

Curriculum Vitae

Xing (Peter) Fang

Ph.D., P.E., D.WRE, F.EWRI, F.ASCE

Arthur H. Feagin Chair Professor

Graduate Program Officer (GPO)

Department of Civil and Environmental Engineering

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Area of Expertise

- Water quality modeling and monitoring in lakes, reservoirs, and streams
- Hydrological analysis and modeling (Water Resources Engineering)
- Ecological modeling (Fish habitat modeling in aquatic systems)
- Hydraulic analysis and modeling (Computational Fluid Dynamics)
- Lake and reservoir hydrodynamics (Global warming impacts on water quality)

Education

- Ph.D. in Civil Engineering, 1994, University of Minnesota, Minneapolis, MN.
- M.S. in Civil Engineering, 1991, University of Minnesota, Minneapolis, MN.
- B. S. in Hydraulic/Civil Engineering, 1987, Tsinghua University, Beijing, P. R. China.

Positions

- October 2014 – Present
Arthur H. Feagin Chair Professor of Civil Engineering, Department of Civil Engineering, Auburn University, Auburn, Alabama, 36849.
- August 2013 – September 2014
Professor, Department of Civil Engineering, Auburn University, Auburn, AL 36849.
- January 2014 – April 2015
Guest Research Scientist, Beijing Cooperative Innovation Research Center on Architectural Energy Saving and Emission Reduction, Beijing University of Civil Engineering and Architecture, Beijing, China, 100044
- July 2013 – July 2016
Guest Professor, College of Energy and Environmental Engineering, Key Laboratory of Urban Stormwater System and Water Environment, Beijing University of Civil Engineering and Architecture, Beijing, P. R. China.
- August 2007 – July 2016
Associate Professor, Department of Civil Engineering, Auburn University, AL 36849
- September 2006 – August 2007
Professor, Department of Civil Engineering, Lamar University (as Adjunct Professor at Lamar University after August 2007 - August 2010)
- September 2000 – August 2006

- Associate Professor, Department of Civil Engineering, Lamar University
- Summer, 2003 – Interim Department Chair of Civil Engineering, Lamar University
- September 1995 – August 2000
Assistant Professor, Department of Civil Engineering, Lamar University
- May 1996 – August 1996 and May 1997, August 1997, May and August 1998
Visiting Assistant Professor, St. Anthony Falls Laboratory, University of Minnesota
- September 1994 – August 1995
Postdoctoral Research Associate, St. Anthony Falls Hydraulic Laboratory, University of Minnesota
- December 1991 – August 1994
Research/Teaching Assistant, St. Anthony Falls Hydraulic Laboratory/Department of Civil Engineering, University of Minnesota
- August 1987 – September 1989
Assistant Research Engineer, Department of Hydraulic Engineering, Tsinghua University, Beijing, P. R. China.

Research Experience

- Evaluation of ALDOT ditch check practices using large-scale testing techniques
- Evaluation of inlet protection practices using large-scale testing techniques
- Assessing the performance of sediment basins at construction sites
- Evaluation of scour potential of cohesive soils
- Physical model investigation on the mixing of oil-dispersed substances in Mobile Bay ship channel
- Identifying cisco (cold-water) refuge lakes under the future climate scenario
- Three-dimensional flow simulation using FLOW-3D
- Estimation volumetric and rate-based runoff coefficient from observed rainfall and runoff data, and development of modified rational unit hydrograph
- Three-dimensional thermal discharge modeling using FEDC (thermal discharge modeling in reiver-reservoir system, tidal river, and estuary)
- Unit hydrograph development by using linear programming and Gamma function fitting.
- Regional rainfall hyetograph analysis in Texas
- Estimation of timing parameters of direct runoff hydrographs and unit hydrographs.
- Study on sediment transport in gravel-bed rivers, Texas
- Synthesis on storm drainage design and Texas storm statistics
- Travel time estimate in hydrological design for flat terrains
- Developed an integral jet model for plunging flow from an open channel into a shallow lake and reservoir
- Regional characteristics of unit hydrographs and rainfall hyetograph in Texas
- Environmental effects of dredging (predicting the quality of effluent discharged from confined dredged material disposal areas)
- Studied impacts of water withdrawal on water temperature dynamics in Toledo Bend Reservoir, Texas/Louisiana
- Studied the relationship of air temperatures and water temperatures in streams
- Developed the year-round lake water temperature, dissolved oxygen and ice/snow cover simulation models

- Investigated effects of the global climate warming on water quality and fish resources in lakes over the contiguous United States
- Examined dynamic of heat exchange between sediment and water in lakes and temperature variability in the lake sediments
- Developed the dissolved oxygen model for region lakes including model formulation, calibration, validation, and sensitivity analysis to model coefficients in eight Minnesota lakes (both eutrophic and oligotrophic lakes)
- Improved the one dimensional, deterministic, unsteady lake eutrophication and water quality management model – MINLAKE96, MINLAKE2012, MINLAKE2020
- Analyzed the interaction between surface gas transfer, epilimnetic diffusion and photosynthetic productivity in the dissolved oxygen model for lakes
- Developed a relationship between surface wind mixing and vertical diffusion to improve surface mixed layer modeling for stratified lakes

Teaching Experience (13 years of teaching experience at Auburn University (AU), Alabama, and 12 years of teaching experience at Lamar University (LU), Texas)

- Open Channel Hydraulics (Undergraduate, graduate, AU)
- Hydrological Analysis and Modeling (Undergraduate, graduate, AU)
- Stormwater Management and Modeling (Undergraduate, graduate, AU)
- Hydrologic Modeling (graduate, AU)
- Flow and Water Quality Models (graduate, AU)
- Surface Water Quality Modeling (graduate, AU & LU)
- Hydrology of the Environment (Engineering Hydrology) (undergraduate)
- Hydraulics & Hydraulic Lab (undergraduate, AU & LU)
- Fluid Mechanics (graduate, LU)
- Hydraulic Engineering (Water Resources Engineering) (undergraduate, LU)
- Stormwater Design and Management (graduate, LU)
- Hydraulic Engineering Systems (graduate, LU)
- Drainage System Design (graduate, LU)
- Hydrological Engineering Projects (graduate, LU)
- Coastal and Hydrodynamic Processes (graduate, LU)
- Models of Hydrologic Systems (graduate, LU)
- GIS in Water Resources (graduate, LU)
- Computer-Aided Software Engineering (Arc/Info, ArcView, and ArcGIS) (graduate, LU)
- Computer-Aided Design (AutoCAD, MicroStation) (undergraduate and graduate, LU)
- Lake and Reservoir Hydrodynamics (graduate, LU)
- Surveying (undergraduate, LU)
- Statics (undergraduate, LU)
- FE Review (undergraduate, AU & LU)

Graduate Students

Ph.D. in Civil Engineering (**Auburn University**)

Graduated – 9

1. Nirajan Dhakal (2012, *Assistant Professor* at Spelman College), 2. Suresh Sharma (co-chair, 2012, *Associate Professor* at Youngstown State University, Ohio), 3. Golbahar Mirhosseini (co-chair, 2013), 4. Manoj KC (2014), 5. Janesh Devkota (2014), 6. Gang

Chen (2016, *Lecturer at Hohai University*, China), 7. Liping Jiang (2016, *Assistant Professor* at Montana Tech), 8. Xiaoning Li (2019), 9. Zuhier Alakayleh (2019, *Assistant Professor* at Mutah University, Jordan)

