar Non-Aqueous Phase Liquid at Manufactured Gas Plant Sites." EnviroExpo and Conference. Boston, MA.
4. Moo-Young, H.K. (2004). "Collaborative-Large Scale Engineering Assessment Networks for Environmental Research: The Overview." American Geophysical Union. Montreal, CN.
5. Moo-Young, H.K. and R. Wilhelm. (2004). "Inventory of Performance Monitoring Tools for Subsurface Monitoring of Radionuclide Contaminants". Proceeding of the

- Joint Workshop on Long Term Performance Monitoring of Metals and Radionuclides in the Subsurface: Strategies, Tools, and Case Studies. Florida State University, Tallahassee, FL,
6. Moo-Young, H.K. "Air Shed Monitoring." CLEANER Workshop 2. Minneapolis, MN. October 2002.
  7. Moo-Young, H.K. "Partnerships in CLEANER Network." Workshop 3. Durham, NC. February 2003.
  8. Moo-Young, H.K. "Paper Clay Utilization in Engineering Applications." 2001 International Containment and Remediation Technology Conference and Exhibition. Orlando, FL. June 10-13, 2001.
  9. Moo-Young, H.K. "Advective Transport Through Marine Sediment Caps." Third International Conference on Geoenvironmental Engineering-Contaminated Ground: Fate of Pollution and Remediation. September 18, 2001.
  10. Moo-Young, H.K. "Problem-based Design Experience in Engineering and Education Schools via Computer Based Training Development for Lucent Technologies." Proceeding of ASEE National Conference. Albuquerque, NM. June 25, 2001.
  11. Moo-Young, H.K. "The Recovery and Reuse of Pig Iron from Iron Rich Material Utilizing the Cokeless Cupola." 5<sup>th</sup> International Symposium on Environmental Geotechnology and Global Sustainable Development. Belo Horizonte, Brazil. August 24, 2000.
  12. Moo-Young, H.K. "Dewatering of Highly Organic Dredged Material Using Geotextile Tubes." Seattle 2000 Civil Engineering Conference. ASCE. October 20, 2000.
  13. Moo-Young, H.K. "The Site Selection Process for Brownsfield Redevelopment in the Lehigh Valley." Seminar on Productive Reuse of Brownfield and Base Realignment and Closure of Military Installations. ASTM. October 24, 2000.
  14. Moo-Young, H.K., "Laboratory Determination of Slurry Wall Construction with Paper Clay." ASCE-Geo-Institute's GeoDenver Conference, Environmental Geotechnics Session. August 7, 2000.
  15. Moo-Young, H.K. "Dewatering Highly Organic Fine-Grained Dredged Material Using Geotextile." Western Dredging Association Twentieth Technical Conference. Warrick, Rhode Island. June 26, 2000.
  16. Moo-Young, H.K. "A Web Based Design Course in Civil Engineering." Proceeding of the Middle Atlantic Regional Conference of American Society of Engineering Education. Long Island, NY. April 15, 2000.
  17. Moo-Young, H.K. and Ochola, C. "Laboratory Evaluation of Geosynthetic Fabric Containers for Contaminant Migration." Environmental Engineering '99. ASCE-National Conference on Environmental Engineering. Norfolk, VA. July 25-28, 1999.
  18. Moo-Young, H.K. and Ochola, C. "Strain Effects on the Filtration Properties of Geotextiles." Geosynthetics '99 Conference. Boston, MA. April 28-30, 1999.
  19. Moo-Young, H. K., Gallagher, M. J., Amadon, A. J., Polaski, J., and Wolfe, M. "Use of Paper Clay as a Barrier for Treatment of Contaminated Ground Water," American Society of Testing and Materials Symposium on the Geotechnics of High Water Content Materials. Memphis, TN. January 28-29, 1999.
  20. Moo-Young, H.K. and Payne, I.D. "Educating Underrepresented Engineers Utilizing a Goal Oriented Learning Environment." Proceedings 1999 Technical Professional

