

## **Gangsheng Wang**

Postdoctoral Research Associate

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### **Education and Training**

2010 Washington State University, Pullman, WA. Biological/Agricultural Engineering, PhD.

2005 Chinese Academy of Sciences, Beijing, China. Physical Geography, PhD.

2002 Wuhan University, Wuhan, China. Hydrology and Water Resources, M.S.

2000 Wuhan University, Wuhan, China. Hydrology and Water Resources, B.E.

### **Research and Professional Experience**

2011–Present Postdoctoral Research Associate, Oak Ridge National Laboratory

2007–2010 Graduate Research Assistant, Washington State University, Pullman, WA

2005–2007 Research Assistant Scientist, Institute of Geographical Sciences and Natural Resources Research (IGSNRR), CAS, Beijing, China

2002–2005 Graduate Research Assistant, IGSNRR, CAS, Beijing, China

2000–2002 Graduate Research Assistant, Wuhan University, Wuhan, China

### **Publications**

1. Wang, G., Post, W.M., Mayes, M.A., 2012. Development of microbial-enzyme-mediated decomposition model parameters through steady-state and dynamic analyses. *Ecological Applications* (in press), doi: 10.1890/12-0681.1.
2. Wang, G., Post, W.M., 2012. A note on the reverse Michaelis-Menten kinetics. *Soil Biology and Biochemistry* (in press), doi: 10.1016/j.soilbio.2012.08.028.
3. Wang, G., Chen, S., 2012. Evaluation of a soil greenhouse gas emission model based on Bayesian inference and MCMC: model uncertainty. *Ecological Modelling* (in press).
4. Wang, G., Chen, S., 2012. Evaluation of a soil greenhouse gas emission model based on Bayesian inference and MCMC: parameter identifiability and equifinality. *Ecological Modelling* (in press).
5. Wang, G., Post, W.M., 2012. A theoretical reassessment of microbial maintenance and implications for microbial ecology modeling. *FEMS Microbiology Ecology* 81, 610–617. doi: 10.1111/j.1574-6941.2012.01389.x.
6. Wang, G., Post, W.M., Mayes, M.A., Frerichs, J.T., Jagadamma, S., 2012. Parameter

- estimation for models of ligninolytic and cellulolytic enzyme kinetics. *Soil Biology and Biochemistry* 48, 28–38. doi: 10.1016/j.soilbio.2012.01.011.
7. Wang, G., Chen, S., Frear, C., 2012. Estimating greenhouse gas emissions from soil following liquid manure applications using a unit response curve method. *Geoderma* 170, 295–304. doi: 10.1016/j.geoderma.2011.12.001.
  8. Wang, G., Chen, S., 2012. A review on parameterization and uncertainty in modeling greenhouse gas emissions from soil. *Geoderma* 170, 206–216. doi: 10.1016/j.geoderma.2011.11.009.
  9. Wang, G., Xia, J., 2010. Improvement of SWAT2000 modeling to assess the impact of dams and sluices on streamflow in the Huai River basin of China. *Hydrological Processes*, 24, 1455–1471. doi: 10.1002/hyp.7606.
  10. Wang, G., Xia, J., Chen, J., 2009. Quantification of effects of climate variations and human activities on runoff by a monthly water balance model: A case study of the Chaobai River basin in northern China. *Water Resources Research*. 45, W00A11. doi: 10.1029/2007wr006768.

### **Synergistic Activities**

1. The US committee member for International Standards Organization (ISO) PC 248: Bioenergy Sustainability Criteria (Work Group on greenhouse gas emissions), 2011–present.
2. The Walter & Vinnie Hinz Scholarship Award, Biological Systems Engineering, WSU, 2010.
3. Second Grade Award for the Advancement in Science and Technology (Ranked 4th), Anhui Province, China, 2009. *Study on the impact of dams/sluices on water environment in the Huai River Basin*.
4. President’s Outstanding Award of the Chinese Academy of Sciences, 2005.
5. First Grade Award for the Natural Sciences (Ranked 5th), Hubei Province, China, 2004. *Study on theory and approaches for nonlinear hydrological system*.
6. Designated as Meritorious in International Mathematical Contest in Modeling, the Consortium for Mathematics and its Applications, the National Security Agency, USA, 2000.
7. First Grade Award in China Undergraduate Mathematical Contest in Modeling, Ministry of Education, the Consortium for Mathematics and its Applications, China, 1999.
8. First Grade Scholarship for outstanding students, Wuhan University, China, 1996–2000.
9. Member of International Association of Hydrological Sciences (IAHS), 2003–present.
10. Member of American Geophysical Union (AGU), 2011–present.