Currently supervising - 2

Matthew D. Ricks (Assistant Professor at Liberty University) and Bushra Tasnim

Master of Science (M.S.) or Master of Civil Engineering (M.C.E.) (**Auburn University**)

Graduated – 15

1. Jasmeet Singh Lamba (co-chair, 2009), 2. Nirajan Dhakal (2010), 3. Sushban Shrestha (2011), 4. Liping Jiang (2012), 5. Manoj K. C. (2012), 6. Janesh Devkota (2012), 7. Christopher Logan (2012), 7. Thomas B. Weems (2013), 9. Kyle Lusk (2017), 10. Sagar Kumar Tamang (2017), 11. Sudan Pokharel (2017), 12. Jalil Ahmad Jamily (2018), 13. Xueqian Li (2019), 14. Jie Pu (2019), 15. Bushra Tasnim (2020)

Currently supervising – 2

Nikit Bahattarai and Mingzhao Zhou

Postdoc/Visiting Scholars – 5 (Auburn University)

Drs. Gang Chen (Hohai University), Liping Jiang (Montana Tech), Zhongshun Li (Tsinghua University), Junqi Li (BUCEA), and Xiaoli Du (BUCEA)

Doctoral of Engineering (D.E.) (Lamar University): Graduated – 5

Dehui Su, August 2003, “Development and applications of an integration one- and two-dimensional, numerical urban rainfall-flood simulation model”

Shoudong Jiang, May 2007, “Numerical simulations of shallow flow characteristics through curb-opening inlets at various longitudinal and cross slopes.”

Pratistha Pradhan, December 2007, “Estimation of rainfall loss and unit hydrograph parameters using non-linear programming.”

Jinwei Qiu, August 2008, “Gravel transport estimation and flow simulation over low water stream crossings”.

Alam Shoeb, May 2010, “Identification of potential coldwater refuge lakes important for sustaining Cisco habitat under climate warming scenarios in Minnesota”.

Master of Engineering Science (with thesis, Lamar University): Graduated – 8

Alam Shoeb, May 1999, “Simulation and validation of fish habitat constraints in small U.S. lakes under different climate scenarios”.

Nagrani Nitin K., December 2002. “Design of confined placement areas in Sabine-Neches waterway, Texas, for the 50-year dredged material management plan”.

Agnihotri Nilesh, August 2003, “Unit hydrograph development for watersheds in Fort Worth”.

Gharty Chhetri OM, December 2003. “Synthesis of storm drainage design - current methodologies”.

Khanal Prakash; May 2004, “Development of regional synthetic unit hydrograph for Texas watersheds”.

Malla Ranjit, December 2004, “Estimating time parameters of direct runoff and unit hydrographs for Texas watersheds”.

Gajendra Shrestha, May 2005, “Gravel transport over low-water crossings in Johnson Fork River, Texas”.

Rajendra Shrestha, December 2006, “Water temperature simulation in Amistad Reservoir”.

Master of Engineering (non-thesis, Lamar University): Supervised numerous graduate projects and served as committee members for **more than 130 students** who completed degrees in Master of Engineering, Master of Environmental Studies, Master of Environmental Engineering at Lamar University, Beaumont, Texas from 1995 to 2007.

Professional Activities

- Editorial Board Member, *Water (Online Open Access)*, (2017–Present)
- Guest Editor, *Water (Online Open Access)* for the special issue of " Water Quality Monitoring and Modeling in Lakes", (2016–2018)
- Guest Editor, *Water (Online Open Access)* for the special issue of "Climate Change Effects on Freshwater Organisms and Ecosystems", (2015–2016)
- Associate Editor, the Hydrological Sciences Journal (HSJ) under the International Association of Hydrological Sciences (IAHS/AISH), (2015–2019)
- Associate Editor and Editorial Board Member for British Journal of Environment and Climate Change (BJECC) (2012–2018), Now called as the International Journal of Environment and Climate Change (IJECC)
- Member of ASCE EWRI TMDL Analysis and Modeling Task Committee (August 2013 – present)
- Involved with meetings for the ASCE EWRI Hydroclimate Technical Committee (2012–2014)
- Involved with meetings for the ASCE EWRI Surface Hydrology Technical Committee (2012–2014)
- Associate Editor for Water Quality Modeling, Journal of the American Water Resources Association (JAWRA), (2012–2013)
- Associate Editor for Surface Water Hydrology, Journal of the American Water Resources Association (JAWRA), (2007–2012)
- Floodplain Management Committee of the American Water Resources Association (2003–2016)
- ASCE Task Committee “Urbanization Effects for Groundwater”, Vice Chair, (2008–2010).
- Chinese American Water Resources Association (CAWRA, <http://cawra.us/default.htm>), Board of Directors, (2007–2011).
- Technical Assistant Panel member of TxDOT Research Management Committee 3 - “ROW, Hydraulics, Environmental Conservation” (1996–2007).
- Served as *proposal reviewer and review panel member* for the **National Science Foundation (1997, 2012 CAREER Program** in the Division of Bioengineering & Environmental Systems and the Division of Hydrologic Sciences, and **2003 hydrology program**).

- Served as a *proposal reviewer* for the US Geological Survey and National Institutes for Water Resources, National Competitive Grants Program (reviewed ten proposers for 1998 and 1999 runs).
- Served as a *proposal reviewer* for New York Sea Grant program (2008).
- Served as paper reviewers for many journals: *British Journal of Environment and Climate Change*, *Journal of Ecological Engineering*, *ASCE Journal of Hydrological Engineering*, *ASCE, Journal of Hydraulic Engineering*, *Journal of Civil Engineering and Environmental Systems*, *Journal of Irrigation and Drainage Engineering*, *ASCE Journal of Environmental Engineering*, *AGU Water Resources Research*, *Climatic Change*, *Limnology and Oceanography*, *IAHR Journal of River Basin Management*, *Transaction of the ASABE*, *IAHR Journal of Fluid Engineering*, *Journal of Theoretical Biology*, *Journal of Applied Remote Sensing*, *Separation and Purification*, *Journal of the American Water Resources Association (JAWRA)*, *Lakes & Reservoirs: Research and Management*, *Environmental Monitoring and Assessment*, *Ocean Engineering*, and *Frontiers of Environmental Science and Engineering*, *Urban Climate*.
- Attended the Lower Neches Valley Authority (LNVA) Steering Committee meetings and provided both oral and written recommendations in its Clean River Program. Reviewed the 1996 Regional Assessment of Water Quality Reports for LNVA (1996).
- Served as *secretary* for the Chinese Association of Southeast Texas (Beaumont, Port Author, and Orange, Texas) for two years (1995–1997).

Members of Professional Societies or Associations

- (1) International Association of Hydrological Sciences (IAHS/AISH), member, (2013 – present, member), <http://www.iahs.info/>.
- (2) Environmental & Water Resources Institute (EWRI), the American Society of Civil Engineers (ASCE) (1994–present, Fellow member).
- (3) Chi Epsilon Faculty Member (National Civil Engineering Honor Society) (2000–present, member).
- (4) International Association for Hydraulic Engineering and Research (IAHR) (1998–2013, member).
- (5) American Water Resources Association (AWRA) (1996–present, member).
- (6) American Geophysical Union (AGU) (1996–present, member).
- (7) American Society of Civil Engineers (ASCE) (1994–present, Fellow member).
- (8) American Society of Engineering Education (ASEE) (1995–1997, member).
- (9) Minnesota Ground Water Association (1994–1996, member).
- (10) Sigma Xi (The Scientific Research Society) (1996–1998, member).
- (11) Environmental Engineering Society, University of Minnesota (1993–1994, member).

