

## 郭安妮 副教授 On-Lei Annie Kwok

### Associate Professor

學歷/美國加州大學洛杉磯分校博士

### **Ph.D. in Civil & Envir. Engr., Univ. of California, Los Angeles**

專長/ 大地地震工程包括土壤力學、地震波分析及特性描述、土壤對地震波的影響

Geotechnical Earthquake Engineering including Soil Dynamics.

Ground Motion Characterization and Site Response Analysis

### 期刊論文 (Journal papers)

1. David M. Weidinger, Honghua Zhao, Annie On-Lei Kwok, Xin Kang & Louis Ge (2019). Small strain moduli of compacted silt by ultrasonic pulse velocity measurements. *Marine Georesources & Geotechnology*, DOI: 10.1080/1064119X.2019.1657209. SCI
2. Chien-Ting Sun, On-Lei Annie Kwok, Pai-Chen Guan, and Wen-Kai Shih (2018). Using Reproducing Kernel Particle Method for Shallow Water Problems. *Journal of Marine Science and Technology*, 26 (3), 431-440. SCI
3. OLA Kwok, JP Stewart, DY Kwak, and PL Sun (2018). Taiwan-Specific Model for VS30 Prediction Considering Between-Proxy Correlations. *Earthquake Spectra*, 34 (4), 1973-1993. SCI
4. CT Sun, PC Guan, WK Shih, OLA Kwok (2018). The weighted reconstruction of reproducing kernel particle method for one-dimensional shock wave problems. *Ocean Engineering*, 149, 325-340. SCI
5. PC Guan, OL Kwok, WC Yao, YF CHen, JS Li, YL Chen, LC Chen, HH Chou (2017). The Development of Transformation Interface Program Between AVEVA Marine Data Base and Finite Element Method. *Journal of Taiwan Society of Naval Architects and Marine Engineers*, 36 (4), 179-188. EI
6. X. Kang, L. Ge, K.T. Chang, A.O.L. Kwok (2016). Strain-Controlled Cyclic Simple Shear Tests on Sand with Radial Strain Measurements. *Journal of Materials in Civil Engineering*, 28 (4). SCI

### 研討會論文 (Conference papers)

1. C.C Yao, and O.L.A. Kwok (2019, Oct). Site Response at the Vertical Arrays in the Taiwan Surface Downhole Monitoring Network. The 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea, Daejeon, Korea. 本人為通訊作者.
2. Jia Ren Liu and On Lei Annie Kwok (2019, Oct). Experimental Investigation of Soil Behavior of Partially Saturated Penghu Calcareous Sand. The 32nd KKHTCNN Symposium on Civil

- Engineering, October 24-26, 2019, Daejeon, Korea, Daejeon, Korea. 本人為通訊作者.
3. On Lei Annie Kwok, Jia Ren Liu and Chia Ying Lien (2019, Sep). Liquefaction Resistance of Penghu Calcareous Sand. International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19, 2019, Taipei, Taiwan. 本人為第一作者、通訊作者.
4. On Lei Annie Kwok, Zhi Rong Yang, and Chun Chieh Yao (2019, Sep). Numerical Study of Ground Response for Sites with Inclined Layers . International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19, 2019, Taipei, Taiwan. 本人為第一作者、通訊作者.
5. OLA Kwok, PC Guan, CT Sun (2018, Jul). Numerical Investigation of Stability of Submarine Pipelines Subjected to Wave/Current-Induced Scour Using RKPM Method. 13TH World Congress on Computational Mechanics , New York, USA. 本人為第一作者、通訊作者.
6. AOL Kwok, YW Hwang, ML Lee (2018, Jun). Numerical Simulation of Site Effect Due to Inclined Bedrock on Seismic Ground Motion. 11th US National Conference on Earthquake Engineering, Los Angeles, USA. 本人為第一作者、通訊作者.
7. T. Kishida, V. Contreras, Y. Bozorgnia, N. A. Abrahamson, S. K. Ahdi, T. D. Ancheta, D. M. Boore, K. W. Campbell, B. Chiou, R. Darragh, N. Gregor, N. Kuehn, D. Y. Kwak, A. O. Kwok, P. Lin, H. Magistrale, S. Mazzoni, S. Muin, S. Midorikawa, H. Si, W. J. Silva, J. P. Stewart, K. E. Wooddell, R. R. Youngs (2018, Jun). NGA-SUB Ground Motion Database. 11th National Conference on Earthquake Engineering, Los Angeles, USA.
8. Y. Bozorgnia, T. Kishida, N.A. Abrahamson, S.K. Ahdi, T D. Ancheta, R.J. Archuleta, G. Atkinson, D. M. Boore, K. W. Campbell, B. Chiou, V. Contreras, R. Darragh, N. Gregor, Z. Gulerce, I.M. Idriss, C. Ji, R. Kamai, N. Kuehn, D. Y. Kwak, A. Kwok, P.S. Lin, H Magistrale, S. Mazzoni, S. Muin, S. Midorikawa, G. Parker, H Si, W.J. Silva, J.P. Stewart, M. Walling, K. E. Wooddell, R. R. Youngs (2018, Jun). NGA-Subduction Research Program. 11th National Conference on Earthquake Engineering, Los Angeles, USA.
9. OLA Kwok, CY Lien (2017, Nov). Determination of Small-strain Dynamic Shear Modulus and Damping Ratio of Penghu Calcareous Sand by Resonant Column Test. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan. 本人為第一作者、通訊作者.
10. OLA Kwok, ML Lee, YW Huang, WA Chang (2017, Nov). Numerical Study of Ground Response of Sites with Inclined Bedrock. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan. 本人為第一作者、通訊作者.
11. OLA Kwok, BH Ye, WA Chang (2017, Aug). A Study of Maximum Shear Modulus of Sands Containing Fines by Bender Element Tests. 第十七屆大地工程學術討論會, Yilan, Taiwan. 本人為第一作者、通訊作者.
12. OLA Kwok, CH Hung, YT Lu (2017, Aug). Determination of Small-Strain Dynamic Shear Modulus and Damping Ratio of Laterite from Linkou Tableland by Resonant Column Tests. 第十七屆大地工程學術討論會, Yilan, Taiwan. 本人為第一作者、通訊作者.
13. OLA Kwok, PC Guan, CT Sun (2017, Jul). Modeling of Flow and Scouring under Pipelines by

