Edith Cowan University
School of Engineering

Assoc. Prof. Guangzhi Sun

PERSONAL DETAILS

Marital Status:	Married	Tel:	+61 8 63045423 (Office)
Nationality:	Australian / British dual citizen	Email:	g.sun@ecu.edu.au
Hobby:	Travel and reading	Webpage:	http://orcid.org/0000-0003-3190-497X

EMPLOYMENT HISTORY

Jan 2015 -	Associate dean (academic). Associate professor and chemical engineering discipline leader. School of Engineering, Edith Cowan University, Australia. Responsibilities: Line management of academic staff, teaching, and research.
Jul 2011 - Jan 2015	Senior Lecturer in Chemical Engineering. James Cook University, Townsville, Australia. Responsibilities: Teaching materials development, teaching delivery, and research.
Feb 2006 - Dec 2010	Lecturer in Water Engineering. Department of Civil Engineering, Monash Univ., Australia. Responsibilities: Teaching and research.
Sep 2000 - Jan 2006	Lecturer in Chemical Engineering, Queen's University Belfast, UK. Responsibilities: Teaching and research.
Oct 1998 - Aug 2000	Postdoctoral Research Fellow. The University of Birmingham, UK.

QUALIFICATIONS

1999	PhD in Chemical Engineering	
The University of Birmingham, UK	Thesis title:	Treatment of high strength wastewaters in constructed reed bed systems
	Year of study:	1995-1998 (Degree awarded in July 1999)
1992, 1995	Bachelor in Engineering, Master in Engineering	
Tianjin Uni, China	Year of study:	1988-1995 (BEng and MEng awarded in 1992 and 1995, respectively)

CAREER HIGHLIGHTS

- Teaching: Having taught 20+ units in four universities (Edith Cowan University, James Cook University, Monash University, and Queen's University Belfast, UK) from September 2000 to present.
- Research: Principal investigator of two EPSRC (Engineering and Physical Sciences Research Council, UK) research grants. Contributions to knowledge in field of wastewater engineering.
- Publications: Co-author of 50+ journal papers (h-index: 20 according to Thomas Reuters ResearcherID; or 26 according to Google Scholar).
- Supervision: PhD supervisor (2008-10) of Dr Tanveer Saeed, joint PhD supervisor (2009-2010) of Dr Katherine Lizama, and principal supervisor (2004-05) of postdoctoral research fellow (Dr Yaqian Zhao). All are now senior or mid-career faculty member/academics in universities.

SCHOLARLY ACTIVITIES

2015 -	Fellow of Engineers Australia.
2014 -	Honorary Research Professor, Northeast Institute of Geography and Agroecology of Chinese Academy of Sciences (Changchun, China).
2013 -	Wetland Science (ISSN: 1672-5948). Editorial Board: Water (ISSN: 2073-4441); Special Issue Guest Editor: Water (ISSN: 2073-4441).
2012 -	Member of the International Partnership Program for Creative Research Teams, sponsored by Chinese State Administration of Foreign Experts Affairs (SAFEA) and the Northeast Institute of Geography and Agroecology of Chinese Academy of Sciences (CAS).
2004 -	*ad hoc* examiner of PhD/MEng theses for: University of Birmingham (UK); Queen's University Belfast (UK); University of Western Sydney (Australia); University of Malaya (Malaysia); University of Agriculture (Pakistan).
2000 -	*ad hoc* reviewer: *Chemical Engineering Journal*; *Chemosphere; Desalination; Ecological Complexity; Ecological Engineering; Ecohydrology; Engineering in Life Sciences; Environmental Pollution; Environmental Science & Pollution Research; Environmental Science & Technology; Journal of Chemical Technology & Biotechnology; Journal of Hazardous Materials; Journal of Hydrology; Journal of Environmental Management; Global Change Biology; Process Biochemistry; Science of the Total Environment; Waste Management, Water Research; etc*.

