

## Curriculum Vitae of Wan-Ju Liao

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**Education**

Ph. D., Department of Architecture, National Taiwan University of Science and Technology, Taiwan.

**List of Publications (~2019):**

**Journal**

1. WJ Liao, 2016, The Implementation of wind power pressure pump and application for building water supply systems, *Architecture Science*, No 13, pp. 1-12, June.2016, ISBN: 22191577.
2. W.J. Liao, C.W. Chen, 2016, Model for estimating optimum numbers of public lavatories in MRT stations. *Architecture Science*. No 14, pp.1-14, December 2016, ISBN:22191577.
3. Cheng-Li Cheng, Jr-Jie Peng, Ming-Chin Ho, Wan-Ju Liao and Szu-Jen Chern, 2016, Evaluation of Water Efficiency in Green Building in Taiwan. *Water*, 2016, 8, 236; doi:10.3390/w8060236
4. CL Cheng, JJ Peng, WJ Liao and CW Chang, 2016, Relationship between building hot water usage and energy and carbon reduction (2016, Jul), *Building Service Engineering Research & Technology*, 0(0) 1 – 12 (SCI, 21/47)
5. Minami Okamoto, Ryohei Yaita, Minoru Sato, Masayoshi Kamijo, Kanako Toyosada, Yasutoshi Shimizu, Kyosuke Sakaue, Wan-Ju Liao, Meng-Chieh Lee and Cheng-Li Cheng, 2015, Comparison of the Physical Properties of Showers that the Satisfaction of Shower Feeling among Users in Three Asian Countries. *Water*, ISSN 2073-4441, 2015(7), 4161–4174. (SCI, 39/83)
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7. CL Cheng, WJ Liao, KC He, CH Hsieh and YC Liu, 2013, Empirical approach to main drain system design and solid transportation performance in buildings. *Building Service Engineering Research &*

- Technology , 34(4), 393 – 406. (SCI, 10/57, Construction & Building Technology) (2013, Oct).
8. W.J. Liao, K.W. Mui, C.L. Cheng, L.T. Wong, K.C. He, Air Pressure Fluctuations of Drainage Stacks at a High-rise Office Building, *Indoor and Built Environment*, 20.4 (2011) pp. 412 – 419
  9. CL Cheng, WJ Liao, KC He and JL Lin, 2011, Empirical study on drainage stack terminal water velocity, *Building Service Engineering Research & Technology* ,32.2(2011)pp171-181.
  10. C. L. Cheng, W. J. Liao, K. C. He, C. J Yen, A Non-Destructive Testing Method and Analysis for Air Pressure Distribution in the Stacks of Building Drainage Systems, *Proceedings of PVP2008, ASME Pressure Vessels and Piping Division Conference*, July 27–31, pp1644-1650, 2008, Chicago, Illinois, USA (EI).

### Conference

1. C.L. Cheng., C.J. Chen., W.J. Liao, 2017, Performance evaluation for same-floor drain technology in residential buildings, 2017CIBW62 43th International Symposium.
2. 曾建勳，鄭政利，廖婉茹，2017，建築空調冷卻水塔之耗水量評估與探討，臺灣建築學會第二十九屆建築研究成果發表會論文集，中華民國建築學會。
3. 黃耀慶，鄭政利，廖婉茹，2017，建築物筏基空間於雨水利用池與滯洪池之運用研究，臺灣建築學會第二十九屆建築研究成果發表會論文集，中華民國建築學會。
4. 廖婉茹，徐維君，鄭政利，2016，建築物污水處理設施使用現況調查及污泥減量之研究，臺灣建築學會第二十八屆建築研究成果發表會論文集，中華民國建築學會，台北。(ISBN 978-986-7214-33-1)
5. 金佑珊，鄭政利，陳瑞鈴，廖婉茹，譚思姍，2016，綠建築雨水利用之節水成效探討，臺灣建築學會第二十八屆建築研究成果發表會論文集，中華民國建築學會，台北。(ISBN 978-986-7214-33-1)
6. 韋理琿，鄭政利，廖婉茹，2016，醫院逆滲透放流水再利用可行性影響因子之探討，臺灣建築學會第二十八屆建築研究成果發表會論文集，中華民國建築學會，台北。(ISBN 978-986-7214-33-1)
7. 譚思姍，鄭政利，何明錦，廖婉茹，2016，綠建築用水基準與節水潛力之研究，臺灣建築學會第二十八屆建築研究成果發表會論文集，中華民國建築學會，台北。(ISBN 978-986-7214-33-1)
8. C.L. Cheng, S.C. Haung, W.J. Liao, J.J Perg ,2015, Study on the performance and application of Integrated Unit Trap in bathroom. 2015CIB-W62 41th International Symposium, Beijing, China.