- Reproducing Kernel Particle Method. 14th U.S. National Congress on Computational Mechanics , Montreal, Canada. 本人為第一作者、通訊作者.
14. PC Guan, OLA Kwok, CT Sun (2017, May). Keynote Speech: Development of fluid-solid interacting reproducing kernel particle method for the modeling of flow and scouring under pipelines.. Engineering Mechanics Institute Conference, Taiwan.
15. SK Ahdi, TD Ancheta, V Contreras, T Kishida, DY Kwak, OLA Kwok, GA Parker, Y Bozorgnia, JP Stewart (2017, Jan). NGA-Subduction site database. 16WCEE World Conference Earthquake Engineering, Santiago, Chile.
16. T. Kishida, Y. Bozorgnia, N. Abrahamson, S. Ahdi, T. Ancheta, D. Boore, K. Campbell, B. Chiou, R. Darragh, N. Gregor, R. Kamai, D. Kwak, OLA. Kwok, P. Lin, H. Magistrale, S. Midorikawa, G. Parker, H. Si, W. Silva, J. Stewart, C. Tsai, K. Wooddell, R. Youngs (2017, Jan). Development of the NGA-Subduction Database. 16th World Conference on Earthquake, Santiago, Chile.
17. O.L.A Kwok, B.-H. Ye (2016, Dec). A study of dynamic properties of sands containing fines. 29th KKHTCNN Symposium on Civil Engineering, Hong Kong. 本人為第一作者、通訊作者.
18. O.L.A. Kwok, C.-H. Hung (2016, Dec). Determination of small-strain dynamic shear modulus and damping ratio of laterite in Linkou Tableland by resonant column test. 29th KKHTCNN Symposium on Civil Engineering, Hong Kong. 本人為第一作者、通訊作者.
19. O.L.A. Kwok, Y.-C, Li (2016, Sep). Determination of Small-strain Dynamic Shear Modulus and Damping Ratio of Calcareous Sand by Resonant Column Tests. 7th Japan-Taiwan Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall , PingTung, Taiwan. 本人為第一作者、通訊作者.
20. O.L.A Kwok, B.-J. Chen (2016, Aug). Evaluation of Site Effect at Surface-Downhole Ground Motion Stations in Taiwan by Nonlinear Ground Response Analyses. 5th IASPEI / IAEE International Symposium: Effects of Surface Geology on Seismic Motion, Taipei, Taiwan. 本人為第一作者、通訊作者.
21. P.C. Guan, C.-T. Sun,O.L.A. Kwok (2016, Jul). Modeling of Offshore Foundation with Dynamic Wave Loading Using Reproducing Kernel Particle Method. 12th World Congress on Computational Mechanics, Seoul, Korea.

## 技術報告(Technical reports)

1. 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志（2020 年 11 月）。核能電廠耐震先導技術研發計畫期末報告,子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。
2. 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、陳北亭（2019 年 08 月）。核能電廠耐震先導技術研發計畫第三次期中報告,子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。

3. 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、許雅涵、黃郁惟、劉佳泓（2018 年 08 月）。核能電廠耐震先導技術研發計畫第二次期中報告,子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。
4. 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、許雅涵、黃郁惟、劉佳泓（2017 年 08 月）。核能電廠耐震先導技術研發計畫第一次期中報告,子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。。台灣電力股份有限公司委託之研究計畫(027050000101)。