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Publication List - Guangzhi Sun

JOURNAL PAPER (h-index = 20 based on Thomson Reuters ResearcherID. Impact factor based on InCites™ 2016 journal citation report)

1) Bavandpour F., Zou Y., He Y., Saeed T., Sun Y., Sun G. (2018) Removal of dissolved metals in wetland columns filled with shell grits and plant biomass. *Chemical Engineering Journal.* 331: 234-241. (ISSN: 1385-8947; Impact factor: 6.216).
2) Saeed T., Sun G. (2017) Pollutant removals employing unsaturated and partially saturated vertical flow wetlands: A comparative study. *Chemical Engineering Journal.* 325: 332-341. (ISSN: 1385-8947; Impact factor: 6.216).
3) Yu X., Grace M.R., Sun G., Zou Y. (2017) Application of ferrihydrite and calcite as composite sediment capping materials in a eutrophic lake. *Journal of Soils Sediments.* In press. doi.org/10.1007/s11368-017-1872-4 (ISSN: 1439-0108; Impact factor: 2.522).
4) Zou Y., Wang L., Xue Z., E M., Jiang M., Lu X., Yang S., Shen X., Liu Z., Sun G., Yu X. (2017) Impacts of agricultural and reclamation practices on wetlands in the Amur River Basin, northeastern China. *Wetlands.* In press. doi.org/10.1007/s13157-017-0975-4 (ISSN: 0277-5212; Impact factor: 1.573).
5) Saeed T., Sun G. (2017) A comprehensive review on nutrients and organics removal from different wastewaters employing subsurface flow constructed wetlands. *Critical Reviews in Environmental Science and Technology.* 47(4): 203-288 (ISSN: 1064-3389; Impact factor: 5.790).
6) Sun Y., Yang G., Sun G., Sun Z., Zhang L. (2017) Performance study of stirred tank slurry reactor and fixed-bed reactor using bimetallic Co–Ni mesoporous silica catalyst for fischer–tropsch synthesis. *Environmental Progress and Sustainable Energy*. In press (accepted on 15/7/2017). DOI: 10.1002/ep.12696 (ISSN: 1944-7442; Impact factor: 1.672).
7) Sun Y, Sun G, Zhang JP, Sun Z, Zhang L. (2017) Preparation of hybrid porous carbon using black liquor lignin impregnated with steelmaking slag and its performance in SO_2 removal. *Environmental Progress and Sustainable Energy*. 36(5): 1417-1427 (ISSN: 1944-7442; Impact factor: 1.672).
8) Zhang L., Zhang, G., Sun G. (2017) Variation trend of dry-wet climatic factors and correlation with wetlands in western Jilin province, China. *Carpathian Journal of Earth and Environmental Sciences*. 12(1): 131-139. (ISSN: 1842-4090; Impact factor: 0.880).
9) Zhang L., Hou G.L., Zhang, G.X., Liu Z.L., Sun G.Z., Li M.N. (2016) Calculation of freshwater wetlands ecological water requirement in China's Western Jilin province based on regionalization and grading techniques. *Applied Ecology and Environmental Research*. 14(3): 463-478. (ISSN: 1589-1623; Impact factor: 0.681).
10) Saeed T., Paula B., Afrin R., Al-Muyeed A., Sun G (2016) Floating constructed wetland for the treatment of polluted river water: a pilot scale study on seasonal variation and shock load. *Chemical Engineering Journal.* 287: 62-73. (ISSN: 1385-8947; Impact factor: 6.216).
11) Wang, X., Zhang, G., Xu, Y.J., Sun G (2015) Identifying the regional-scale groundwater-surface water interaction on the Sanjiang Plain, Northeast China. *Environmental Science and Pollution Research.* 22(21):16951-16961 (ISSN: 0944-1344; Impact factor: 2.741)
12) Sun G., Saeed, T., Zhang, G., Sivakugan, N. (2015) Water quantity and quality assessment on a tertiary treatment wetland in a tropical climate. *Water Science and Technology*. 71(4): 511-517. (ISSN: 0273-1223; Impact factor: 1.197)
13) Zhang L., Zhang, G., Li H., Sun G. (2014) Eco-physiological responses of *Scirpus planiculmis* to different water-salt conditions in Momoge Wetland in western Jilin Province, China. *Polish Journal of Environmental Studies*. 23(5): 1813-1820. (ISSN: 1230-1485; Impact factor: 0.793)
14) Saeed T., Kayed, F., Al-Muyeed A., Afrin R., Rahman H., Sun G. (2014) Pollutant removal from municipal wastewater employing baffled subsurface flow and integrated surface flow-floating treatment wetlands. *Journal of Environmental Sciences-China*. 26(4): 726-736. (ISSN: 1001-0742; Impact factor: 2.937)
15) Saeed T., Sun G. (2013) A lab-scale study of constructed wetlands with sugarcane bagasse and sand media for the treatment of textile wastewater. *Bioresource Technology*. 128: 438-447. (ISSN: 0960-8524; Impact factor: 5.651)
16) Cao X.X., Lu X.G., Zhang Z.S., Zou Y.C., Sun G.Z. (2013) Research progress on the design of constructed wetlands. *Wetland Science*. 11(1): 121-128. (ISSN: 1672-5948)
17) Saeed T., Al-Muyeed A., Sun G. (2013) Ammoniacal nitrogen and organics removal modelling in vertical flow wetlands treating strong wastewaters. *Wetland Science*. 11(4): 421-432. (ISSN: 1672-5948)
18) Sun G., Zhu Y., Saeed T., Zhang G., Lu X. (2012) Nitrogen removal and microbial community profiles in six wetland columns receiving high ammonia load. *Chemical Engineering Journal*. 203: 326-332. (ISSN: 1385-8947; Impact factor: 6.216)
19) Saeed T., Sun G. (2012) A review on nitrogen and organics removal mechanisms in subsurface flow constructed wetlands: dependency on environmental parameters, operating conditions and supporting media. *Journal of Environmental Management*. 112: 429-448 (ISSN: 0301-4797; Impact factor: 4.010).