9. C.L. Cheng, S.G. Chang, W.J. Liao, J.J. Perg, Y.S. Jing, 2015, Evaluation model and baseline of water efficiency for green building in Taiwan. 2015CIBW62 41th International Symposium, Beijing, China.
10. Wan-Ju Liao, 2014, The study on the application of wind power pressure pump for building water supply systems, Proceedings of 1st South East European Conference on Sustainable Development of Energy, Water and Environment Systems-SEE SDEWES, Ohrid city, Republic of Macedonia.
11. C.L. Cheng, H.C. Chen, W.J. Liao, 2014, The potential of saving water strategy for reduction of CO<sub>2</sub> emission in building design. Proceedings of 1st South East European Conference on Sustainable Development of Energy, Water and Environment Systems-SEE SDEWES, Ohrid city, Republic of Macedonia.
12. C.L. Cheng, C. W. Chang, W.J. Liao, 2014, Evaluation on energy consumption and carbon reduction of building hot water system,. 2014 CIB-W62 40th International Symposium,, Sao Paulo, Brazil
13. C.L. Cheng, C.H. Lo, W.J. Liao, 2014, Evaluation of Renewal and Maintenance for Drainage System in Existing Building,. 2014 CIB-W62 40th International Symposium, Sao Paulo, Brazil.
14. Wan-Ju Liao, 2014, A Study of Microbial Decomposition Utilized for Purification of Building Sewage Water, ,The Third Asian Saving Water Symposium in Hanoi.
15. C.L. Cheng, H.C. Chen, Y. Shimizu, K. Toyosada, W.J. Liao, 2013, A proposal for Asia Water Saving Guideline from the vision of CO<sub>2</sub> reduction potential. CIB-W62 39th International Symposium, Nagano, Japan.
16. C.L. Cheng, W.J. Liao, Y.C. Liu, Y.C. Tseng, H.C. Chen, 2012, Evaluation model of CO<sub>2</sub> emission for saving water strategy in buildings. CIB-W62 International Symposium, Edinburgh, UK.
17. H.C. Chen, C.L. Cheng, W.J. Liao, Y.C. Liu, S.C. Chung, 2012, Research of Optimal Design for Lavatory Number in Factory. CIB-W62 International Symposium.
18. S.C. Chung, C.L. Cheng, W.J. Liao, H.J. Chen, 2012, Study on new style seal trap and application in building drainage system. CIB-W62 International Symposium.
19. Y.C. Chung, C.L. Cheng, W.J. Liao, H.C. Chen, 2012, The performance standard on the new style trap, 2nd International Symposium on Plumbing System in East Asia. , Taipei, Taiwan.
20. C.L. Cheng, W.J. Liao, 2011, Current situation and sustainability of water resource in Taiwan. International Symposium of 1st Asian Water Saving Council.

21.C.L. Cheng, K.C. He, W.J. Liao, C.H. Hsieh,2010,Research of main drain system and solid transportation performance in existing buildings” ,CIB-W62 Symposium, Sydney, Australia

22.W.L. Woo, K. W. Mui , C.L. Cheng, L. T. Wong, W. J. Liao, 2010,Measurement of air pressure fluctuations at lower levels in high-rise drainage stack, CIB-W62 International Symposium, Sydney, Australia.

### **專書/章節**

- 1.廖婉茹執行編者及撰文 (2018 年 01 月),「2017 綠建築在臺灣-第九屆優良綠建築作品專輯」,內政部建築研究所出版。(ISBN : 978-986-05-5257-7)
- 2.廖婉茹主編及撰文 (2016 年 2 月),「2015 綠建築在臺灣-第八屆優良綠建築作品專輯」,內政部建築研究所出版。(ISBN : 978-986-04-8056-6)
- 3.廖婉茹主編及撰文 (2013 年 12 月),「2013 綠建築在臺灣-第七屆優良綠建築作品專輯」,內政部建築研究所出版。(ISBN : 978-986-04-0393-0)