

**Professor CHAU, Kwok-wing
CV**

ACADEMIC QUALIFICATIONS

B.Sc.(Eng.) in Civil Engineering (with First Class Honours)	University of Hong Kong
M.Sc.(Eng.) in Civil Engineering (with Distinction)	University of Hong Kong
M.Phil.	University of Hong Kong
Ph.D.	University of Queensland

PROFESSIONAL QUALIFICATIONS

Chartered Engineer
Corporate Member of the Hong Kong Institution of Engineers
Corporate Member of the Institution of Civil Engineers, UK
Corporate Member of the Institution of Structural Engineers, UK

PROFESSIONAL EXPERIENCE

Jul 2010 - present Professor, Department of Civil & Environmental Engineering,
Hong Kong Polytechnic University

FULL PUBLICATION LIST

BOOKS

1. Chau, K.W., "Modelling for Coastal Hydraulics and Engineering," Spon Press (Taylor & Francis), UK, 2010, 240pp. (ISBN: 978-0-415-48254-7)
2. Chau, Kwok-wing and Wu, Cong-lin, "Hydrological Predictions: Using Data-Driven Models Coupled with Data Preprocessing Techniques," LAP LAMBERT Academic Publishing, Germany, 2010, 248pp. (ISBN: 978-3-8433-6446-1) (cited 3 times)
3. Chau, Kwok-wing, "Knowledge-Based System for Analysis and Design of Liquid Retaining Structures," Nova Science Publishers, USA, 2011, 159p. (ISBN: 978-1-61209-550-9)

JOURNAL PUBLICATIONS

SCI Journals

1. Chau, K.W. and Lee, J.H.W., "Mathematical modelling of Shing Mun River network," *Advances in Water Resources*, Vol. 14, No. 3, 1991, pp. 106-112. (grade A journal) (cited 32 times)

2. Chau, K.W. and Lee, S.T., "Computer-aided design package RCTANK for the analysis and design of reinforced concrete tanks," *Computers and Structures*, Vol. 41, No. 4, 1991, pp. 789-799. (grade A journal) (cited 5 times)
3. Chau, K.W., "User-friendly PC-based design package for gravity-type seawalls," *Journal of Waterway, Port, Coastal and Ocean Engineering, ASCE*, Vol. 118, No. 3, 1992, pp. 267-279. (grade B journal) (cited 1 time)
4. Chau, K.W., "An expert system for the design of gravity-type vertical seawalls," *Engineering Applications of Artificial Intelligence*, Vol. 5, No. 4, 1992, pp. 363-367. (grade A journal) (cited 23 times)
5. Chau, K.W., "Resolving construction disputes by mediation: Hong Kong experience," *Journal of Management in Engineering, ASCE*, Vol. 8, No. 4, 1992, pp. 384-393. (grade A journal) (cited 18 times)
6. Chau, K.W., "A robust computer-aided design package for municipal stormwater drainage networks," *Advances in Engineering Software*, Vol. 15, No. 1, 1992, pp. 43-53. (grade B journal) (cited 2 times)
7. Chau, K.W. and Yang, Wen-wu, "A knowledge-based expert system for unsteady open channel flow," *Engineering Applications of Artificial Intelligence*, Vol. 5, No. 5, 1992, pp. 425-430. (grade A journal) (cited 19 times)
8. Sin, Y.S. and Chau, K.W., "Eutrophication studies on Tolo Harbour, Hong Kong," *Water Science and Technology*, Vol. 26, No. 9-11, 1992, pp. 2551-2554. (grade C journal) (cited 17 times)
9. Chau, K.W. and Sin, Y.S., "Correlation of water quality parameters in Tolo Harbour, Hong Kong," *Water Science and Technology*, Vol. 26, No. 9-11, 1992, pp. 2555-2558. (grade C journal) (cited 12 times)
10. Chau, K.W., "Management of limited water resources in Hong Kong," *International Journal of Water Resources Development*, Vol. 9, No. 1, 1993, pp. 65-73. (grade C journal) (cited 8 times)
11. Pau, S.H., Chau, K.W. and Wong, W.G., "Prospects for no-dig technology in Hong Kong construction industry," *Journal of Construction Engineering and Management, ASCE*, Vol. 119, No. 3, 1993, pp. 550-559. (grade A journal) (cited 2 times)
12. Chau, K.W. and Yang, Wen-wu, "Development of an integrated expert system for fluvial hydrodynamics," *Advances in Engineering Software*, Vol. 17, No. 3, 1993, pp. 165-172. (grade B journal) (cited 27 times)
13. Chau, K.W. and Yang, Wen-wu, "Structuring and evaluation of VP-expert based knowledge bases," *Engineering Applications of Artificial Intelligence*, Vol. 7, No. 4, 1994, pp. 447-454. (grade A journal) (cited 12 times)
14. Chau, K.W., "Computer-aided design of gravity type vertical seawall," *Advances in*

