# Shu-Qing Yang's PUBLICATIONS:

## (a) **Books**

Guo J., Liong S.Y., Lin P., Shankar N.J., Cheong H.F. and Shu-Qing Yang, (2002). "Advances in hydraulics and water engineering" (ed.) World Scientific Publishing Co. Pte Ltd, ISBN 981-238-090-6 (set), ISBN 981-238-108-2 (Vol. 1) and ISBN 981-238-109-0 (Vol. 2), Singapore. Shu-Qing Yang (2004) "Global and China's Water Crisis and its Solutions in the 21<sup>st</sup> century" Tianjing Univ. Press, ISBN 7-5618-2069-0 (in Chinese).

## (b) Patents

- 1. Shu-Qing Yang, et al. "Coastal Reservoirs", Patent No. 200504653-7. (in Singapore).
- Shu-Qing Yang, "Water partition wall by soft pipes", Patent No.:03257886.5, (in China)
  Shu-Qing Yang, "A method of increasing the storage capacity of lake for flooding
- 3. Shu-Qing Yang, "A method of increasing the storage capacity of lake for flooding control", Patent No.: 03130017.0 (in China)
- 4. Shu-Qing Yang, "Soft curtain for water partition", Patent No.: 03257885.7 (in China)
- 5. Shu-Qing Yang, "A method for pollution control in large water bodies", Patent No. 03129750.1 (in China).
- 6. Shu-Qing Yang, "Storage and Isolation of Clean Freshwater in the sea", Patent No. ZL200510016106.1 (In China).

## (c) Papers in refereed Journals

- 1. Shu-Qing Yang (2009). "Conditionally-Averaged turbulent structures in 2-D open channel flow and wake-Law". Water Management, (in press).
- 2. Shu-Qing Yang (2009). "Influence of Sediment and Secondary Currents on Velocity". Water Management (in press).
- 3. Shu-Qing Yang (2009) "Drag reduction in turbulent flow with polymer additives". J. Fluids Engineering, ASME (In press).
- 4. Shu-Qing Yang (2009). "Velocity distribution and wake-law in gradually decelerating flows". J. Hydr. Res., IAHR. (In press).
- 5. Shu-Qing Yang (2009). "Discussion of Semi-analytical Model for Shear Stress Distribution in Simple and Compound Open Channels". J. Hydr. Engrg., ASCE. (In Press)
- 6. Pan-Wei Liu and Shu-Qing Yang (2008). "The water environmental problems would be solved after construction of sewerage drainage channel around the lake" J. Environ. Science and Technology, (in Chinese) (in press).
- 7. Shu-Qing Yang and A. T. Chow (2008). "Turbulence structures in non-uniform flows", Advances in Water Resources, 31, 1344–1351
- 8. Shu-Qing Yang and S.K. Tan (2008). "Flow resistance over mobile bed in an open-channel flow". Journal of Hydraulic Engineering, ASCE, 134(7), 937-947.
- 9. Shu-Qing Yang<sup>\*</sup> and G. Dou (2008). "Modeling of Viscoelatic turbulent flow in open channel and pipe" Physics of Fluids, American Institute of Physics, 20(6), 065105.
- 10. Shu-Qing Yang, Koh, S.C., Kim, I.S. and Song, Y.C. (2007). "Sediment transport capacity-an improved Bagnold formula". International Journal of Sediment Research, 22(1), 27-38.
- 11. Shu-Qing Yang<sup>\*</sup> (2007). "Turbulent transfer mechanism in sediment-laden flow". Journal of Geophysical Research, AGU, 112, F01005, doi: 10.1029/2005JF000452.
- 12. Shu-Qing Yang\* (2007). "Closure of Sediment transport capacity in rivers", Journal of Hydraulic Research, IAHR. 45(3), 425-428.
- 13. Shu-Qing Yang<sup>\*</sup> and J. W. Lee (2007). "Reynolds shear stress distributions in a gradually varied flow". Journal of Hydraulic Research, IAHR. 45(4), 462-471.