Honors

- 2019 Auburn University SGA's (Student Government Association) [2018–2019 Faculty Member of the Year](#)–Outstanding Faculty Member in the [Graduate School](#) (April 8).
- **Arthur H. Feagin Chair Professor of Civil Engineering** at Auburn University on October 1, 2014
- **F.ASCE** – Fellow of ASCE (American Society of Civil Engineers) elected in February 2014

- **F.EWRI** – Fellow of EWRI (ASCE Environmental & Water Resources Institute) elected in May 2014
- **Diplomate, Water Resources Engineer (D.WRE)**, a credential from the American Academy of Water Resources Engineers (AAWRE), March 2007.
- **“James M. Robbins Excellent-in-Teaching Award”**, 2005, Southwest District of Chi Epsilon – National Civil Engineering Honor Society.
- **“John B. Hawley Award”** in Recognition of Technical Paper of Outstanding Merit, 2004, American Society of Civil Engineers, Texas Section.
- **"Release Time Research Award"** April 2003, Lamar University, Beaumont, TX
- **"University Scholar Award"** April 2002, Lamar University, Beaumont, TX
- **“Andrew Green College of Engineering Performance Award"** February 2000, College of Engineering, Lamar University, Beaumont, TX
- **"Who’s Who in Science and Engineering"** 5th Edition, 2000/2001, The Marquis Who’s Who Publication Board.
- **"University Merit Award"** 1998, Lamar University, Beaumont, TX.
- **"Teaching Bonus Award"** 1998, Lamar University, Beaumont, TX.
- **"Scholarship For Studying In Foreign Countries"** (1990–1991), sponsored by the Ministry of Education of China, Beijing, P. R. China.
- **"Fellowship of Fluid Mechanics"** (1985), sponsored by Professor Allen Chwang of the University of Iowa, Iowa City, Iowa.
- **"Excellent Undergraduate Student"** (1982–1987, five times); "Best Graduating Student" (1987), Tsinghua University, P. R. China.

University Services at Lamar University

- Faculty Advisor for ASCE student chapter (1998–2001)
- University Academic Computing Committee (1998–2003)
- University Graduate Council (2002–2004)
- University Curriculum Council (2003–2005)
- University Research Council (2001–2003)
- University International Student Affairs Committee (1998–2000)
- College Faculty and Student Relations Committee (1995–1998)
- College Graduate Engineering Core Courses Policy Committee
- College of Engineering Promotion and Tenure Committees
- University Search Committee for the Dean of Engineering
- University and College Faculty Merit Award committees

University Services at Auburn University

- University Academic Standards Committee, 2011–2017 (chair in 2013–2015)
- Departmental Graduate Program Committee (2008–, chair starting from June 2014).
- Departmental Program Assessment Committee (2009–2013).

ABET Accreditation Experience

- Prepared course materials and parts of self-study report for and participated in ABET accreditation visits in 2000 and 2006.
- Attended ASCE and ABET online training workshop for CE program evaluators (April 14 and 21, 2006)

- Attended ABET Faculty Workshop on Assessing Program Outcomes on February 24, 2007, in Baltimore, Maryland.

Research Grants and Proposals

At Lamar University (1995–2007)

1. **Received** a *Lamar Research Enhancement grant* (09/01/98 to 08/31/99) to conduct research in “Variation of reservoir water temperatures under inflows”.
2. **Received** a *Lamar Research Enhancement grant* (09/01/96 to 08/31/97) to conduct research in “Water temperature dynamics in Toledo Bend Reservoir, TX”.
3. **Received** a *US EPA research subcontract* (10/01/96 to 09/30/98) for a one-year study in water quality and fish habitat projections in lakes from the University of Minnesota.
4. **Received** funding from the Texas Higher Education Coordinating Board for a two-year study about “Internet- and component-based modeling system for lake water quality and fish habitat projections” (01/01/2000-12/31/2001).
5. **Received** funding from the Texas Water Development Board for a one-year study on “Nutrient transport and water quality monitoring in Sabine Lake bayous” (09/01/1999-01/31/2000).
6. **Received** funding from the Texas Department of Transportation with Texas Tech University (PI), University of Houston, and USGS for a four-year study "Regional Characteristics of Storm Hyetographs" (09/01/2000-8/31/2004).
7. **Received** funding from the Texas Department of Transportation with Texas Tech University (PI), University of Houston, and USGS for a five-year study "Regional Characteristics of Unit Hydrographs" (09/01/2000-8/31/2005).
8. **Received** funding from the U.S. Army Corps of Engineers for “Assistance in the field data collection effort for the Sabine-Neches waterway project” (06/01/2001-09/30/2002).
9. **Received** funding from the Texas Higher Education Coordinating Board for a supplemental High School Teacher Grant for ATP project “Internet- and component-based modeling system for lake water quality and fish habitat projections” (05/26/2001-8/31/2001, and 05/27/2002-8/31/2002).
10. **Received** funding from the U.S. Army Corps of Engineers for “The Sabine-Neches Waterways Feasibility Study - Pipeline/Facilities Relocation and Removals”. (09/01/2001–8/31/2002) with Dr. Victor Zaloom (PI), and Dr. Mien Jao
11. **Received** funding from Lamar University Research and Graduate Studies as a part of 2002 **University Scholar Award** for a one-year study “Development of a 2-dimensional numerical model for flood risk simulation with application to the City of Beaumont.”
12. **Received** funding from the Texas Department of Transportation with Texas Tech University (PI) for a one-year study (9/1/2002 – 8/31/2003) about “Synthesis of storm drain design; current methodologies and need for alternatives to the rational method”.
13. **Received** funding from the U.S. Army Corps of Engineers for “Design of Confined Placement Areas for the 50-Year Dredged Material Management Plan”. (09/01/2002-6/30/2003) with Dr. Victor Zaloom (PI), Dr. Hsing-wei Chu, and Dr. Mien Jao.
14. **Received** funding from the U.S. Army Corps of Engineers for “Field Investigation of Effluent Quality of Placement Areas along Sabine-Neches Waterway”. (01/01/2003-8/31/2003) with Dr. Victor Zaloom (PI), Dr. Hsing-wei Chu, Dr. Jerry Lin, and Dr. Mien Jao.