20) Saeed T., Afrin R., Al Muyeed A., Sun G. (2012) Treatment of tannery wastewater in a pilot-scale hybrid constructed wetland system in Bangladesh. *Chemosphere*. 88(9): 1065-1073. (ISSN: 0045-6535; Impact factor: 4.208)

21) Lizama Allende K., Fletcher, T.D., Sun G. (2012) The effect of substrate media on the removal of arsenic, boron and iron from an acidic wastewater in planted column reactors. *Chemical Engineering Journal*. 179: 119-130. (ISSN: 1385-8947; Impact factor: 6.216)

22) Li H., Zhang G., Sun G. (2012) Simulation and evaluation of water purification function of Zhalong Nature Reserve based on a combined quantity and quality model. *Science in China Series E-Technological Sciences*. 55: 1973-1981. (ISSN: 1006-9321; Impact factor: 1.019)

23) Saeed T., Sun G. (2012) A comparative study of pollutant removal stability in hybrid wetland columns. *Wetland Science*. 10(2): 142-148. (ISSN: 1672-5948)

24) Saeed T., Sun G. (2011) A comparative study on the removal of nutrients and organic matter in wetland reactors employing organic media. *Chemical Engineering Journal*. 171: 439-447. (ISSN: 1385-8947; Impact factor: 6.216)

25) Lizama K., Fletcher, T., Sun G. (2011) Removal processes for arsenic in constructed wetlands: a review. *Chemosphere*. 84: 1032-1043. (ISSN: 0045-6535; Impact factor: 4.208)

26) Saeed T., Sun G. (2011) Kinetic modelling of nitrogen and organics removal in vertical and horizontal flow wetlands. *Water Research*. 45: 3137-3152. (ISSN: 0043-1354; Impact factor: 6.942)