- Conference: Engineering Pathways into the 21<sup>st</sup> Century: 25<sup>th</sup> Annual National Convention of National Society of Black Engineers. March 24-29, 1999.
21. Moo-Young, H.K., Zimmie, T.F., and Quiroz, J.D. "Paper Mill Sludge Applications in Geotechnical Construction." Hazardous & Industrial Wastes - Proceedings of the 31<sup>st</sup> Mid-Atlantic Industrial Waste Conference. Storrs, CT. June 1999.
  22. Moo-Young, H.K. and Gallagher, M. "Laboratory Assessment of Waste Paper Mill Sludges As Reactive Impermeable Barrier Slurry Walls." 30<sup>th</sup> Mid Atlantic Industrial Waste Conference. Villanova, PA. July 15, 1998.
  23. Moo-Young, H.K., Fowler, J., and Myers, T. "Remediation of Contaminated Sediment Utilizing Geosynthetic Fabric Containers" 77<sup>th</sup> Annual Transportation Research Board Meeting. Washington, D.C. January 9, 1998.
  24. Moo-Young, H.K. and Ochola, C. "Strain Effects on Filtration Properties of Geotextiles." American Society of Civil Engineers Annual Conference. GeoCongress '98. Boston, MA, October 18-20, 1998.
  25. Moo-Young, H.K., Fowler, J., and Ochola, C. "Utilizing Geosynthetic Fabric Containers to Remediate Contaminated Sediment." 4<sup>th</sup> International Symposium on Environmental Geotechnology. Boston, MA. August 9-12, 1998.
  26. Moo-Young, H.K. "Non-Destructive Testing of Fine Grained Soil Behavior Utilizing the Environmental Scanning Electron Microscope." American Society of Testing and Materials Symposium on Non-Destructive and Automated Testing of Soil and Rock. San Diego, CA. January 28-29, 1998.
  27. Moo-Young, H.K. and LaPlante, C. "Non-Destructive Analysis of Fine Grained Soils Utilizing Medical Imaging." American Society of Testing and Materials Symposium on Non-Destructive and Automated Testing of Soil and Rock. San Diego, CA. January 28-29, 1998.
  28. Moo-Young, H.K. and Pamukcu, S. "Non-Destructive Analysis of DNAPL Migration in Porous Media Using MRI." American Society of Testing and Materials Symposium on Non-Destructive and Automated Testing of Soil and Rock. San Diego, CA. January 28-29, 1998.
  29. Moo-Young, H.K. "Utilization of Geosynthetic Composites in Dredging Operations." Second International Conference on Composites in Infrastructure. Tuscon, AZ. January 5-7, 1998.
  30. Moo-Young, H.K., Myers, T., Townsend, D., and Ochola, C. "Laboratory Evaluation of Geosynthetic Fabric Containers to Contain Contaminated Dredged Sediment." 6<sup>th</sup> International Conference on Geosynthetic. Atlanta, GA, March 25-29, 1998.
  31. Moo-Young, H.K., Zimmie, T.F., LaPlante, C., and Quiroz, J.D. "Field Measurement of Frost Penetration into Landfill Covers That Use Paper Mill Sludge," American Society of Testing and Materials Symposium on Field Instrumentation, Atlanta, GA. June 16, 1998.
  32. Moo-Young, H.K. and Gallagher, M. "Determination of the Adsorption Capacity of Paper Sludge as a Reactive Impermeable Barrier." First International Workshop for the Use of Paper Industry Sludge in Environmental Geotechnology and Construction. Helsinki, Finland. August 8-12, 1997.
  33. Moo-Young, H.K. "Designing Waste Containment Systems Utilizing Paper Sludge Capping Layers." First International Workshop for the Use of Paper Industry Sludge in Environmental Geotechnology and Construction. Helsinki, Finland. August 8-12, 1997.