15. **Received** funding from the Pacific International Engineering for “Jefferson County Highway 87 Shore Protection Clay Sediment Characterization” (2/1/2003-8/31/2003) with Dr. Victor Zaloom (PI), Dr. Hsing-wei Chu, Dr. Jerry Lin, and Dr. Mien Jao.
16. **Received** funding from the Texas Department of Transportation with Texas Tech University, University of Houston, and USGS for a two-year study (Lamar is the leading institution, I am the P.I.) about “Estimating Time Parameters of Direct Runoff and Unit Hydrographs for Texas Watersheds (Proj No. 0-4696)” (9/1/2003-8/31/2005).
17. **Received** funding from the Texas Department of Transportation with Texas Tech University (PI), University of Houston, and USGS for a two-year study about Guidance for Design in Areas of Extreme Bed-Load Mobility (Proj No. 0-4695)” (9/1/2003-8/31/2007).
18. **Received** a *Lamar Research Enhancement grant* (09/01/04 to 08/31/05) to conduct research in “Simulation of spatially varied flows and performance of inlets in superelevation transitions” in cooperation with Dr. Ken Aung at the Mechanical Engineering Department.
19. **Received** funding from the US Department of Agriculture through the Texas State University System and for a study of "Water Quality Simulations from Two- or Three-Dimensional Water Quality Models" in cooperation with Texas State University–San Marcos (7/1/2004-6/30/2006).
20. **Received** funding from the Texas Department of Transportation with the University of Houston, the University of Texas at Arlington for a two-year study (Project 4862) “Correlation of Texas Cone Penetrometer Test Values and Shear Strength of Texas Soils”, (9/1/2003-8/31/2005).
21. **Received** funding from the Texas Department of Transportation with Texas Tech University (PI), University of Houston, and USGS for a two-year study (Project 5-4194) “Implementation of Storm Event Statistical Data for Project Planning Purposes”, (5/1/2005-8/31/2006).

At Auburn University (2007–present)

22. **Received** funding from the Texas Department of Transportation with University of Houston (PI), USGS, and Texas Tech University for a three-year study (Project 0-6070) “Development of Guidance for Runoff Coefficient Selection and Examination of Temporal and Rainfall Depth Sensitivity”, (9/1/2007-8/31/2010).
23. **Received** funding from the Minnesota Department of Natural Resources through University of Minnesota (Heinz Stefan) “Identification of potential coldwater refuge lakes important for sustaining cisco habitat under climate warming scenarios in Minnesota”, (4/12/2008–10/31/2010).
24. **Received** funding from the Texas Department of Transportation with University of Houston (PI, Currently Texas Tech University), USGS, and Texas A&M University for a three-year study (Project 0-63820) “Establish effective lower bounds of watershed slope for traditional hydrologic methods”, (9/1/2008-8/31/2011).
25. **Received** funding from Auburn University Competitive Research Grant with Dr. James A. Stoeckel (Co-Pi, Department of Fisheries and Aquacultures), “Three-dimensional flow simulations for determining fertilization efficiency of unionid mussels in river systems”, (5/1/2008 – 4/31/2009).
26. **Received** funding from Auburn University Water Resources Center with Drs. Hanqin Tian (PI, Forestry and Wildlife), Latif Kalin, David Laband, Prabhakar Clement, Jack W. Feminella, Kathryn Flynn, Mark Dougherty, Chris Anderson, and Shufen Pan “Impacts of

- human activities and climate change on water resources and ecosystem health in the Wolf Bay Basin: A Coastal Diagnostic and Forecast System (CDFS) for integrated assessment”. (6/1/2008 – 5/30/2011)
27. **Received** funding from Alabama Power Company, “Three dimensional flow and thermal discharge modeling”, (8/10/2010 – 12/31/2010).
 28. **Received** funding from Alabama Department of Transportation, “Assessing performance characteristics of sediment basins constructed in Franklin County”, (8/10/2010 – 8/31/2012) with Dr. Zech and Dr. Clement.
 29. **Received** funding from Alabama Power Company, “Three dimensional flow and thermal discharge modeling for the Greene County Steam Plant”, (3/1/2011 – 12/31/2011).
 30. **Received** funding from Alabama’s Rapid Response Program for BP-Gulf Research Initiative, “Physical model investigation on the mixing of oil-dispersed substances in Mobile Bay ship channel.”, (1/1/2011 – 12/31/2011) with Dr. Vasconcelos (PI).
 31. **Received** funding from Alabama Department of Transportation, “Evaluation of scour potential of cohesive soils – Phase 2”, (1/27/2011 – 1/31/2013), with Dr. Anderson (PI)
 32. **Received** funding from Alabama Power Company, “Three dimensional flow and thermal discharge modeling: Phase II – Model Improvement”, (7/1/2011 – 12/31/2013).
 33. **Received** funding from Alabama Department of Transportation, “Evaluation of ALDOT ditch check practices using large-scale testing techniques”, (5/1/2012 – 10/31/2013), with Dr. Zech (PI)
 34. **Received** funding from Auburn Highway Research Center (HRC), “Testing and Improving Design Configurations of Sediment Basins”, (1/1/2013 to 8/31/2014) with Dr. Zech (Co-PI)
 35. **Received** funding from Alabama Department of Transportation, “Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques”, (5/1/2013 – 4/31/2015), with Dr. Zech (PI)
 36. **Received** funding from Alabama Department of Transportation, “Evaluation of high-rate settling technology for sediment control in roadway construction sites”, (5/2/2014 – 6/1/2016), with Dr. Vasconcelos (PI) and Dr. Zech (Co-PI)
 37. **Received** funding from Auburn Highway Research Center (HRC), “ Design and Construction of Rainfall-induced Large-Scale 3:1 Erosion Control Plots at the Auburn University Erosion and Sediment Control Testing Facility (AU-ESCTF)”, (1/1/2015 to 6/30/2016) with Dr. Zech (PI) and Dr. Donald (Co-PI)
 38. **Participated** in a project funded by the National Natural Science Foundation of China, “Studying on-site infiltration-detention principles and methods to reduce inundation on urban roadway system”, (1/1/2015-12/31/2018) with Prof. Junqi Li (PI) and Dr. Gongyong Wei, Beijing University of Civil Engineering and Architecture, P.R. China.
 39. **Received** funding from Auburn Highway Research Center (HRC), “Evaluation of EFA testing results for ALDOT’s bridge scour calculation”. (1/1/2016 to 8/31/2017) with Dr. J Brian Anderson (Co-PI)
 40. **Received** funding from Alabama Department of Transportation, “Analysis and potential solutions to sediment deposition in Dean Road Bridge watershed, Midland City, AL”, (6/1/2016 – 12/31/2017), with Dr. Vasconcelos (PI) and J Brian Anderson (Co-PI)
 41. **Received** funding from Alabama Power Company, “Three-Dimensional Flow and Thermal Discharge Modeling Under Different Operation and Climate Scenarios”, (5/1/2016 – 12/31/2018).