- 14. Shu-Qing Yang<sup>\*</sup> and S.Y. Lim (2006). "Discussion on Shear Stress in Smooth Rectangular Open-Channel Flows". Journal of Hydraulic Engineering, ASCE , 132(6), 629-631.
- 15. Shu-Qing Yang<sup>\*</sup>, S.K. Tan and S.Y. Lim (2006). "Closure of Relation between flow resistance and bed-form geometry in wide alluvial channels". Water Resources Research, AGU, 42, WR06602.
- 16. Shu-Qing Yang\* et al. (2006). "Velocity distribution in combined wave-current flows". Advances in water resources, 29(8), 1196-1208.
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- 18. Shu-Qing Yang<sup>\*</sup> and G. Dou (2005). "Drag Reduction in Flat-plate turbulent boundary layer flow by polymer additive". Physics of Fluids, American Institute of Physics.17(6), 065104
- 19. S.Y. Lim and Shu-Qing Yang<sup>\*</sup> (2005) "Simplified model of tractive-force distribution in closed conduits", Journal of Hydraulic Engineering, ASCE, 131(4), 322-329.
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- 22. Shu-Qing Yang<sup>\*</sup> and S.Y. Lim (2005), "Boundary Shear Stress Distribution in Trapezoidal Channels". Journal of Hydraulic Research, IAHR. 43(1), 98-102.
- 23. Shu-Qing Yang<sup>\*</sup> (2005). "Sediment transport capacity in rivers", Journal of Hydraulic Research, IAHR. 43(2), 131-138.
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- 27. Shu-Qing Yang<sup>\*</sup>, (2005). "Interactions of boundary shear stress, secondary currents and velocity". Fluid Dynamics Research, 36(3), 121-136.
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- 29. Shu-Qing Yang<sup>\*</sup>, S.K. Tan and Lim S.Y. (2004). "Velocity Distribution and Dip Phenomena in Smooth and Straight Open Channel Flow". Journal of Hydraulic Engineering, ASCE, 130(12), 1179-1186.
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- 31. Shu-Qing Yang<sup>\*</sup>, S.K. Tan and S.Y. Lim (2004), "Velocity and sediment concentration profiles in sediment- laden flows". China Ocean Engrg. 18 (2): 229-244.
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- 33. Shu-Qing Yang<sup>\*</sup> and S.Y. Lim (2003). "Total Load Transport Formula for Flow in Alluvial Channels" Journal of Hydraulic Engineering, ASCE, 129(1), 68-72.
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- 35. Shu-Qing Yang<sup>\*</sup> (2003) "Potential Water Resources In Singapore" J. of Water supply: Research and Technology, International Water Association, 52(6), 425-434.

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- Shu-Qing Yang<sup>\*</sup>, and Lim, S.Y. (1999). "Closure to Mechanism of Energy Transportation and Turbulent Flow in a 3-D Channel" Journal of Hydraulic Engineering, ASCE, 125(3), 319-320.
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- 41. Shuqing Yang<sup>\*</sup> and Zhu Xuan (1995) "On Turbulent Structure of Three -Dimensional Flow" J. of Nanjing Hydraulic Research Institute, Nov. 3, pp. 1-12(in Chinese).
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- 43. Shuqing Yang<sup>\*</sup> and Dou Guo-ren (1989) "Laser-Doppler-Meter Measurements of Drag Reduction Flow in Roughened Channels" J. of Nanjing Hydraulic Research Institute, No. 3, pp. 1-10 (in Chinese).
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### (e) **<u>Publications in conference proceedings</u>**