34. Moo-Young, H.K. "Non-Destructive Testing In Geo-Environmental Engineering." Proceeding of Second Annual National Science Foundation's Workshop for Underrepresented Engineers in Civil and Mechanical Systems. National Science Foundation. Arlington, VA. September 24, 1997.
35. Moo-Young, H.K. and Gallagher, M. "Paper Mill Sludge as a Reactive Semi-permeable Barrier-A Feasibility Study." Thirteenth International Conference on Solid Waste Technology and Management. Philadelphia, PA. November 19, 1997.
36. Moo-Young, H.K. and Zimmie, T.F. "A Comparison of Clay to Paper Sludge as Hydraulic Barrier in Municipal Landfill Covers." Proceeding of 14<sup>th</sup> International Conference Soil Mechanics and Foundation Engineering Conference. Hamberg, Germany. September 6-12, 1997.
37. Moo-Young, H.K. and Zimmie, T.F. "Performance of Paper Mill Sludges as Landfill Capping Material." 1997 Proceeding of the International Containment Technology Conference. St. Petersburg, FL. February 12, 1997.
38. Moo-Young, H.K., Myer, T.J., and Zimmie, T.F. "Environmental Monitoring of the Depth of Frost Penetration into Landfill Covers." Fifth International Symposium on Cold Region Development. Fairbanks, AK. May 5, 1997.
39. Moo-Young, H.K. and Zimmie, T.F. "Utilizing a Paper Sludge Barrier Layer in a Municipal Landfill Cover in New York." Symposium on Testing Soil Mixed with Waste or Recycled Materials. New Orleans, LA. January 12, 1997.
40. Moo-Young, H.K., Pamukcu, S. and Romero, S. "Prediction of Dynamic Properties by Low Strain Excitation." Symposium on Testing Soil Mixed with Waste or Recycled Materials, American Society of Testing and Materials. New Orleans, LA. January 12, 1997.
41. Moo-Young, H.K., Pamukcu, S., and Kershaw, D. "Use of Ground Tire Rubber in Reactive Permeable Barriers to Mitigate BTEX Compounds." Symposium on Testing Soil Mixed with Waste or Recycled Materials. American Society of Testing and Materials. New Orleans, LA. January 12, 1997.
42. Moo-Young, H.K. and Zimmie, T.F. "Laboratory Testing of Paper Sludge Landfill Covers". Third International Symposium on Environmental Geotechnology. San Diego, CA, June 9-12, 1996.
43. Moo-Young, H.K. and Zimmie, T.F. "Effects of Organic Decomposition on Paper Mill Sludges Used as Landfill Covers." Second International Conference on Environmental Geotechnics. Osaka, Japan. November 3-9, 1996.
44. Moo-Young, H.K. and Zimmie, T.F. "Quality Assurance and Quality Control Laboratory and Insitu Testing of Paper Mill Sludges Used as Landfill Covers." Proceeding for the Eleventh Annual Waste Testing and Quality Assurance Symposium. Washington D.C. July 15, 1996.
45. Moo-Young, H.K. and Zimmie, T.F. "Design of Landfill Covers Using Paper Mill Sludge." Research Transformed into Practice: Implementations of NSF Research. Washington, DC. June 1996.
46. Moo-Young, H.K. and Zimmie, T.F. "Analysis of the Macro Structure of Frozen Paper Mill Sludges Used as Landfill Cover Material." 32nd Annual Meeting of Clay Mineral Society. Baltimore, MD. June 5-7, 1996.



47. Moo-Young, H.K. and Zimmie, T.F. “Hydraulic Conductivity of Paper Sludges Used for Landfill Covers.” GeoEnvironment 2000. New Orleans, LA. February 24-26, 1995.

### Research Administration

- 2004-06 Villanova University Research Budget—04/05= \$6.5 Million; 05/06= \$8.5 Million.  
 2006-13 CSULA Research Budget—06/07 = \$1.5 Million; 07/08 = \$2.0 Million; 08-09 = \$3.0 Million; 09-10 = \$4.5 million; 10-11 = \$8.0 million; 11/12 = \$12 Million; 12/13 = \$16 Million