42. **Received** funding from City of Orange Beach, Alabama, “Monitoring and Modeling Hydrodynamic and Water Quality Conditions in Cotton Bayou”, Joel Hayworth (PI) Prabhakar Clement (Co-PI), (8/1/2016 – 9/15/2018).
43. **Received** funding from Ocean University of China (OUC)–Auburn University Joint Center of Aquaculture and Environmental Sciences, “Forecasting the Ecological Health of Coastal Waters in Alabama and China”, Alan E. Wilson (PI), Xing Fang (Co-PI), Joel Hayworth (Co-PI), (1/1/2017 – 12/31/2017) with Dajinag Sun (Co-PI), Yangen Zhou, Kai Yu, and Hongwei Shan at OUC.
44. **Received** funding from Ocean University of China-Auburn University Joint Center of Aquaculture and Environmental Sciences, “Identifying potential bioaccumulation hotspots of heavy metals in dynamic estuarine systems in Alabama, USA and China”, Matthew Waters (PI), Joel Hayworth, Xing Fang, Jinfen Pan, and Min Wang, (10/1/2018 – 9/30/2019).
45. **Received** funding from Alabama Department of Transportation, “Evaluation of ALDOT Erosion Control Practices using Rainfall Simulation”, (5/1/2018 – 12/15/2020), with Wesley Zech (PI) and Wesley Donald.
46. **Participated** in a project funded by the National Natural Science Foundation of China, “Suitability of Extension Green Roof Construction Based on Climate Characteristics and Effectiveness Controlling of Runoff Quantity and Quality in Beijing”, (1/1/2019-12/31/2022) with Dr. Yongwei Gong (PI), Prof. Junqi Li, Beijing University of Civil Engineering and Architecture, P.R. China.
47. **Received** funding from Presidential Awards for Interdisciplinary Research (PAIR), “A prototype framework of climate services for decision making”, (7/1/2018–6/30/2020) with Di Tian (PI), Xing Fang, Sanjiv Kumar, Jasmeet Lamba, Bo Liu, Brenda Ortiz, Puneet Srivastava, and Sarah Zohdy.
48. **Received** funding from the NorthWestern Energy, “Studying effects of sub-zero temperatures on the volume of water and discharge in the Missouri River”, with Drs. Liping Jiang (PI), Brian Kukay, Xiaobing Zhou, Chip Todd at Montana Technology University (10/1/2019–10/30/2022) and Xing Fang (PI at AU).
49. **Received** funding from the Iowa Department of Transportation, “Evaluation of Sediment Basin Performance using Large-Scale Testing Techniques”, (5/1/2020 – 4/30/2022), with Michael A. Perez (PI), Wesley N. Donald, and Xing Fang.
50. **Received** funding from Alabama Department of Transportation, “Best practices for construction site stormwater treatment using flocculants”, (5/16/2020 – 5/15/2022), with Michael A. Perez (PI), Wesley N. Donald, Xing Fang, and Joey Shaw.
51. **Received** funding from Alabama Department of Transportation, “Evaluation of ALDOT erosion control practices using rainfall simulation on various soil types and slope gradients”, (5/16/2020 – 5/15/2022), with Michael A. Perez (PI), Wesley N. Donald, and Xing Fang.

Book Chapters

1. Fang, Xing, Heinz G. Stefan, Liping Jiang, Peter C. Jacobson, and Donald L. Pereira, 2015. “Projected Impacts of Climatic Changes on Cisco Oxythermal Habitat in Minnesota and Management Strategies”, in “Handbook of Climate Change Mitigation and Adaptation, Second edition, Volume 1 (part II), pages 657-722” Editors-in-Chief Wei-Yin Chen, John

- M. Seiner, Toshio Suzuki, and Maximilian Lackner, DOI 10.1007/978-3-319-14409-2, Springer.
2. Heinz G. Stefan, Fang, Xing, and John S. Gulliver 2012. "[Chapter 11](#). Lake and Reservoir Fate and Transport of Chemicals", in the volume of "[Transport and Fate of Chemicals in the Environment](#)", pages 241–286, "[Encyclopedia of Sustainability Science and Technology](#)" Editor-in-Chief Dr. Robert A. Meyers, and Editor for the volume, Dr. John G. Gulliver, [Springer](#).
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109. Yongwei Gong, Dingkun Yin, Junqi Li, Xianwei Zhang, Wenhai Wang, Xing Fang, Honghong Shi, and Qi Wang, 2020. "Factors affecting the ability of extensive green roofs

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111. Xiaoli Du, Shenshen Cui, Xing Fang, Qian Wang, Guizhong Liu, 2020. "Adsorption of Cd(II), Cu(II), and Zn(II) by granules prepared using sludge from a drinking water purification plant". Accepted for publication in *Journal of Environmental Chemical Engineering*.

Journal Papers or Book Chapter Submitted for Review

1. **Xing Fang**, Peter C. Jacobson, Liping Jiang, William R. Herb, Heinz G. Stefan, and Donald L. Pereira and Lucinda Johnson, 2020. "Understanding Effects of Climate Change and Eutrophication on Fish Habitat in Glacial Lakes of the Midwest States and Management Strategies," book chapter in "Handbook of Climate Change Mitigation and Adaptation, third edition, Editors-in-Chief: Maximilian Lackner, Baharak Sajjadi and Wei-Yin Chen, Springer.
2. Vamsi K. Sridharan, Saurav Kumar, Nigel W.T. Quinn, **Xing Fang**, Andrew Parker, Ebrahim Ahmadisharaf, Harry X. Zhang, and Steven C. McCutcheon, 2020. "Adaptive Protocol for Selecting Appropriate Total Maximum Daily Load (TMDL) Models," submitted to *ASCE Journal of Hydrologic Engineering*.
3. Xiaoning Li, Chuanhai Wang, Gang Chen, Qiang Wang, Zunle Hu, Jinning Wu, Shan Wang, and **Xing Fang**, 2020. "Evaluating efficiency improvement of deep-cut curb inlets for road-bioretention systems" submitted to *Water Resources Management*.
4. Gang Chen, **Xing Fang**, Liping Jiang, Xiaoning Li, and Thomas B. Weems, 2020. "Reservoir hydrodynamic and temperature characteristics under release operations and downstream backwater effects in the cascade-reservoir system," submitted to *Water Resources Management*.
5. Xiaoli Du, Hui Liang, **Xing Fang**, Shenshen Cui, and Junqi Li, 2020. "Characteristics of colloids and their affinity for heavy metals in road runoff with different traffic in Beijing, China". submitted to *Environmental Science and Pollution Research*
6. Jianlong Wang, Mengyuan Zhao, Nannan Tu, Xiaoning Li, **Xing Fang**, Junqi Li, Junwei Jin, and Dingjiang Su, 2020. "Curb inlet efficiency evaluation under unsteady rainfall based on full-scale rainfall-runoff experiments", submitted to *ASCE Journal of Hydrologic Engineering*.
7. Chuanhai Wang, Wenjuan Hua, Gang Chen, **Xing Fang**, and Xiaoning Li, 2020. "Distributed-Framework Basin Modeling System: Overview and Model Coupling (I)", submitted to *Water*.
8. Gang Chen, **Xing Fang**, Chuanhai Wang, Wenjuan Hua, and Xiaoning Li, 2020. "Distributed-Framework Basin Modeling System: Hydrologic Modeling System (II)", submitted to *Water*.
9. Xiaoning Li, Chuanhai Wang, Gang Chen, **Xing Fang**, Pingnan Zhang, and Wenjuan Hua, 2020. "A Distributed-Framework Basin Modeling System: Hydraulic Modeling System (III)", submitted to *Water*.

10. Gang Chen, Chuanhai Wang, **Xing Fang**, Xiaoning Li, Pingnan Zhang, and Wenjuan Hua, 2020. “Distributed-Framework Basin Modeling System: Application in Taihu Basin (IV)”, submitted to *Water*.