27) Lizama K., Fletcher, T., Sun G. (2011) Enhancing the removal of arsenic, boron, and heavy metals in subsurface flow constructed wetlands using different supporting media. *Water Science and Technology*. 63(11): 2612-2618. (ISSN: 0273-1223; Impact factor: 1.197)

28) Saeed T., Sun G. (2011) Enhanced denitrification and organics removal in hybrid wetland columns: comparative experiments. *Bioresource Technology*. 102(2): 967-974. (ISSN: 0960-8524; Impact factor: 5.651)

29) Saeed T., Sun G. (2011) The removal of nitrogen and organics in vertical flow wetland reactors: predictive models. *Bioresource Technology*. 102(2): 1205-1213. (ISSN: 0960-8524; Impact factor: 5.651)

30) Sun G., Ladson A. (2010) Kinetic modelling of the removal of seven common pollutants in subsurface flow constructed wetlands. *Wetland Science*. 8(4): 320-326. (ISSN: 1672-5948)

31) Sun G. (2010) A lab-scale study on the routes of nitrogen and phosphorus removal in gravel-based reed bed systems. *Wetland Science*. 8(2): 139-143. (ISSN: 1672-5948).

32) Sun G., Saeed T. (2009) Kinetic modelling of organic matter removal in 80 horizontal flow reed beds for domestic sewage treatment. *Process Biochemistry*. 44: 717-722. (ISSN: 1359-5113; Impact factor: 2.497)

33) Lee C.G., Fletcher T.D., Sun G. (2009) Nitrogen removal in constructed wetland systems: a review. *Engineering in Life Sciences*. 9: 11-22. (ISSN: 1618-0240; Impact factor: 1.698)

34) Sun G., Cooper D. (2008) A statistical analysis on the removal of organic matter in subsurface flow constructed wetlands in the UK. *Environmental Technology*. 29: 1139-1144. (ISSN: 0959-3330; Impact factor: 1.751)

35) Sun G., Zhang G. (2008) The design of treatment wetlands in the United Kingdom: successes, failures, and alternative approaches. *Wetland Science*. 6(2): 343-350. (ISSN: 1672-5948)

36) Sun G., Austin D. (2007) Completely autotrophic nitrogen-removal over nitrite in lab-scale constructed wetlands: evidence from a mass balance study. *Chemosphere*. 68: 1120-1128. (ISSN: 0045-6535; Impact factor: 4.208)

37) Sun G., Zhao Y. Q, Allen S. (2007) An alternative arrangement of gravel media in tidal flow reed beds treating pig farm wastewater. *Water Air and Soil Pollution*. 182: 13-19. (ISSN: 0049-6979; Impact factor: 1.702)

38) Sun G., Austin D. (2007) A mass balance study on nitrification and deammonification in vertical flow constructed wetlands treating landfill leachate. *Water Science and Technology*. 56(3): 117-123. (ISSN: 0273-1223; Impact factor: 1.197)

39) Sun G., Zhao Y., Allen S., Cooper D. (2006) Generating 'tide' in pilot-scale constructed wetlands to enhance agricultural wastewater treatment. *Engineering in Life Sciences*. 6: 560-565. (ISSN: 1618-0240; Impact factor: 1.698)

40) Sun G., Zhao Y., Allen S. (2005) Enhanced removal of organic matter and ammoniacal-nitrogen in a column experiment of tidal flow constructed wetland system. *Journal of Biotechnology*. 115: 189-197. (ISSN: 0168-1656; Impact factor: 2.599)

41) Zhao Y., Sun G., Allen S. (2004) Anti-sized reed bed system for animal wastewater treatment: a comparative study. *Water Research*. 38: 2907-2917 (ISSN: 0043-1354; Impact factor: 6.942)

42) Zhao Y., Sun G., Allen S. (2004) Purification capacity of a highly loaded laboratory scale tidal flow reed bed system with effluent recirculation. *Science of the Total Environment*. 330: 1-8. (ISSN: 0048-9697; Impact factor: 4.900)