### Funded Research Projects

- 6/13-12/14 Washington State University, Tri Cities  
 Wine Science Center, State of Washington, \$5,000,000.00
- California State University, Los Angeles  
 Examples Major Contracts and Grants won by College of Engineering
- 9/11-Present NSF Acquisition of an Ultra-Centrifuge to Enhance Geoenvironmental Research and Education, (PI), \$441,663.
- 6/10-Present NSWC Corona Partnership Agreement, (PI), \$1,000,000 over four years.
- 10/08-Present California Air and Resource Board, Hydrogen Refueling Station, \$4,500,000.
- 9/10-Present NSF ARI Award for Renovation of Core Facilities, \$1,730,000.
- 1/08-Present HENAAC Value Chain. Department of Defense. Great Minds in STEM, \$7,500,000.
- 1/09-Present Increasing Engineering Transfers Students with ELAC., Department of Education. (PI), \$2,000,000.
- 1/09-Present Improving Transfer Student Efficiency with LATTC., Department of Education. (PI), \$1,500,000.
- 1/08-Present National Science Foundation. “GK-12 Fellowship Program.” (co-PI), \$2,500,000.
- 1/08-Present Senior Design. Various Corporations, \$4,000,000.
- 10/09-Present NSF CREST Center for Sustainable Energy, (Chair of Advisory Committee) \$5,000,000.
- 1/06-Present NASA University Research Center, (Chair of the Advisory Committee) \$10,000,000.
- 1/06-Present MESA Engineering and Schools Program. (PI)., State of California, \$2,000,000.00
- Villanova University
- 2/06-2/08 Conti Enterprise. Sustainable Energy Grant. (PI), \$125,000.
- 04-06 NAVSEA Philadelphia. (PI), \$1,800,000.
- 06/06-06/11 Pennsylvania Department of Community and Economic Development.

“Delaware County Keystone Innovation Zone.” (PI), \$1,250,000.

Lehigh University

- 1/03-1/06 National Science Foundation. “GK-12 Fellowship Program.” \$1,250,000.
- 10/01-1/03 Electric Power Research Institute. “Residual Saturation of Coal Tar Contaminated Soil Samples”. \$115,000.
- 10/02-10/05 Department of Energy. “Multi-Scale Transport and Heterogeneity of Pore Water Movement.” \$275,000.
- 10/00-6/03 Ben Franklin Technology Center and KoreMart Inc. “Environmental Reclamation of Foundry Sands.” \$200,000.
- 1/03-12/05 Department of Energy. Reclaimed Limestone Residuals for Acid Mine Drainage Remediation. \$100,000.
- 1/99-12/01 National Science Foundation. “Temporary Flood Mitigation Utilizing Geotextile Tubes.” \$240,000.
- 1/96-1/98 National Science Foundation. “Analysis of the Microstructure of Fine Grained Soils Used for the Impermeable Barrier in Landfill Covers.” \$18,000.
- 7/00-10/01 Pennsylvania Department of Transportation “Development of Product/Material Use of Scrap Tires for State and Local Projects” Moo-Young, H.K. \$271,000.
- 6/99-12/00 National Science Foundation. “REU-Supplement for Temporary Flood Mitigation Utilizing Textile Tubes.” \$13,400.
- 7/01-12/02 National Science Foundation. REU-Supplement for Temporary Flood Mitigation Utilizing Textile Tubes.” \$21,000
- 9/00-9/01 Pennsylvania Department of Transportation. “Development of Product/Material Use of Reclaimed Portland Cement Concrete for State and Local Projects”. \$132,000.
- 12/96-5/98 “Analysis of Synthetic Fabric Containers to Contain Contaminated Dredge Sediment.” Department of Army/Battelle. \$12,000.
- 5/97-5/99 Andersen Consulting. “Goal Oriented Learning Applied to Civil and Environmental Engineering Courses.” \$180,000.
- 6/97-12/97 Lehigh County. “Determination of the Organic Waste Stream in Lehigh Valley for a Composting Facility” \$5,000.
- 6/98-12/98 Chrin Landfill. "Feasibility of Leachate Recirculation." \$10,000.
- 1/98-12/06 Department of Commerce through Pennsylvania Infrastructure Technology Alliance."Utilization of Steel Slag to Remediate Acid Mine Drainage" Moo-Young, H.K. Pennsylvania \$120,000.
- 6/98-6/99 "Feasibility of Thermal Decomposition of IRM into Pig Iron." \$4,000.
- 6/98-12/98 Waterways Experiment Station, "Centrifuge Experimentation to Determine the Effectiveness of Capping Contaminated Dredged Sediment." Moo-Young, H.K. \$24,552.
- 1/99-1/03 Sloan Foundation. "Increasing the Number of Minority Graduate Students into the Department of Civil and Environmental Engineering." \$90,000.
- 97-00 Federal Highway Administration, National Highway Institute. "Dwight D. Eisenhower Faculty Fellowship." \$5,000. Three Time Recipient (1997, 1998, 2000).
- 8/99-8/00 Penn DOT “Feasibility of the Use of Cathodic Protection and Electro-Chloride