Invited Lectures and/or Research Seminars

1. Texas State University – San Marcos, Department of Biology and Aquatic Research Station, 1999. “*Simulation and validation of fish thermal DO habitat in north-central U.S. lakes under different climate scenarios*”
2. University of Houston, Department of Civil and Environmental Engineering, 2004. “*Flood Risk Simulation for Urban City*”
3. University of Minnesota, Department of Civil Engineering, 2004. “*Lake and Reservoir Water Quality Modeling*”
4. Korea National Institute of Environmental Research (Seoul, Korea), March 24, 2009. “*Practical Studies, Modeling Tools, and Research Development on TMDL in USA*”
5. Korea National Institute of Environmental Research (Seoul, Korea), March 25, 2009. “*Effects of Global Climate Warming on Water Quality Characteristics and Fish Habitats in Lakes of the Contiguous USA*” for 2009 International Seminar on Climate Change and Water: Impacts and Response”.
6. Northwest A&F University, College of Resources and Environmental Sciences, P.R. China. “*Effects of Global Climate Warming on Water Quality Characteristics and Fish Habitats in Lakes of the Contiguous USA*,” Yangling, Shanxi, China, June 29, 2010.
7. Northwest A&F University, College of Water Resources and Architectural Engineering, P.R. China. “*Hydraulic and Hydrologic Analysis and Modeling*,” Yangling, Shanxi, China, June 28, 2010.
8. South China Institute of Environmental Sciences, Ministry of Environment Protection, P.R. China. “*Watershed, Lake, Estuarial Water Quality Modeling and Management under Different Climate Scenarios*,” GuangZhou, China, June 26, 2010.
9. Sun Yat-Sen University, School of Geography Sciences and Planning, “*Effects of Global Climate Warming on Water Quality Characteristics and Fish Habitats in Lakes of the Contiguous USA*”, P.R. China. GuangZhou, China, June 25, 2010.
10. Sun Yat-Sen University, School of Geography Sciences and Planning, “*Modeling, Prevention, Engineering and Management Practices to Mitigate the Risk of Flash Floods in Urban Areas*”, P.R. China. GuangZhou, China, June 25, 2010.
11. Nanchang University, P.R. China (joint workshop with University of Virginia funded by the National Science Foundation). “*Watershed and Lake Water Quality Modeling and Management under Different Climate Scenarios*,” Nanchang, China, June 23, 2010.
12. Alabama Association of Floodplain Managers, the 4th Annual Fall Conference. “*Flood Risk Simulation for Urban Cities: 1- and 2-Dimensional Hydraulic Models in Urban Flood Simulations*” Auburn, AL, October 18, 2011.
13. Tsinghua University, P.R. China. “*Watershed, Lake, Estuarial Water Quality Modeling and Management under Different Climate Scenarios*”, College of Civil and Hydropower Engineering, July 25, 2013.
14. Beijing University of Civil Engineering and Architecture, P.R. China. “*Modeling, Prevention, Engineering and Management Practices to Mitigate the Risk of Flash Floods in Urban Areas*”, School of Environmental and Energy Engineering, July 26, 2013.

15. University of Central Florida, Department of Civil and Environmental Engineering, "Climate Change Impacts on Water Quality and Fish Habitat in the Contiguous USA" and "Evaluating the Climate Change Impact on Rainfall IDF Curves in Alabama, Using Dynamically Downscaled Precipitation Data", January 30, 2015.
16. China Institute of Water Resources and Hydropower Research (IWHR). "Development, Applications, and Challenges of Hydrodynamic and Water Quality Modeling and Monitoring in USA", Beijing, March 2, 2015.
17. Beijing University of Civil Engineering and Architecture, P.R. China. "How to Write and Publish Journal Papers in SCI and EI Journals", School of Environmental and Energy Engineering, March 5, 2015.
18. Tsinghua University, P.R. China. "Water Quality and Ecosystem Modeling – Updates & Challenges", College of Civil and Hydropower Engineering, March 9, 2015.
19. Peking University, Center of Water Science, P.R. China. "Projections of climate impacts on water quality characteristics and fish habitats in lakes of the contiguous USA", College of Civil and Hydropower Engineering, March 10, 2015.
20. Beijing University of Civil Engineering and Architecture, P.R. China. "Modeling Overland Flows on Impervious and Previous Surfaces of Different Slopes", School of Environmental and Energy Engineering, March 11, 2015.
21. Chinese Academy of Sciences (CAS). "Watershed and Lake Ecological Modeling and Management under Different Climate Scenarios", Institute of Geosciences and Natural Resources, Beijing, March 13, 2015.
22. University of Mississippi, National Center of Computational Hydroscience Engineering (NCCHE). "Projections of climate impacts on water quality characteristics and fish habitats in lakes of the contiguous USA", Oxford, Mississippi, April 17, 2015.
23. Beijing University of Civil Engineering and Architecture, P.R. China. "Characteristics of Comprehensive Stormwater Management in USA", School of Environmental and Energy Engineering, July 12, 2016.
24. Beijing University of Civil Engineering and Architecture, P.R. China. "Calculation of the Runoff Control Rate of LID Facilities in USA - National Stormwater Calculator", School of Environmental and Energy Engineering, July 17, 2016.
25. Ocean University of China, Qingdao, P.R. China. "Effects of Climate Warming on Fish Habitats in Lakes of the Contiguous USA", Fishery College, July 1, 2016.
26. Tsinghua University, Beijing, P.R. China. "Simulations of Unsteady Flow Dynamics, Temperature, and Dye Distributions of Density Currents in a River-Reservoir System under Different Upstream Releases and Weather Scenarios", College of Civil and Hydropower Engineering, July 5, 2016.

Published in Conference Proceedings

1. Stefan, H. G., J. G. Eaton, M. Hondzo, B. E. Goodno, **X. Fang**, K. E. F. Hokanson, and J. H. McCormick, 1994. "A Methodology to Estimate Global Climate-Change Impacts on Lake Waters and Fisheries in Minnesota." Proceedings of the First National Conference on *Climate Change and Water Resources Management*. (Editors) T. M., Ballentine and E. Z., Stakhiv, U.S. Army Corps of Engineers, pp. II-177:II-192.
2. **Fang, X.**, and H. G. Stefan, 1996. "Surface Mixed Layer and Vertical Diffusion Modeling of Stratified Waters." *Proceedings of Texas Section of American Society of Civil Engineers - 1996 Spring Meeting*, Beaumont, Texas.