43) Connolly R., Zhao Y., Sun G., Allen S. (2004) Removal of ammoniacal-nitrogen from an artificial landfill leachate in downflow reed beds. *Process Biochemistry*. 39: 1971-1976. (ISSN: 1359-5113; Impact factor: 2.497)

44) Zhao Y, Sun G., Lafferty C., Allen S. (2004) Optimising the performance of a lab-scale tidal flow reed bed system treating agricultural wastewater. *Water Science and Technology*. 50(8): 65-72. (ISSN: 0273-1223; Impact factor: 1.197)

45) Zhao Y.Q., Allen S.J., Sun G. (2004) On the role of gypsum in conditioning and dewatering of waterworks sludge. *Journal of Guangzhou University*. 3(2): 137-142. (ISSN: 1671-4229)

46) Sun G., Gray K.R., Biddlestone A.J., Allen S., Cooper D.J. (2003) Effect of effluent recirculation on the performance of a reed bed system treating agricultural wastewater. *Process Biochemistry*. 39: 351-357. (ISSN: 1359-5113; Impact factor: 2.497)

47) Sun G., Zhang Z. (2002) Mechanical strength of microcapsules made of different wall materials. *International Journal of Pharmaceutics*. 242: 307-311. (ISSN: 0378-5173; Impact factor: 3.649)

48) Sun G., Zhang Z. (2001) Mechanical properties of melamine-formaldehyde microcapsules. *Journal of Microencapsulation*. 18: 593-602. (ISSN: 0265-2048; Impact factor: 1.543)

49) Stenekes R.J.H., De Smedt S.C., Demeester J., Sun G., Zhang Z., Hennink W.E. (2000) Pore sizes in hydrated dextran microspheres. *Biomacromolecules*. 1: 696-703. (ISSN: 1525-7797; Impact factor: 5.246)

50) Sun G., Gray K.R., Biddlestone A.J., Cooper D.J. (1999) Treatment of agricultural wastewater in a combined tidal flow-downflow reed bed system. *Water Science and Technology*. 40(3): 139-146. (ISSN: 0273-1223; Impact factor: 1.197)

51) Sun G., Gray K.R., Biddlestone A.J. (1999) Treatment of agricultural wastewater in a pilot-scale tidal flow reed bed system. *Environmental Technology*. 20: 233-237. (ISSN: 0959-3330; Impact factor: 1.751)

52) Sun G., Biddlestone A.J., Gray K.R., Yu Z. (1999) Wastewater treatment in constructed reed bed systems. *Pollution Control Technology*. 12(1): 1-4. (ISSN: 1004-695X)

53) Sun G., Gray K.R., Biddlestone A.J. (1998) Treatment of agricultural and domestic effluents in constructed downflow reed beds employing recirculation. *Environmental Technology*. 19: 529-536. (ISSN: 0959-3330; Impact factor: 1.751)

54) Sun G., Gray K.R., Biddlestone A.J. (1998) Treatment of agricultural wastewater in downflow reed beds: experimental trials and mathematical model. *Journal of Agricultural Engineering Research*. 69: 63-71. (ISSN: 1537-5110; Impact factor: 1.746)

55) Liu J.Q., Sun G., Liu H. (1997) Synthesis of propylene oxide from propylene chlorohydrin by vacuum saponification. *Journal of Chemical Engineering of Chinese Universities*. 1: 94-97. (ISSN: 1003-9015)

56) Sun G., Gray K.R., Biddlestone A.J. (1997) Wastewater treatment in constructed downflow reed beds: experimental studies and design equation. *China Water and Wastewater*. 13(S1): 4-6. (ISSN: 1000-4602)

BOOK CHAPTER

57) Sun G., Wycherley C, Sun Y (2015) The removal of heavy metals from an acidic wastewater in treatment wetlands filled with recycled materials. In: *Physical, Chemical and Biological Treatment Processes for Water and Wastewater*. Tushar Kanti Sen (ed.), Nova Science Publishers, New York, USA, pp. 57-77.

