Yushi Wang Research Scientist, The Water Institute of the Gulf

T: 225.228.2102

301 N. Main Street, Suite 2000 E: ywang@thewaterinstitute.org Baton Rouge, LA 70825

Education

Ph.D. in Civil and Environmental Engineering, 2013

The University of Iowa, Iowa City, Iowa

M.S. in Civil and Environmental Engineering, 2009

The University of Iowa, Iowa City, Iowa

B.S. in Environmental Sciences, 2007

Florida A&M University, Tallahassee, Florida

Research Interests

Environmental hydraulics; computational fluid dynamics; water quality modeling; hydraulic design and environmental impact assessment; thermal discharge flow; multiphase flow modeling.

Professional Experience

The Water Institute of the Gulf	2015-Present
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Research Scientist

Stantec Consulting Ltd. 2013-2015

• Computational Fluid Dynamics (CFD) Specialist

The University of Iowa – IIHR-Hydroscience & Engineering 2007-2013

• Research Assistant

Florida A&M University – The Environmental Sciences Institute 2005-2007

• Research Assistant

Awards, Honors:

Best Technical Papers awards presented at HydroVision International 2015. Hydro Research Fellowship, 2011-2013 The 2007 Computational Science Workshop for Underrepresented Groups, 2006 Florida China Linkage Institute Scholarship from Brevard Community College, 2006 Academic Achievement Scholarship from Guangdong University of Technology, 2003

Professional Memberships:

Member, International Association for Hydro-Environment Engineering and Research (IAHR)

Peer Reviewed Publications

Wang, Y., Politano, M., Laughery, R., & Weber, L. 2015. Model development in OpenFOAM to predict

spillway jet regimes. Journal of Applied Water Engineering and Research, 3(2):80-94. DOI: 10.1080/23249676.2015.1025442

Wang, Y., Politano, M., and Laughery, R. 2013. Towards Full Predictions of Temperature Dynamics in McNary Dam Forebay Using OpenFOAM. Water Science and Engineering, 6(3): 317-330.

Wang, Y., Politano, M., Ho H., Muste, M., Michell, F., and Stallings, J. 2014. Assessment of Ice Plugging of a Cooling Water Intake by a Numerical Model. Journal of Hydraulic Research, 52(1): 81-92.

Conference Proceedings and Presentations

Meselhe, E., White, E., Reed, D., Grace, A., Wang, Y., Green, M., Freeman, A., Habib, E., Lindquist, D., Pahl, J., Yuill, B. 2016. Introduction to the 2017 Coastal Master Plan Future Scenarios. In Proceedings of the State of the Coast Conference 2016. New Orleans, Louisiana, USA.

Politano, M., Wang, Y., Lyons, T., and Weber, L. 2016. Computation of the Flow Field over Spillways using OpenFoam. In Proceedings of the EWRI World Environmental & Water Resource Congress 2016. West Palm Beach, Florida, USA.

Freeman, A., Grace, A., Green, M., Lindquist, D., Meselhe, E., Reed, D., Wang, Y., White, E. 2015. Coastal Ecosystem Integrated Compartment Model (ICM): Modeling Framework. In Proceedings of the AGU 2015. San Francisco, California, USA.

Freeman, A., Grace, A., Green, M., Lindquist, D., Meselhe, E., Reed, D., Wang, Y., White, E. 2015. Louisiana's 2017 Coastal Master Plan: Model Improvement Plan. In Proceedings of the CERF 2015. Portland, Oregon, USA.

Politano, M., Wang, Y., Laughery, R., and Weber, L. 2015. A Numerical Model for Spillway Jet Regimes and Total Dissolved Gas. In Proceedings of the HydroVision International Conference 2015. Portland, Oregon, USA. (Best Technical Paper)

Michell, F., Politano, M., and Wang, Y. 2014. Structural Modification of a Power Plant's River Water Intake to Minimize Ice Blockage. In Proceedings of the CTI 2014 Annual Conference. Houston, Texas, USA.

Michell, F., Politano, M., Stallings, J., and Wang, Y. 2013. Structural Modification of a Power Plant's Water Intake to Minimize Ice Blockage. In Proceedings of the ASME 2013 Power Conference. Boston, USA.

Wang, Y., Politano, M., and Laughery, R. 2013. Simulation of the Temperature Dynamics in McNary Dam Using OpenFOAM. In Proceedings of the HydroVision International Conference 2013. Denver, USA.

Wang, Y., Politano, M., Muste, M., Stallings, J., and Michell, F. 2011. A 3D Numerical Model to Evaluate the Effect of Shutting Down a Once-through Cooling System on the Ice Transport to Existing Intakes. In Proceedings of the 34th IAHR congress, Brisbane, Australia.

Wang, Y., Politano, M., and Weber, L. 2009. A Multidimensional Eulerian-lagrangian Model to Predict Organism Distribution. In Proceedings of the 7th Int. Symp. on Ecohydraulics. Concepcion, Chile.

Reports and Theses

Wang, Y. 2013. Development of a numerical tool to predict hydrodynamics, temperature and TDG in hydropower flows. Master's Thesis, The University of Iowa.

Politano, M., Amado, A. A., and Wang, Y. 2010. Hells Canyon Dam Total Dissolved Gas Modeling. IIHR

LDR No 366.

Wang, Y. 2009. A multidimensional Eulerian-Lagrangian model to predict organism distribution. Doctoral dissertation, The University of Iowa.