

**JENNIFER GUOHONG DUAN, Ph.D., P.E.**

Professor, Department of Civil and Architectural Engineering and Mechanics, University of Arizona  
1209 E. 2<sup>nd</sup> Street, Room 206, Tucson, AZ 85721

Tel: 520-626-5946, Fax: 520-621-2550, Email: [gduan@email.arizona.edu](mailto:gduan@email.arizona.edu)

**a. Professional Preparation**

Wuhan University	Wuhan, PR China	Hydraulics and River Dynamics	B.S.	1989
Tsinghua University	Beijing, PR China	Hydraulic Engineering	M.S.	1992
University of Mississippi	Oxford, MS	Computational Hydroscience & Engr.	Ph.D.	1998

**b. Appointments**

08/2018- present	Professor, Department of Civil and Architectural Engineering and Mechanics, University of Arizona, Tucson, Arizona.
06/2011- 07/2018	Associate Professor, Department of Civil Engineering, University of Arizona, Tucson, Arizona.
08/2006 – 06/2011	Assistant Professor, Department of Civil Engineering, University of Arizona, Tucson, Arizona.
07/2005- 07/2006	Associate Research Professor, Division of Hydrologic Sciences, Desert Research Institute, Nevada System of Higher Education, Las Vegas, Nevada.
01/1999 – 06/2005	Assistant Research Professor, Division of Hydrologic Sciences, Desert Research Institute, Nevada System of Higher Education, Las Vegas, Nevada.

**c. Products**

**(i) Up to five products most closely related to this proposal:**

- Duan, J. G., Bai, Y, Dominguez, F., Rivera, E., Meixner, T. (2017) “Framework for incorporating climate change on flood magnitude and frequency analysis in the upper Santa Cruz River”, *Journal of Hydrology*, 549, 194-207. <http://dx.doi.org/10.1016/j.jhydrol.2017.03.042>.
- Yu, C. and Duan, Jennifer G., “Simulation of surface runoff using hydrodynamic model”, *Journal of Hydrologic Engineering*, doi:10.1061/(ASCE)HE.1943-5584.0001497.
- Yu, C.S. and Duan, J.G. (2014) “High Resolution Numerical Schemes for Solving Kinematic Wave Equation”, *Journal of Hydrology*, DOI: 10.1016/j.jhydrol.2014.08.003.
- Yu, C.S. and Duan, J.G. (2014) “Two-dimensional hydrodynamic model for surface flow routing”, *Journal of Hydraulic Engineering*, DOI:10.1061/(ASCE).HY.1943-7900.0000913.
- Bai, Y. and Duan, J.G. (2014) “Simulating unsteady flow and sediment transport in vegetated channel network”, *J. of Hydrol.*, <http://dx.doi.org/10.1016/j.jhydrol.2014.04.030>.

**(ii) Up to five other significant products:**

- Zhang, S., Duan, J. G., and Strelkoff, T. S. (2013) “Gain-scale non-equilibrium sediment transport model for unsteady flow.” *Journal of Hydraulic Engineering*, 139(1), 22-36.
- Yu, C.S. and Duan, J.G. (2012) “Two-dimensional depth-averaged unsteady turbulent flow model over obstacles”, *Journal of Hydraulic Research*, 50:6, 599-611.

- He, L., Duan, J. G., Wang, G. Q., and Fu, X. D. (2012), "Numerical Simulation of Unsteady Hyperconcentrated Sediment-Laden Flow in the Lower Yellow River" *J. Hydraul. Eng.*, Vol 138:11, 958-969.
- Zhang, S., Duan, J. G., and Strelkoff, T. S., Bautista, E. (2011). "Simulation of unsteady flow and soil erosion in irrigation furrows." *J. Irrigation and Drainage Eng.*, Vol 138, No. 4, 294-303.
- Zhang, S. and Duan, J. G. (2011), "1D finite volume model of unsteady sediment transport model." *J. Hydrology*, Vol. 405, Issue 1-2, 57-68.

#### **d. Synergistic Activities**

- Adjunct faculty, *Department of Hydrology and Water Resources, Department of Agriculture and Biosystem Engineering*, University of Arizona, Tucson.
- Associate Editor, *Journal of Hydrology*, Elsevier Publication.
- Chair, *ASCE Technical Committee of Computational Hydraulic*. Chair *ASCE Task Committee on Computational Modeling of Sediment Transport Processes*.
- Member, *Living River Technical Committee*, Pima County Association of Government, Tucson, AZ
- Faculty Advisor, *Women in Civil Engineering (WICE)*, University of Arizona.