58) Zhao Y.Q., Connolly R., Sun G., Allen S.J. (2003) Start-up of a novel reed bed system for agricultural wastewater treatment. In: *Transactions on Ecology and the Environment - Water Pollution VII: Modelling, Measuring and Prediction*. C. Brebbia, D. Almorza, D. Sales (eds.), ISBN: 1853129763, WIT Press, UK, pp. 303-311.

NEWSLETTER

59) Sun G., Connolly R., Zhao Y.Q., Allen S.J. (2006) 'Adsorption' being the first step of ammonia and phosphorus removal in gravel-based constructed wetland - preliminary evidence. *Macrophyte Specialist Group Newsletter of International Water Association*, pp. 4-10.

CONFERENCE PUBLICATIONS (FULL PAPER)

60) Sun Y., Sun G. (2016) Preparation of biomass derived porous carbon: application for methane energy storage. In *3rd International Conference on Material Engineering and Application,* Vol. 103, Atlantis, pp 18-22.

61) Saeed T., Azam F., Quiyum Z., E-Rabbi A., Sun G. (2012) Tannery wastewater treatment in a pilot-scale wetland system with coco-peat, slag and gravel media. In: *13th International Conference on Wetland Systems for Water Pollution Control*. 25-29 Nov., Perth, Australia. Vol. 2, pp. 357-366.

62) Sun G., Heimann K. (2012) The concept of ecosystem manipulation: what is it, and how does it work in bioremediation? In: *Environmental Science and Technology,* Vol. 1, G.A. Sorial, and J. Hong (eds.), ISBN 9780976885351, American Science Press, Houston, USA, pp 558-563.

63) Sun G., Zhu Y., Saeed T. (2012) Nitrogen dynamics and microbial community compositions in six vertical flow wetland columns. In: *Environmental Science and Technology*, Vol. 2, G.A. Sorial, and J. Hong (eds.), ISBN: 9780976885344, American Science Press, Houston, pp254-260.

64) Lizama Allende K., Fletcher T.D., Sun G. (2012) Removal of arsenic by coprecipitation with iron in vertical flow wetland columns. In: *Environmental Science and Technology*, Vol. 2, G.A. Sorial, and J. Hong (eds.), ISBN: 9780976885344, American Science Press, Houston pp312-318.

65) Lizama K., Fletcher T., Sun G. (2010) Enhancing the removal of arsenic and heavy metals in subsurface flow constructed wetlands using different supporting media. In: *12th International Conference on Wetland Systems for Water Pollution Control*. 4-8 October 2010, Venice, Italy. pp. 591-599.

66) Saeed T., Hatt B., Sun G. (2010) A comparative study on the stability of pollutant removal in hybrid wetland reactors. In: *12th International Conference on Wetland Systems for Water Pollution Control*. 4-8 October 2010, Venice, Italy. pp. 906-913.

67) Sun G., Cooper P., Cooper D. (2008) The removal of organic matter in horizontal flow reed beds in the UK: performance evaluation using Monod and first order kinetics. In: *11th International Conference on Wetland Systems for Water Pollution Control*. 1-7 November 2008, Indore, India, Vol. 1, pp. 336-343.

68) Sun G., Ladson A. (2008) Modelling of subsurface flow wetlands based on the kinetics of seven key pollutants. In: *11th International Conference on Wetland Systems for Water Pollution Control*. 1-7 November 2008, Indore, India, Vol. 2, pp. 890-898.

69) Sun G., Kadlec R. H., Austin D., Zhu Y. (2008) A lab-scale study of factors affecting nitrogen removal in planted vertical flow columns. In: *11th International Conference on Wetland Systems for Water Pollution Control*. 1-7 November 2008, Indore, India, Vol. 2, pp. 717-726.