	Extraction Technology for Structures in Pennsylvania.” \$125,198.
6/99-12/99	ELKAM/David Garrett Associates. “Feasibility of Utilizing Textile Tubes for Dewatering the Wastewater at ELKAM.” \$5,000.
6/99-6/02	Lucent Technologies. “Lucent Creative Partnership: k-12 Microelectronics Software.” \$93,000.
6/98	“Development of Multimedia Laboratory for Instruction in Civil Engineering.” Civil Engineering Faculty. \$25,000. .
6/99-6-00	Lehigh University Provost Office. “Venture: Lucent Creative Partnership: k-12 Microelectronics Software.” \$25,000.
6/00	Lehigh University “Installation of Research Centrifuge at Lehigh University.” Moo-Young. \$18,000. 6/00.
8/96-8/97	“Acquisition of Flow through Porous Media Equipment” Moo-Young, H.K. General Electric, \$15,000.
1/97-1/98	“Acquisition of Mercury Porosimetry Device” Moo-Young, H.K. Lindback Foundation, \$15,000.
1/00	“Acquisition of a Used 5000-g pound Research Centrifuge.” Moo-Young, H.K. U.S. Army Corp of Engineers and ADAMA Engineering. Donated Research Equipment. \$100,000.

## **Fund Raising**

- Villanova University raised \$4 million for Structural Engineering Research Center, \$1 million for System Engineering Chaired Professorship
- CSULA significantly increase funding from corporations over 5 years from 30K to \$1.0 million
- Developed the Friends of Engineering, Computer Science, and Technology which has increased corporate, alumni and foundation support: \$1,000,000.00 support per year.
- \$48 Million of support for software, equipment and cash from the GM and other industry partners.

## **Course Instruction**

- Solid Waste Management
- Waste Containment System Design
- Hazardous Waste Management
- Introduction to Environmental Engineering
- Remediation Technologies
- Fluid Mechanics
- Civil Engineering Senior Design
- Fate and Transport of Contaminants

### **Ph.D. Program Supervision**

- Charles Ochola, (Civil and Environmental Engineering, 2002), Reclaimed Limestone Residuals for Remediation of Hexavalent Chromium in Subsurface
- Xinghua Mo, (Civil and Environmental Engineering, 2009), Flood Protection Barriers and Multiscale Transport and Heterogeneity of Pore Water
- Kassahun Sellasie, (Civil and Environmental Engineering 2004), Study of Heat Production and Transfer in Scrap Tires

### **M.S. Program Supervision**

- Marc Gallagher (Civil and Environmental Engineering, May 1998), The Use of Paper mill Waste for Heavy Metal Removal from Groundwater, supported as TA
- Charles Ochola (Civil and Environmental Engineering, May 1998), The Migration of Fines From Contaminated Sediment Through Synthetic Fabric Containers Utilized in Dredging Operations, Supported by Battelle
- Mohammad Al-Attar (Civil and Environmental Engineering, May 1998), Brownsfield and Site Remediation, Self-Supported
- Anibal Valiente, (Civil and Environmental Engineering, December 1998), Leachate Recirculation System, Supported by Fullbright Scholarship.
- Wayne Tucker, (Civil and Environmental Engineering, May 2000), Filtration Properties of Textile Tubes, Supported by Teaching Assistant and summer supported by PADC
- Tim Fortner (Civil and Environmental Engineering, May 2000), Application of Goal Oriented Learning into Civil Engineering Curriculum, Supported by Andersen Consultant and Lucent Technology
- Marvin Bennett (Civil and Environmental Engineering, May 2000), Utilization of Computer Aided Tomography for Heavy Metal Detection in Porous Media, Supported by G.E. Fellowship, PADC, and Research Assistantship
- Kristin Tedsco (Civil and Environmental Engineering, May 2001), Utilization of Industrial Co-Product Materials for Heavy Metal Removal, Supported by Teaching Assistant and summer support by PADC
- Brian Merritt, (Civil and Environmental Engineering, December 2001), Design Criteria for Textile Tubes as Flood Protection Barriers, supported by NSF and Teaching Assistant
- Aviv Ozari, Chemistry, (December 2001), Sorption of Organic Contaminants with Paper Clay, supported by PITA and Teaching Assistant.
- Gina Gonzalez, Civil and Environmental Engineering, (December 2003), Recycling Reclaimed Portland Cement Concrete, supported by Penn DOT