- Engineering Software*, Vol. 19, No. 1, 1994, pp. 33-40. (grade B journal)
15. Chau, K.W. and Ng, S.L., "A robust integrated computer-aided design package for urban drainage networks," *Water Science and Technology*, Vol. 30, No. 1, 1994, pp. 117-120. (grade C journal) (cited 2 times)
 16. Pau, S.H., Chau, K.W. and Wong, W.G., "Closure for the prospects for no-dig technology in Hong Kong construction industry," *Journal of Construction Engineering and Management*, ASCE, Vol. 121, No. 1, 1995, pp. 160-163. (grade A journal)
 17. Chau, K.W., "Integrated CAD package for storm-water drainage networks," *Journal of Water Resources Planning and Management*, ASCE, Vol. 121, No. 4, 1995, pp. 336-339. (grade B journal) (cited 2 times)
 18. Chau, K.W. and Zhang, X.N., "An expert system for flow routing in a river network," *Advances in Engineering Software*, Vol. 22, No. 3, 1995, pp. 139-146. (grade B journal) (cited 29 times)
 19. Chau, K.W. and Jin, H.S., "Numerical solution of two-layer, two-dimensional tidal flow in a boundary-fitted orthogonal curvilinear co-ordinate system," *International Journal for Numerical Methods in Fluids*, Vol. 21, No. 11, 1995, pp. 1087-1107. (grade B journal) (cited 26 times)
 20. Chau, K.W., Jin, H.S. and Sin, Y.S., "A finite difference model of two-dimensional tidal flow in Tolo Harbor, Hong Kong," *Applied Mathematical Modelling*, Vol. 20, No. 4, 1996, pp. 321-328. (grade A journal) (cited 28 times)
 21. Chau, K.W. and Ng, Vitus, "A review of design practices of thrust blocks for water pipelines in Hong Kong," *Journal of Water Supply Research and Technology - Aqua*, Vol. 45, No. 2, 1996, pp. 92-95. (grade C journal)
 22. Chau, K.W. and Ng, Vitus, "A knowledge-based expert system for design of thrust blocks for water pipelines in Hong Kong," *Journal of Water Supply Research and Technology - Aqua*, Vol. 45, No. 2, 1996, pp. 96-99. (grade C journal) (cited 24 times)
 23. Chau, K.W. and Jin, H.S., "Eutrophication model for a coastal bay in Hong Kong," *Journal of Environmental Engineering*, ASCE, Vol. 124, No. 7, 1998, pp. 628-638. (grade B journal) (cited 42 times)
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29. Chau, K.W. and Chen, W., "An example of expert system on numerical modelling system in coastal processes," *Advances in Engineering Software*, Vol. 32, No. 9, 2001, pp. 695-703. (grade B journal) (cited 32 times)
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31. Cheng, Chuntian and Chau, K.W., "Fuzzy iteration methodology for reservoir flood control operation," *Journal of the American Water Resources Association*, Vol. 37, No. 5, 2001, pp. 1381-1388. (grade B journal) (cited 63 times)
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- the Pearl River delta,” *Chemosphere*, Vol. 52, No. 9, 2003, pp. 1615-1621. (grade A journal) (cited 23 times)
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 62. Chau, K.W., “Toxic organic pollution in environment of Pearl River Estuary in Southern China,” *Toxicology and Applied Pharmacology*, Vol. 197, No. 3, 2004, pp. 234-234. (grade C journal)
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 65. Chau, K.W., "Rainfall-runoff correlation with particle swarm optimization algorithm," *Lecture Notes in Computer Science*, Vol. 3174, 2004, pp. 970-975. (grade C journal) (cited 20 times)
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 69. Chau, K.W., "Selection and calibration of numerical modeling in flow and water quality," *Environmental Modeling and Assessment*, Vol. 9, No. 3, 2004, pp. 169-178. (grade C journal) (cited 4 times)
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85. Chau, K.W., Wu, C.L. and Li, Y.S., "Comparison of several flood forecasting models in Yangtze River," *Journal of Hydrologic Engineering, ASCE* 10 (6): 485-491 2005. (grade B journal) (cited 135 times)
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89. Chau, K.W., "Algal bloom prediction with particle swarm optimization algorithm," *Lecture Notes in Artificial Intelligence*, Vol. 3801, 2005, pp. 645-650. (grade C journal) (cited 13 times)
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94. Chau, K.W., "Prediction of construction litigation outcome - a case-based reasoning approach," *Lecture Notes in Artificial Intelligence*, Vol. 4031, 2006, pp. 548-553. (grade C journal) (cited 8 times)
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98. Chau, K.W., "Persistent organic pollution characterization of sediments in Pearl River estuary," *Chemosphere*, Vol. 64, No. 9, 2006, pp. 1545-1549. (grade A journal) (cited 47 times)
99. Chau, K.W., "A review on integration of artificial intelligence into water quality modelling," *Marine Pollution Bulletin*, Vol. 52, No. 7, 2006, pp. 726-733. (grade A journal) (cited 60 times)

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103. Chau, K.W., "Editorial, Special Issue on Application of Artificial Intelligence on Environmental Prediction," *International Journal of Environment and Pollution*, Vol. 28, No. 3-4, 2006, pp. 221-222. (grade B journal)
104. Muttil, N. and Chau, K.W., "Neural network and genetic programming for modelling coastal algal blooms," *International Journal of Environment and Pollution*, Vol. 28, No. 3-4, 2006, pp. 223-238. (grade B journal) (cited 142 times)
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