70) Sun G., Ladson A. (2008) Modelling of wastewater treatment wetlands: what's removed in the greenbox, and how? In: *Proceedings of International Symposium on Sanitary & Environmental Engineering*. 24-27 June, Florence. (8 pages in CD-Rom; ISBN: 9788890355707)

71) Sun G., Austin D. (2006) A mass balance study on nitrification and deammonification in vertical flow constructed wetlands treating landfill leachate. In: *10th International Conf. on Wetland Systems for Water Pollution Control*. Lisbon, Portugal, pp. 187-195 (ISBN: 9892003616).

72) Sun G., Zhao Y.Q., Allen S.J. (2005) A pilot study on agricultural wastewater treatment in tidal flow constructed wetlands. In: *1st International Conference on Environmental Science and Technology*, 23-26 January, New Orleans, USA, Vol 2, pp. 295-301.

73) Zhao Y., Sun G., Allen S.J. (2005) Anti-sized reed bed system for wastewater treatment: concept and development. In: *3rd IWA Leading-Edge Conference on Water and Wastewater Treatment Technologies*. 6-8 June, Sapporo, Japan. (7 pages in CD-Rom)

74) Sun G., Cooper D., Yu Z. (2005) A statistical analysis on the removal of organic matter in constructed wetlands in the UK. In: *1st International Symposium on Wetland Pollutant Dynamics and Control*, 4-8 September, Ghent, Belgium.

75) Connolly R., Zhao Y.Q., Sun G., Allen S. (2004) A study on the treatment of leachates from different landfill sites in a lab-scale vertical flow wetland system employing effluent recirculation. In: *9th International Conference on Wetland Systems for Water Pollution Control*. 27-30 September, Avignon, France. (4 pages in CD-Rom)

76) Zhao Y.Q., Sun G., Allen S.J. (2004) An alternative arrangement of gravel medium in tidal flow reed beds for the treatment of high strength wastewater. In: *6th Specialist Conference on Small Water and Wastewater Systems*. 11-13 Feb, Fremantle (8 pages in CD-ROM)

77) Sun G., Connolly R., Calcan D., Zhao Y.Q., Allen S.J. (2004) Effect of adsorption on the removal of ammoniacal-nitrogen in a lab-scale constructed wetland. In: *6th Specialist Conference on Small Water and Wastewater System*. 11-13 Feb, Fremantle, Australia. (6 page in CD)

78) Zhao Y., Sun G., Lafferty C., Allen S. (2003) Optimising performance of a novel reed bed system for the treatment of high strength agricultural wastewater. In: *Asian Waterqual*. 19-23 October, Bangkok, Thailand. (8 pages in CD-Rom)

79) Sun G., Gray K.R., Biddlestone A.J., Allen S.J., Cooper D.J. (2002) A novel approach to the operation of vertical flow reed beds. In: *8th International Conference on Wetland Systems for Water Pollution Control*. 16-19 September, Arusha, Tanzania, pp. 158-167.

80) Sun G., Gray K.R., Biddlestone A.J., Allen S.J., Cooper D.J. (2002) High strength effluent treatment in a downflow reed bed system with enhanced aeration. In: *3rd IWA World Water Congress*. 7-12 April, Melbourne, Australia. (7 pages in CD-Rom)

81) Zhao Y.Q., Bache D.H., Allen S.J., Sun G. (2002) Use of gypsum ($CaSO_4.2H_2O$) for waterworks sludge conditioning and dewatering. In: *5th Specialised Conference on Small Water and Wastewater Treatment Systems*. Istanbul, Turkey, pp. 407-414.

82) Sun G., Gray K.R., Biddlestone A.J. (1998) Design of downflow reed beds treating high strength wastewaters. In: *1998 IChemE Research Event*. Newcastle, UK. (6 pages in CD-Rom)

83) Sun G., Gray K.R., Biddlestone A.J., Cooper D.J. (1998) Treatment of agricultural wastewater in a combined tidal flow-downflow reed bed system. In: *6th International Conference on Wetland Systems for Water Pollution Control*. 16-19 September, Aguas de Sao Pedro, Brazil (8 pages in conference proceedings).

