

Dr Jing Guan

BSc (1984), ME (1989), PhD (1999)

Senior Research Fellow, Centre for Water and Waste Technology, UNSW (since April 06)

Employment History

Senior Research Associate	Center for Water and Waste Technology, UNSW	2004-2006.3
Facilitator	Australia-China Consortium for Water Research, UNSW	2004-present
Senior Research Scientist	CRC for WMPC, Australia	2003-2004
Process Engineer	Cardno MBK - Engineering the Future, Australia	2000-2001
Visiting Research Fellow	The University of Wollongong, Australia	1992-1993
Lecturer	Shenyang University, P.R. China	1989-1992

Expertise

Jing guan has had more than 20 years work experience in research, consulting and teaching in environmental engineering and science including

- Biological and physic-chemical water and wastewater treatment,
- Application and synthesis of nano sized material,
- Advanced oxidation processes and membrane process in water and wastewater treatment,
- Water and wastewater reclamation, and
- Environmental remediation and sustainable water management.

Jing is also responsible for data analysis using GC/MS, HPLC, ICP etc.

Selected Publications

1. Guan, J., Waite, T.D. and Amal, R. (2006) Impact of Aggregate Size and Structure on Biosolids Settleability (submitted to *Drying Technology*)
2. Feitz, A, Joo, SH, Guan, J, Sun, Q., Sedlak, D.L. and T. David Waite, T.D. (2005) Oxidative Transformation Of Contaminants Using Colloidal Zero-Valent Iron. *Colloids and Surfaces A: Physicochem. Eng. Aspects.* 265, 88-94.
3. Guan, J., Wang, S.W. and Sun, T.H. (2005) A Developed Membrane Bioreactor (MBR) System For Wastewater Treatment And Reuse In China. Full paper presented in *The 5th International Symposium of Wastewater Reclamation and Reuse for Sustainability (WRRS2005)*. Jeju Island, Korea, 8/11/05 - 11/11/05.
4. Guan, J., Amal, R. and Waite, T.D. (2003) Effect of Floc Size and Structure on Biosolids Capillary Suction Time. *Water Science and Technology*, 47 (2), 255–260.
5. Feitz, A, Guan, J., Chattopadhyay, G. and Waite, T.D. (2002) Photo-Fenton Degradation of Dichloromethane for Gas Phase Treatment. *Chemosphere*, 48, 401-406.
6. Wu, R.M., Lee, D.J., Waite, T.D. and Guan, J. (2002) Muliti-Level Structure of Sludge Floccs. *Journal of Colloid and Interface*, 252, 383-392.
7. Guan J, Franz O, Aplin R, Feitz A and Waite TD (2000) Comparison of Advanced Oxidation Processes for Chlorinated Hydrocarbon Decontamination. Proc. of the 6th Advanced Oxidation Conference, 25-30 June 2000. London.
8. Guan, J., Waite, T.D. and Amal, R. (1998) Rapid Structure Characterisation of Bacterial Aggregates Using Small Angle Light Scattering. *Environmental Science and Technology*, 32, 3735-3742.
9. Amal, R., Waite, T.D., Guan, J., Bustamante, H. and Wukasch, R. (1997) Sludge Dewatering Control System. International Patent Application PCT/All97/00723
10. Feitz A, Guan J., Waite, T.D. (2004) Process for Producing a Nanoscale Zero-Valent Metal. International Patent Application PCT/AI 20041209

Publications over last 5 years

Peer-reviewed research publications: 12

Conference publications: 3