

Curriculum Vitae

Professor Tso-Ren Wu

Tel: +886-3-4227151 #65687

Email: tsoren@ncu.edu.tw



Education

2004	Ph.D.	Civil and Environmental Engineering, Cornell University (USA)
1994	MS	Department of Civil Engineering, National Central University
1992	BS	Soil and Water Conservation, National ChungHsing University

Positions Held

2022-present	Director, Interdisciplinary Program of Earth System Science, NCU
2021-present	Professor, IHOS, NCU
2017-2021	Associate Vice President for International Affairs, NCU
2014-2017	Director, IHOS, NCU
2013-2021	Associate Professor, IHOS, NCU
2006-2013	Assistant Professor, IHOS, NCU
2004-2006	Postdoctoral Fellow, Cornell University (USA)

Honors and Awards

2022	Award for Outstanding Research Faculty of National Central University
2019-2020	Award for Outstanding Research Faculty of National Central University
2018-2019	Award for Outstanding Teaching Faculty of National Central University
2017	Rewards certificate of merit, Director of general department of natural disaster prevention and control ministry of agriculture and rural development
2017	Award for Outstanding Contribution by the Atomic Energy Council
2016	Award for excellence performance in project funded by the Atomic Energy Council
2016	Award for Outstanding Research Faculty of National Central University
2015	Invited speaker by UNESCO on tsunami numerical modeling
2012	Invited speaker by UNESCO on tsunami numerical modeling
2010	Award for excellence performance in project funded by the ministry of Education

Research Interests

- Tsunami Science, Local Scour Simulation
- Storm Surge Simulation
- 3D Numerical Modeling
- Two-way Coupled Moving-Solid Model
- Landslide and Debris Flow Simulation

Publication Lists

1. Chu, Chia-Ren, Tso-Ren Wu*, Yuan-Fu Tu, Shun-Kai Hu, and Chia-Lin Chiu, "Interaction of two free-falling spheres in water," *Physics of Fluids*, 32, 033304 March 2020. (SCI)
2. Liu, Jann-Yenq, CHI-YEN LIN, Yuh-Ing Chen, Tso-Ren Wu, Meng-Ju Chung, Tien-Chi Liu, Yu-Lin Tsai, Loren C. Chang, Chi-Kuang Chao, Dimitar Ouzounov and Katsumi Hattori, "The Source Detection of 28 September 2018 Sulawesi Tsunami by Using Ionospheric GNSS Total Electron Content Disturbance," *Geoscience Letters*, 7(1), 11(1-7), August 2020. (SCI)
3. Wu, Tso-Ren*, Thi-Hong-Nhi Vuong, Chun-Wei Lin, Chun-Yu Wang, Chia-Ren Chu, "Modeling the Slump-type Landslide Tsunamis part I: Developing a Three-Dimensional Bingham-type Landslide Model," *Applied Sciences-Basel*, 10(18), 6501, September 2020. (SCI)
4. Vuong, Thi-Hong-Nhi, Tso-Ren Wu*, Chun-Yu Wang, Chia-Ren Chu, "Modeling the Slump-type Landslide Tsunamis part II: Numerical Simulation of Tsunamis with Bingham Landslide Model," *Applied Sciences-Basel*, 10(19), 6872, December 2020. (SCI)
5. Yen, Eric*, Simon C. Lin, Tso-Ren Wu, Yu-Lin Tsai, "Knowledge-Building Approach for Tsunami Impact Analysis Aided by Citizen Science," *Frontiers in Earth Science*, section Solid Earth Geophysics, 8, 315, October 2020. (SCIE)
6. Tsai, Yu-Lin, Tso-Ren Wu*, Chuan-Yao Lin, Simon C. Lin, Eric Yen and Chun-Wei Lin, "Discrepancies on Storm Surge Predictions by Parametric Wind Model and Numerical Weather Prediction Model in a Semi-Enclosed Bay: Case Study of Typhoon Haiyan," *Water*, 12(12), 3326, November 2020. (SCI)
7. Wu, Tso-Ren*, Hong-Yueh Lo, Yu-Lin Tsai, Li-Hung Ko, Mei-Hui Chuang, Philip L.-F. Liu, "Solitary Wave Interacting with a Submerged Circular Plate," *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 147(1), January 2021. (SCI)
8. Yang, Jie*, Chuan-yao Lin, Haijiang Liu, Linlin Li, Tso-Ren Wu, Peitao Wang, Benxia Li and Philip L.-F. Liu, "Effects of Island Topography on Storm Surge in Taiwan Strait during Typhoon Maria," *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 147(2), March 2021. (SCI)
9. Chu, Chia-Ren*, Truc Thi Thu Tran, Tso-Ren Wu, "Numerical Analysis of Free-surface Flows over Circular-Crested Dams," *Water* 2021, 13(9), 1271, April 2021. (SCI)
10. Chu, C.-R.*, Huynh, L.E. and Wu, T.-R., "Large eddy simulation of the wave loads on submerged rectangular decks," *Applied Ocean Research*, 120, 103051, January 2022. (SCI)
11. Tsai, Yu-Lin, Tso-Ren Wu*, Eric Yen, Chuan-Yao Lin, Simon C. Lin, "Parallel-Computing Two-Way Grid-Nested Storm Surge Model with Moving Boundary Scheme and Case Study of 2013 Super Typhoon Haiyan," *water*, 14(4), 547, February 2022. (SCI)
12. Haekal Azief Haridhi, Bor-Shouh Huang, Kuo-Liang Wen, Arif Mirza, Syamsul Rizal, Syahrul Purnawan, Ilham Fajri, Frauke Klingelhoefer, Char Shine Liu, Chao Shing Lee, Crispen R. Wilson, Tso-Ren Wu, Ichsan Setiawan, and Van Bang Phung, "Tsunami scenario triggered by submarine landslide offshore of northern Sumatra Island and its hazard assessment," *Nat. Hazards Earth Syst. Sci. Discuss.* [preprint], in review, 2022. (SCI)
13. Liu, Tien-Chi, Tso-Ren Wu, and Shu-Kun Hsu, "Historical tsunamis of Taiwan in the 18th century: the 1781 Jiateng Harbor flooding and 1782 tsunami event," *Nat. Hazards Earth Syst. Sci.*, 22, 2517–2530, August 2022. (SCI)