### **Other Ph.D. Dissertation Committee Service**

Served on committees for 3 Ph.D. students.

### **Undergraduate Research Supervision**

- Garvin Prescod (6/05-8/05)

- Scott Gonsar (8/98-5/99)
- Eric August (8/98-5/99)
- Kino Vittet (12/98-8/99)
- Michael Wolfe (8/97-5/98)
- Jennifer Polaski (8/97-5/98)
- Amanda Amadon (8/97-5/98)
- Chris Wheri (6/99-5/00)
- Heritit Hailesallasie (1/99-5/02)
- Brian Merritt (5/99-12/99)
- Rudon Showers (Morgan State University) (5/99-8/99)
- Ian Bass (University of Delaware) (5/99-8/99)
- John Perrotta (1/99-5/00)
- Ehinah Malano (5/98-8/98)
- Arsenio Padovano (5/98-8/98)
- Kwadwo Gyamfi Osafo-Mafo (5/00-present)
- Anastasia Kamera (8/00-5/02)
- Chris Budesza (8/00-5/02)
- Keith Ciceron (8/00-5/01)
- Katie Scheinderlein (8/00-5/01)
- Jennifer O'Connell (8/00-5/01)
- Adifia Bristol (1/01-5/01)
- Sheldon Richards (Morgan State University) (6/01-8/01)
- Adam Koscke (6/01-8/01)

## **University Service**

### California State University, Los Angeles

- Dean's Council
- Graduation Initiative
- Presidential Advisory Committee on Enrollment Management
- College Equity and Diversity Officer
- University Baseline Technology Committee
- California State University Biotechnology Council
- University Budget Committee

### Villanova University

- Graduate Committee Chair
- University Graduate Marketing Committee
- Ph.D. Committee Chair
- College of Engineering Leadership Council
- College of Engineering Research Council
- University Committee on Intellectual Climate
- Management of Technology Committee Chair in Engineering

## Lehigh University

- Graduate Outreach Committee
- Department Seminar Committee
- American Society of Civil Engineers Faculty Advisor, 1997-present
- Engineering 2 Department Tour
- April's Candidate's Day
- Upper-class Parent's Weekend
- Faculty guide, MOLE's field Trip to New York City, 1997-present
- Faculty Contact for Shallow Foundation Design Seminar with Lehigh Valley Section of ASCE
- Faculty Contact for Highway Capacity Analysis Seminar with Lehigh Valley Section of ASCE
- Advisor to National Society of Black Engineers, 1996-present
- Freshman Advising, 1997-2001
- Business College of Business and Economics Representative for CEAS (1999-2000)
- Guide, Candidates Day, April 1997-1998
- Asian American Perspective Weekend Luncheon February 25, 1999
- African American Perspective Weekend Luncheon March 1999
- Students Are Ready (STAR) Executive Board Member
- Lehigh Valley Science Fair Tour Guide
- Represented Lehigh University the Graduate School Fair at the National Society of Black Engineer Conference in Kansas City, MO
- Represented Lehigh University at United States Black Engineer of the Year Award Conference's Career Fair
- To Recruit Graduate and Undergraduate Engineers. Set up a Booth at the Career Fair February 2000.
- Represented Lehigh University the Graduate School Fair at the
- National Society of Black Engineer Conference in Charlotte, NC., March 21-26, 2000.
- Represented Lehigh University at the Greater Baltimore Graduate Career Fair.