3. **Fang, X.**, 1997. "Water Temperature Dynamics in Texas Lakes". *Proceedings of Texas Section of American Society of Civil Engineers - 1997 Spring Meeting*, Houston, Texas
4. **Fang, X.**, H. G. Stefan, S. R. Alam, and J. G. Eaton, 1999. "Simulation and Validation of Fish Habitat Constraints in Small U.S. Lakes under Different Climate Scenarios". *The third International Symposium on EcoHydraulics*, Salt Lake City, Utah.
5. Stefan, H. G., and **X. Fang**, 1999. "Simulation of Global Climate-Change Impact on Temperature and Dissolved Oxygen in Small Lakes of the Contiguous U.S." *Proceedings of a specialty conference on "Potential Consequences of Climate Variability and Change to Water Resources of the United States"* (sponsored by the American Water Resources Association), Atlanta, Georgia.
6. **Fang, X.**, and H.G. Stefan, 2000. "Dilution Estimate for a Plunging Discharge from a Channel over a Sloping Shore." *The fifth International Symposium on Stratified Flows*, Vancouver, BC, Canada.
7. **Fang, X.**, David A. Brock, and Mohammed Sharifuzzaman, 2001. "Nutrient Transport and Water Quality Monitoring in Sabine Lake Bayous". Proceeding of the 29th International Association of Hydraulic Research Congress, Beijing, P. R. China.
8. **Fang, X.**, Longjing Ding, Liang Zhao, and Wen-Ran Zhang, 2001. "Web-based Modeling System for Water Quality and Fish Habitat Projections of Lakes". Proceeding of the 29th International Association of Hydraulic Research Congress, Beijing, P. R. China.
9. **Fang, X.**, Jianhua Fu, David Thompson, Theodore Cleveland, and William Asquith. "Unit Hydrograph Development for Texas Watershed Using Linear Programming". Proceeding of the ASCE Texas Section Spring Meeting in Corpus Christi, April 2-5, 2003.
10. Theodore Cleveland, David Thompson, and **Xing Fang**. "Instantaneous Unit Hydrographs for Central Texas". Proceeding of the ASCE Texas Section Spring Meeting in Corpus Christi, April 2-5, 2003.
11. Su Dehui and **Xing Fang**, 2003. "Estimating Traveling Time of Flat Terrain by 2-Dimensional Overland Flow Model". The International Symposium on Shallow Flows, Delft University of Technology, The Netherlands, June 16-18, 2003.
12. **Fang X.**, Mien Jao, Victor Zaloom, Hsing Wei Chu, and Nitin Nagrani, James Few, 2004. "Design of Confined Placement Areas in Sabine-Neches Waterway, Texas", ASCE Conference – Port 2004, Houston, Texas.
13. **Fang X.**, Om B Gharty Chhetri, and David B. Thompson, 2004. "Synthesis Storm Drain Design" Proceeding of the ASCE Texas Section Fall Meeting in Houston, September 2004.
14. **Fang X.**, Khanal Prakash, Theodore Cleveland, David Thompson, and Pratistha Pradhan, 2005. Revisit of NRCS Unit Hydrograph Procedures. Proceeding of the ASCE Texas Section Spring Meeting in Austin, April 2005.
15. J.F. Krou, Wang, K.H., T.G. Cleveland, **X. Fang**, and D. Thompson, 2005. Bed-Load Transport at Low-Water Crossings. Joint ASME/ASCE/SES Conference on Mechanics and Materials, June 1-3, 2005, Baton Rouge, Louisiana.
16. Cleveland Theodore G., Amanda Garcia, Xin He, William H. Asquith **Xing Fang**, and David B. Thompson. Comparison of Physical Characteristics for Selected Small Watersheds in Texas as Determined by Automated and Manual Methods Proceeding of the ASCE Texas Section Fall Meeting in El Paso, October 2005.
17. Cleveland, G. T, X. He, **X. Fang**, and D. B. Thompson, 2006. "Regressions Relating Watershed Physical Characteristics to Unit Hydrograph Parameters for Rainfall-Runoff Modeling in Central Texas." Proceeding of the International Conference "Challenges in

- Coastal Hydrology and Water Quality” organized by the American Institute of Hydrology and Louisiana State University, Baton Rouge, LA, May 21-24, 2006.
18. Cleveland, G. T, X. He, **X. Fang**, and D. B. Thompson, 2006. “Determination of Instantaneous Unit Hydrographs for Small Watersheds in Texas Using Digital Elevation Data and Quadratic Flux Law Particle Tracking.” Proceeding of the International Conference “Challenges in Coastal Hydrology and Water Quality” organized by the American Institute of Hydrology and Louisiana State University, Baton Rouge, LA, May 21-24, 2006.
 19. **Fang, X.**, P. Pradhan, R. Malla, T. Cleveland, D. Thompson, 2006. “Estimating Time of Concentration for Texas Watersheds.” Proceeding of the International Conference “Challenges in Coastal Hydrology and Water Quality” organized by the American Institute of Hydrology and Louisiana State University, Baton Rouge, LA, May 21-24, 2006.
 20. **Fang, X.**, S.D. Jiang, K. Raut, and J.W. Qiu, 2006. “Applications of Microsoft Excel Solver Function in Water Resource Engineering.” Proceedings of the Texas Section American Society of Civil Engineers Spring Conference, April 19-22, Beaumont, Texas.
 21. **Fang, X.**, J.W. Qiu, G.M. Shrestha, T.G. Cleveland, F. Heitmuller, M. Roussel, D. Thompson, and K.H. Wang, 2006. “Analysis of Gravel Transport over Low-Water Stream Crossings.” Proceedings of the Texas Section American Society of Civil Engineers Spring Conference, April 19-22, Beaumont, Texas.
 22. Theodore G. Cleveland, Xin He, David B. Thompson, and **Xing Fang**, 2006. Synthesis of Unit Hydrographs from Digital Elevation Models. Presentation on AGU Fall Meeting at San Francisco, December 11-15.
 23. **Fang, X.**, S. D. Jiang, J. W. Qui, 2007. “Three Dimensional Flow Simulation in Channels and through Side Weirs”. Proceedings of the Texas Section American Society of Civil Engineers Spring Conference, April 13, Taylor, Texas.
 24. Gudavalli, S., S. Gupta, N. Palla, M. Jao, M. Srinivasan, **Xing Fang**, S. Yin, and M.C. Wang, 2007. “Finite Element Analysis of Texas Cone Penetration Test.” Proceedings of the Texas Section American Society of Civil Engineers Spring Conference, April 13, Taylor, Texas.
 25. Theodore G. Cleveland, Xin He, **Xing Fang**, and David B. Thompson, 2007. Unit Hydrographs for Small Watersheds in Texas Using Particle Tracking. 2007 World Environmental and Water Resources Congress, Tampa, Florida, May 15-19.
 26. Fang, X., S.D., Jiang, and S.R. Alam, 2008. Flow Simulations of Curb Opening Inlets with Different Longitudinal and Cross Slopes. 2008 World Environmental and Water Resources Congress, Honolulu, HI, May 13-17.
 27. Gudavalli S., C. Vipulanandan, A. J. Puppala, N. Palla, **X. Fang**, M. Jao, S. Yin, and M. C. Wang, 2008. “Development of Correlation between TCP Blow Count and Undrained Shear Strength of Low Plasticity Clay”. Geotechnical and Geophysical Site Characterization, Huang and Mayne (eds), 2008, Taylor & Francis Group, London, ISBN 978-0-415-46936-4, Referred conference proceeding for the 3rd international conference on Site Characterization, Taipei, April 2008.
 28. **Fang X.**, and H. G. Stefan, 2009. “Effects of Global Climate Warming on Water Quality Characteristics and Fish Habitats in Lakes of the Contiguous USA” Proceeding of the International Seminar on the World Water Day 2009: “Climate Change and Water: Impacts and Response”, The Korea National Institute of Environmental Research, Seoul, Korea, March 25, 2009.

