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[http://www.ce.nkust.edu.tw/about\\_team\\_info.php?id=177](http://www.ce.nkust.edu.tw/about_team_info.php?id=177)

[http://www.ce.nkust.edu.tw/upload/ckeditor/files/Hsiao%2C%20D\\_H\\_-20220725.pdf](http://www.ce.nkust.edu.tw/upload/ckeditor/files/Hsiao%2C%20D_H_-20220725.pdf)

Prof. Hsiao received academic degrees from B.S. in Civil Engineering in 1981, M.S. in Geotechnical Engineering Group in 1983, and Ph.D. in Civil Engineering in 1996, respectively (National Cheng-Kung University, Tainan, Taiwan). He has worked for 40 years at the Department of Civil Engineering, National Kaohsiung University of Sciences and Technology. He also earned the Outstanding Teaching Award (2007) and the Outstanding Class Teacher Award (2006). Since joining the University, Prof. Hsiao has worked on over 50 research projects, received four patents, and written more than 100 academic papers and professional plan reports from various fields, including pipeline analysis in seismic, soil liquefaction, slope stability and soil debris, risk analysis, and soil improvement, including a case study in the site, laboratory, and numerical researches. To obtain experience in the field, he also earned a Professional Engineer in Civil Engineering and Geotechnical Engineering in Taiwan. In the past, Prof. Hsiao has served as a guest editor of special issues of Sustainability (2022). Prof. Hsiao also served as a civil architecture branch general editor of the Journal of Technology (2012-2021), sponsored by the Ministry of Education of ROC in Taiwan.

#### **Paper Published: (2012-2024)**

1. **Darn-Horng Hsiao** and Chia-Sheng Hsieh, “A Simplified Model to Predict the Repeated Shear Strain during the Cyclic Triaxial Test by Using an Elastic Coefficient-Damping Ratio System,” Appl. Sci., 14, 4178. <https://doi.org/10.3390/app14104178> (SCI) (2024).
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3. **Darn-Horng Hsiao** and Chung-Chieh Lin, “Effects of the Properties of Fines on the Pore Water Pressure Generation Characteristics of Sand-Silt-Clay Mixtures during Cyclic Loading,” Appl. Sci. 2023, 13, 8126. <https://doi.org/10.3390/app13148126> (2023). (SCI)
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8. **Darn-Horng Hsiao**, Hung-Hui Li, Li-Ni Su, Yao-Wen Liang, "Effect of particle gradation on void ratio of gravel soils by DEM," *Proceeding of the 19<sup>th</sup> conference on current researches in geotechnical engineering in Taiwan* (2022).
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12. **Darn-Horng Hsiao**, Chun-Hui Lu, You-Wei Li, "Physical properties analysis on soil engineering properties of the soils in Kaohsiung," *Proceeding of the 18<sup>th</sup> conference on current researches in geotechnical engineering in Taiwan* (2020).
13. **Darn-Horng Hsiao**, Zhu-Yun Zheng, "Simplified Empirical Method for Predicting Liquefaction Potential and Its Application to Kaohsiung Areas in Taiwan" *Geotechnical and Geological Engineering*, Vol:13, No:7, pp.482-490, (2019). (SCI)
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15. Li-Jeng Huang, **Darn-Horng Hsiao**, "On the regression of the velocity distribution of debris flows using machine learning techniques," *7th International Conference on Debris-Flow Hazards Mitigation*, 7th International Conference on Debris-Flow Hazards Mitigation, pp.307-714, USA (2019).
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18. **Darn-Horng Hsiao**, "On ultimate bearing capacity for the sands post liquefaction," *The 14th National Conference on Structural Engineering/The 4th National Conference on Earthquake Engineering Taichung, Taiwan, 6-8 November*, (2018).
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37. Huan-Lin Luo, **Darn-Horng Hsiao**, Deng-Fong Lin, and Cong-Kai Lin, “Cohesive Soil Stabilized Using Sewage Sludge Ash/Cement and Nano Aluminum Oxide,” *International Journal of Transportation Science and Technology*, Vol. 1, No. 1, pp. 83-100 (2012).  
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1. **Darn-Horng Hsiao**, Evaluations of the behaviors induced by deep excavation in gravel in Taoyuan using special measurements and its feedback analysis, Funding by NSTC, Final Report, National Kaohsiung University of Science and Technology, MOST-110-2637-E-151-992-002 (2022-2023).
2. **Darn-Horng Hsiao**, Soil Liquefaction Potential Area Intermediate Map Constructed and Geological Improvement Plan in Yunlin County Phase I - Part of Dynamic Triaxial Test, Funding by CTCI Resources Engineering Inc., Final Report, National Kaohsiung University of Science and Technology (2020).
3. **Darn-Horng Hsiao**, Research on the Mix Ratio for Sliding Material Used for Reducing Friction Resistance of Pressured Sinking Caisson, Funding by CTCI Inc., Final Report, National Kaohsiung University of Science and Technology (2020).
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15. **Darn-Horng Hsiao**, Research on Practical Courses of Ecological Engineering for University Students Majoring in Civil Engineering, Funding by NSC, Final Report, National Kaohsiung University of Science and Technology, NSC-94-2516-S-151-007 (2005-2006).
16. **Darn-Horng Hsiao**, Improving and Uplift Fundamental Education for University Students - Disaster Prevention and Sustainability, E-74(II), Funding by Department of Education, Final Report, National Kaohsiung University of Science and Technology (2005).
17. **Darn-Horng Hsiao**, Application of Laser Technology on Simulating Deep-Excavation System, Funding by NSC and Sanlien Technology Co., Final Report, National Kaohsiung University of Science and Technology, NSC-93-2622-E-151-016-CC3 (2004-2005).
18. **Darn-Horng Hsiao**, On the Dynamic Characteristics of the Soils behind the Flexural Wall for Waterfront Engineering when Subjected to Cyclic Loadings II, Funding by NSC, Final Report, National Kaohsiung University of Science and Technology, NSC-93-2211-E-151-002 (2004-2005).

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26. **Darn-Horng Hsiao**, A Technique to Prevent Soil Loss of Coastal Soil behind Retaining Wall Subjected to Wave Loadings, Funding by NSC, Final Report, National Kaohsiung University of Science and Technology, NSC-90-2211-E-151-008 (2001-2002).
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31. **Darn-Horng Hsiao**, Identification of the Cause of Water Seepage in the Basement from Neighboring House on the West Side of Fusing 1<sup>st</sup> Road, Sinsing District, Kaohsiung City, Funding by Funding by Water Resources Bureau, Kaohsiung City Government, Final Report, National Kaohsiung University of Science and Technology (2000).