- 45. Shu-Qing Yang (2008). "Wall-normal velocity, turbulent structures and sediment transport". 16<sup>th</sup> APD-IAHR congress, Nanjing, China.
- 46. Shuqing Yang<sup>\*</sup> (2007). "Coastal reservoirs- an innovative solution for water crisis". 32<sup>nd</sup> IAHR Congress, Venice, Italy.
- 47. Shuqing Yang<sup>\*</sup> (2007). "Mechanism for initiating secondary currents in 3-D flows". 32<sup>nd</sup> IAHR Congress, Venice, Italy.
- 48. Shuqing Yang<sup>\*</sup> (2007). "Velocity distribution in sediment-laden flow". International Conference on Sedimentation, Moscow, Russia.
- 49. Shuqing Yang<sup>\*</sup> (2007). "Yellow river harnessing and sustainable water resources development". The third Yellow River Forum. Zhenzhou, China.
- 50. Shuqing Yang<sup>\*</sup> (2007). "Problems in existing coastal reservoirs and a potential solution by soft dam". The third international Conference on Asian and Pacific Coasts, Nanjing, China.
- 51. Shuqing Yang\* and S.F. Zhang, (2007). "Power law in sediment-laden flows". Yangtze Forum, Changsha, China.
- 52. Shuqing Yang<sup>\*</sup> (2005). "Mechanism of velocity deviation from classical log-law". XXXI IAHR Congress, Seoul, Korea.
- 53. Shuqing Yang\* and I-S Kim (2005). "New strategies for water crisis in the 21<sup>st</sup> century". XXXI IAHR Congress, Seoul, Korea.
- 54. Shuqing Yang<sup>\*</sup> and I-S Kim (2005). "Water Resources development- new challenge to coastal engineers in the 21<sup>sst</sup> century". 3<sup>rd</sup> Intern. Conf. on Coastal Engrg., Jeju, Korea.
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- 57. Shuqing Yang<sup>\*</sup> and Lim Siowyoung (2003). "Sediment Transport in Coastal Waters"2<sup>nd</sup> International Conference on Port and Maritime R&D and Technology, Singapore.
- 58. Shuqing Yang<sup>\*</sup> and Lim Siowyong (2003). "Velocity Distribution in Coastal Waters" 2<sup>nd</sup> International Conference on Port and Maritime R&D and Technology, Singapore.

- 59. Shuqing Yang (2003). "Strategic Study on Yellow River's Water Supply and Regulation". 1<sup>st</sup> International Yellow River Forum on River Basin Management, China.
- 60. Shuqing Yang<sup>\*</sup> (2002). "1<sup>st</sup> and 2<sup>nd</sup> approximate solution of Reynolds equation in 3-D channels" proceeding of 13<sup>th</sup> Congress of Asia and Pacific Division of international Association for Hydraulic Research (IAHR), World Scientific Press. (**Best Paper Award**).
- 61. Shuqing Yang<sup>\*</sup> and Lin Pengzhi (2002) "sediment transportation in rivers and coastal waters". Proceeding of 13<sup>th</sup> Congress of Asia and Pacific Division of International Association for Hydraulic Research (IAHR), World Scientific Press.
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- 67. Shuqing Yang<sup>\*</sup> and Dou Guo-Ren (1992) "The Turbulent Structure of Polymer Drag Reduction Flow in Roughness Channels" Proc. of International Symp. on Hydraulic Research in Nature and Laboratory. Nov. Wuhan, China. pp. 308-314.

#### (f) Research Reports and Thesis

- 1. Shu-qing Yang (1999): "Numerical Modeling Study on Lake Pontchartrain Outfall" University of New Orleans, USA.
- Shu-qing Yang (1996): "Interactions of Boundary Shear Stress, Velocity Distribution and Flow Resistance in 3-D Channels" Thesis for Doctoral Degree, Nanyang Technological University, Singapore.
- 3. Shu-Qing Yang (1988): "Near Wall Turbulent Structure of Visco-elastic Fluid Flow" Thesis for Master Degree. Nanjing Hydraulic Research Institute, in Chinese.
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