84) Sun G., Gray K.R., Biddlestone A.J. (1997) Treatment of agricultural effluents in tidal flow reed beds. In: *1997 IChemE Research Event*. Nottingham, UK, Vol. 1, pp. 81-84.

85) Gray K.R., Biddlestone A.J., Thayanithy K., Job G.D., Bere S.S.J., Edwards J., Sun G., Cooper D.J. (1996) Use of reed bed treatment systems for the removal of BOD and ammoniacal-nitrogen from agricultural 'dirty waters'. In: *5th International Conference on Wetland Systems for Water Pollution Control*. Vienna, Austria, pp. XII/1-8.

CONFERENCE PRESENTATION (ABSTRACT ONLY)

86) Sun G., Saeed T., Zhang G. (2013) Water quantity and quality modelling for a retention wetland in tropical Queensland, Australia. In: *16th IRCS Conference and International Symposium on Rainwater Utilization*. 1-4 July, Beijing/Nanjing, China. Abstract #34.

87) Lizama Allende K., Fletcher T.D., Sun G. (2012) Arsenic removal by subsurface flow constructed wetlands. In: *Proceedings of the 4th International Congress on Arsenic in the Environment, 22-27 July 2012, Cairns, Australia*, pp. 278-279.

88) Lizama Allende K., Sun G., Fletcher T.D. (2012) Subsurface flow constructed wetlands for the removal of arsenic and metals from acidic contaminated water. In: *7th International Conference on Water Sensitive Urban Design*. 21-23 Feb, Melbourne, Australia. Pp. 507-508.

89) Zhu Y., Sun G. (2008) Nitrogen removal in treatment wetlands: pollutant dynamics and novel pathways. In: *2nd IWA Australia National Young Water Professionals Conference*. 4-6 February 2008, Brisbane, Australia, pp. 72-73.

90) Chen N., Ladson A., Sun G. (2008) An integrated model of pollutant transformation in treatment wetland - decryption of greenbox. In: *2nd IWA Australia National Young Water Professionals Conference*. 4-6 February 2008, Brisbane, Australia, pp. 116-117.

91) Sun G., Zhao Y.Q., Allen S.J. (2004) Field study of a tidal flow constructed wetland system treating high strength agricultural wastewater. In: *7th Intecol International Wetlands Conference*. Utrecht, The Netherlands, 25-30 July 2004, pp. 307.

92) Sun G., Calcan D., Connolly R., Allen S.J. (2003) Treatment of landfill leachates in a downflow reed bed system. In: *1st Annual Conference of Young Academics Network for Chemical Engineering*. Sheffield, UK, 23-24 June 2003.

93) Sun G., Zhang Z. (2001) Comparison of the mechanical strength of microcapsules made of different wall materials. In: *13th International Symposium on Microencapsulation*. 5-7 September, Angers, France.

94) Sherwood K.A., Vasdev H., Sun G., Pacek A., Zhang Z. (2000) Comparison of the size distribution of the microcapsules made in a stirred vessel and static mixer. In: *IChemE Research 2000*. Bath, UK. pp. 80.

95) Sun G., Zhang Z. (2000) Bursting strength of microcapsules made of different wall materials. In: *IChemE Research*. Bath, UK. pp. 111.

96) Sun G., Zhang Z. (2000) Micromanipulation studies of microcapsule strength. In: *Particle Technology Forum 2*. 29-30 June, Surry, pp. 19.

97) Sun G., Zhang Z. (1999) Mechanical properties of melamine-formaldehyde microcapsules. In: *The 12th International Symposium on Microencapsulation*. 6-8 September, London, UK.

98) Sun G., Zhang Z. (1999) Micromanipulation studies of microcapsule strength. In: *Processing of Soft Solids and Particle Technology*. Loughborough, UK, pp. 4.