29. Qiu, J. W., and X. Fang, 2009. "Challenges on Three Dimensional Simulations of Free Surface Flow". Proceeding (CD-ROM) for 2009 World Environmental and Water Resources Congress, Kansas City, Missouri, May 17-21, 2009.
30. Fang, X., N. B. Chang, M. K. Lee, and L. Wolf. 2009. "Environmental Impacts on Surface Water and Groundwater for Expanding Urban Water Supply Capacity Using Stone Quarries". Proceeding (CD-ROM) for 2009 World Environmental and Water Resources Congress, Kansas City, Missouri, May 17-21, 2009.
31. KC Manoj, Janesh Devkota, and X. Fang, 2010. "Computing Critical and Normal Depths for Eight Types of Cross-Section Using Excel Spreadsheet." Proceeding (CD-ROM) for 2010 World Environmental and Water Resources Congress, Providence, Rhode Island, May 16-21, 2010.
32. Su Dehui, Xing Fang, and Zheng Fang, 2010. "Effectiveness and Downstream Impacts of Stormwater Detention Basins Required for Urban Land Development." Proceeding (CD-ROM) for 2010 World Environmental and Water Resources Congress, Providence, Rhode Island, May 16-21, 2010
33. Nirajan Dhakal, Xing Fang, Theodore G. Cleveland, David B. Thompson, and Luke J. Marzen, 2010. "Estimation of Rational Runoff Coefficients for Texas Watersheds". Proceeding (CD-ROM) for 2010 World Environmental and Water Resources Congress, Providence, Rhode Island, May 16-21, 2010.
34. Jiliang Liu, Xing Fang, Zhengzhong Wang, and Danxia Sun, 2011. "Simulations of Natural Vibration Characteristics of Large-size Radial Gate with Three Arms Considering Fluid-solid Coupling". Conference paper published in *Applied Mechanics and Materials*, Vols. 50-51 (2011):200-204. International Conference on Intelligent Structure and Vibration (ISVC), Chongqing, China, January 14-16, 2011.
35. Jiliang Liu, Zhengzhong Wang, Xing Fang, and Hanmei Fang, 2011. "Dynamic Instability Mechanism and Vibration control of Radial Gate Arms". Conference paper published in *Applied Mechanics and Materials*, Vols. 50-51 (2011):309-313. International Conference on Intelligent Structure and Vibration (ISVC), Chongqing, China, January 14-16, 2011.
36. Xing Fang, Shoeb R. Alam, Heinz G. Stefan, Peter C. Jacobson, Donald L. Pereira, 2011. "Projecting the Impact of Climatic Change on Coldwater Fish Habitat in Minnesota Lakes". Proceeding (CD-ROM) for 2011 World Environmental and Water Resources Congress, Palm Springs, CA, May 22-26, 2011.
37. Nirajan Dhakal, Xing Fang, Theodore G. Cleveland, and David B. Thompson, 2011. "Revisiting Modified Rational Method". Proceeding (CD-ROM) for 2011 World Environmental and Water Resources Congress, Palm Springs, CA, May 22-26, 2011.
38. Shoeb R. Alam, Xing Fang, Heinz G. Stefan, Liping Jiang*, Peter C. Jacobson, Donald L. Pereira, 2011 "Year-round Lake Water Quality Model and Simulations in Minnesota Lakes under Future Climate Scenarios". Proceeding for 15th International Workshop on Physical Processes in Natural Waters (PPNW), Burlington, Canada, July 11-14, 2011, page 12-19.
39. Junqi Li, Wen Li, Xing Fang, and Xiaojun Liu, 2011. "Enlightenments from Incentive Mechanisms of Stormwater Management Policies of the United States". The 8th International Conferences on Urban Watershed Management, Beijing, P.R. China, September 6-8, 2011.
40. Junqi Li, Yang Liu, Haibo Yao, and Xing Fang, 2011. "Guarantee Rate Analysis of Water Supply from Rainwater Harvesting System for Watering Green Areas: Case Study in

- Beijing”. The 8th International Conferences on Urban Watershed Management, Beijing, P.R. China, September 6-8, 2011.
41. Jacobson, Peter C., Xing Fang, Heinz G. Stefan, and Donald L. Pereira, 2011, “Protecting cisco *Coregonus artedii* oxythermal habitat from climate change: building resilience in deep lakes using a landscape approach”. Proceeding of the 11th International Symposium on the Biology and Management of Coregonid fishes in Mondsee, Austria, September 26-30, 2011.
 42. Wesley N. Donald, Wesley C. Zech, and Xing Fang, “Auburn University’s Testing Facility for Evaluating Channelized Flow Sediment Control Practices”, IECA (International Erosion Control Association) annual conference, February 2012.
 43. Sushban Shrestha and Xing Fang “Application of WARMF Model to Study the Effect of Land Use Change and Climate Change in the Saugahatchee Creek Watershed.” Proceeding (CD-ROM) for 2012 World Environmental and Water Resources Congress, Albuquerque, NM, May 20–24, 2012.
 44. Thomas Hatch, Manoj KC, Jose Vasconcelos, and Xing Fang, “A Comparison between Numerical Modeling Approaches for the Simulation of Gravity Currents.” Proceeding (CD-ROM) for 2012 World Environmental and Water Resources Congress, Albuquerque, NM, May 20–24, 2012.
 45. Wesley N. Donald, Wesley C. Zech, and Xing Fang. “Evaluating Channelized Flow Sediment Control Practices Using Large-Scale Testing Techniques.” Proceeding (CD-ROM) for 2012 World Environmental and Water Resources Congress, Albuquerque, NM, May 20–24, 2012.
 46. Cleveland, Theodore G., Xing Fang, Ming-Han Li, David B. Thompson, and William H. Asquith. “Watershed slope lower bounds for hydrologic methods.” Proceeding (CD-ROM) for 2012 World Environmental and Water Resources Congress, Albuquerque, NM, May 20–24, 2012.
 47. KC Manoj*, Xing Fang, Young-Jae Yi*¹, Ming-Han Li, Theodore G. Cleveland, and David B. Thompson. “Estimating Time of Concentration on Low-Slope Planes using Diffusion Hydrodynamic Model.” Proceeding (CD-ROM) for 2012 World Environmental and Water Resources Congress, Albuquerque, NM, May 20–24, 2012.
 48. Li, Zhongshun, Dejun Zhu, Yongcan Chen, Zhaowei Liu, and Xing Fang. “Long-term water temperature simulation for Miyun Reservoir”. 2012 SREE (Society for Resources, Environment and Engineering) Conference on Hydraulic Engineering (CHE 2012), December 21-22, 2012, Hon Kong.
 49. Wesley N. Donald, Wesley C. Zech, and Xing Fang, “Comparative evaluation of wattles used as ditch checks comprised of different materials and properties.” IECA (International Erosion Control Association) annual conference, February 2013, San Diego, CA.
 50. Sushban Shrestha, Xing Fang, and Junqi Li, 2013, “ *Mapping the 95th Percentile Daily Rainfall in the Contiguous U.S.*”, World Environmental and Water Resources Congress, Cincinnati, Ohio, May 20–22, 2013.
 51. Zhongshun Li, Yongcan Chen, Xing Fang, Dejun Zhu, and Zhaowei Liu, 2013. “Projecting the impact of climatic change on coldwater fish habitat in Lake Jingpo (Northeast China)”. Proceedings of 35th (2013) IAHR (International Association of Hydraulic Engineering & Research) World Congress, Chengdu, China, September 8–13, 2013.

52. Donald, Wesley N., Wesley C. Zech, and Xing Fang. "Evaluation of Ditch Check Practices: Part 2 - Comparative Evaluations." In Environmental Connection Conference 2014, February 25–28, 2014, 1:255–63. Environmental Connection Conference 2014. International Erosion Control Association, 2014.
53. Donald, Wesley N., Wesley C. Zech, and Xing Fang. "Evaluation of Ditch Check Practices: Part 1 - Installation Improvements." In Environmental Connection Conference 2014, February 25–28, 2014, 2:1059–68. Environmental Connection Conference 2014. International Erosion Control Association, 2014.
54. Janesh Devkota and Xing Fang, 2014, "Age of Water and Salt Exchange in Perdido and Wolf Bay System" 2014 World Environmental and Water Resources Congress, Portland, Oregon, June 1–6, 2014.
55. Manoj KC and Xing Fang, 2014, "Estimating Time of Concentration of Overland Flow on Impervious Surface using Particle Tracking Model" 2014 World Environmental and Water Resources Congress, Portland, Oregon, June 1–6, 2014.
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