QIN QIAN, Ph.D.

Professor, Department of Civil & Environmental Engineering, Lamar University, Beaumont, TX 77710 Ph: 409-880-7559(O); Fax: 409-880-8121; Email: qin.qian@lamar.edu, qqian1@lamar.edu

EDUCATION

Ph.D. Civil Engineering, University of Minnesota, Minneapolis, MN, 02/2008

Dissertation: Solute exchange with sub-aqueous sediments: hydrodynamic interactions with advection flows induced by surface waves or bed forms

M.S. Civil Engineering, University of Minnesota, Minneapolis, MN, 09/2004

M.S.S. Software Systems, University of St. Thomas, St. Paul, MN, 12/2002

B.S. Hydrogeology & Engineering Geology, Nanjing University, China, 1994

PROFESIONAL EXPERIENCE

Professor (09/2021–Current), Civil & Environmental Engineering, Lamar University

Associate Professor (09/2014–08/2021), Civil & Environmental Engineering, Lamar University **Assistant Professor** (06/2008–08/2014), Civil & Environmental Engineering, Lamar University

Research Associate (01/2008–05/2008), Saint Anthony Falls Laboratory (SAFL), University of Minnesota, MN

Civil Engineer (08/2007–01/2008), HZ United, LLC, Plymouth, MN

Research/Teaching Assistant (06/2003–07/2007), Department of Civil Engineering, University of Minnesota, MN

Lab Assistant (01/2003 – 05/2003), Department of Geology and Geophysics, University of Minnesota **Research/Teaching Assistant** (07/1998–02/2000), Department of Earth Science, Nanjing University, China

Construction Engineer and Geotechnical Engineer (06/1994–06/1998) Nanjing Construction Company, China

TEACHING PROFESSIONAL TRAINING &CERTIFICATE

University of Minnesota, Center for Teaching and Learning Services

- Preparing for Future Faculty (PFF) Program, GRAD 8101, Fall 2006
- International TA Program, GRAD 5105, Fall 2003

ABET Faculty Workshop on Assessing Program Outcomes, Feb. 28, 2012, Houston, TX Excellence in Civil Engineering Education (ExCEEd) Teaching Workshop (June 24-29,2012), American Society of Civil Engineers

- Learned effective teaching constitutes, apply learn style model to organize and conduct of class
- Learned classroom assessment techniques and self-assess the classes conducted at workshop "Teaching Today's Student" Certificate (09/2018 to 05/2019), Lamar University, Center for Teaching and Learning Enhancement
 - Finished ten workshops and accomplished the capstone project to make my teaching style fits better for the current students, 2019

Certificate in Effective College Instruction, Association of College and University Educations (ACUE) (06/2022 to 07/2023)

- Microcredential Badge earned for Promoting Active Learning Module (Summer 2022)
- Microcredential Badge earned for Inspiring Inquiry and Preparing Lifelong Learners Module (Fall 2022)
- Microcredential Badge earned for Creating Inclusive and Supporting Learning Environment Module (Spring 2023)
- Microcredential Badge earned for Designing Learner-Centered and Equitable Courses: Cohort G (Summer 2023)

RESEARCH FUNDING

- "Manage surface water quality under climate change conditions to improve resiliency of Southeast Texas" Center for Resiliency, \$25,000, Qin Qian (PI), Xianchang Li (co-PI), 09/01/2024-08/31/2025.
- 2. "Flood and Surface Water Quality Coordination", Center for Resiliency, \$50,000, **Qin Qian** (PI), Xinyu Liu (co-PI), 09/01/2023-08/31/2024.
- 3. "Optimizing Internet of Things (IoT) Ecosystem through LoRaWAN and Edge Computing," Center for Resiliency, \$50,000, Bo Sun (PI), **Qin Qian** (co-PI), Jing Zhang (co-PI), Thinesh Selvaratnam (co-PI), 12/1/2023-08/31/2024.
- 4. "Coastal Sociological-Ecological Restoration Group Year Three (CSERG-3): On-going Initiatives, Capacity Building, and TxDOT GIWW Study," Center for Resiliency, \$48,611, Matthew P. Hoch (PI), Elizabeth Silvy (co-PI), Garrick Karden (co-PI), Zhe Luo (co-PI), Xingya Liu (co-PI), John McCollough (co-PI), Qin Qian (co-PI) 12/1/2023-08/31/2024.
- 5. "Enhancing resilience of energy and water supply infrastructures along the Texas Coast against catastrophic coastal flooding through integration of climate-informed adaptation strategies", NOAA-48OAD-SG-2022-2007298, \$499,492, **Qin Qian** (PI), Helen Lou (co-PI), subcontract from Texas Sea Grant \$105,000, 02/01/2023-12/31/2026.
- 6. "Robust and Reliable IoT-based Wireless Sensor Networks for Environmental Monitoring Infrastructure Resiliency", Center for Resiliency, \$49,303, Bo Sun (PI), **Qin Qian** (co-PI), Jing Zhang (co-PI), Thinesh Selvaratnam (co-PI), 10/1/2022-08/31/2023.
- 7. "Coastal Sociological-Ecological Restoration Group (CSERG) & Pilot Project: North Pleasure Island Reconstruction Continuation", Center for Resiliency, \$50,977, Matthew P. Hoch (PI), Elizabeth Silvy (co-PI), Garrick Karden (co-PI), Zhe Luo (co-PI), Xingya Liu (co-PI), John McCollough (co-PI), Qin Qian (co-PI) 10/1/2022-08/31/2023.
- 8. "Flood Coordination Study: Nonpoint Source Pollution (NPS) Study", \$50,000, Center for Resiliency, Liv Haselbach (PI), **Qin Qian** (co-PI), Frank Sun (co-PI) 09/01/2022-08/31/2023.
- 9. "Southeast Texas Urban IFL: Equitable solutions for communities caught between floods and air pollution", U.S. Department of Energy, \$5,000,000, Liv Haselbach (PI), Qin Qian (co-PI), Sidney Lin(co-PI), Nicholas Brake(co-PI), Clayton Jeffryes (co-PI), Tianxing Cai (co-PI) and Matthew Hoch (co-PI), 10/1/2022-08/31/2027.
- 10. "Identify potential BMP tools to reduce bacteria loading in Neches River" Coastal Management Program, Texas General Land Office, \$166,495, **Qin Qian** (PI), Frank Sun (co-PI), Bo Sun (co-PI), Jing Zhang (co-PI), 10/1/2022-09/31/2024.
- 11. "Conjunctive deployment of distributed stormwater infiltration and bioretention infrastructures to mitigate flooding and related non-point source pollution in Beaumont and Port Arthur, Texas", U.S. EPA Gulf of Mexico Division, \$448,625, **Qin Qian** (PI), Liv Haselbach (co-PI), Thinesh Selvaratnam (co-PI). 01/01/2022-12/31/2025
- 12. "High Frequency Radar for Texas Bays and Ports", Coastal Management Program, Texas General Land Office, \$819,219, Subcontract from UTEP \$79,000, Liv Haselbach (PI), **Qin Qian** (co-PI), Xing Wu (co-PI), 01/01/2021-01/31/2023.
- 13. "Flood Coordination Study: Nonpoint Source Pollution (NPS) and Dredge Studies", \$50,000/, Center for Resiliency, Liv Haselbach (PI), **Qin Qian** (co-PI), Frank Sun (co-PI) 09/01/2021-08/31/2022.
- 14. "Coastal Sociological-Ecological Restoration Group (CSERG) & Pilot Project: North Pleasure Island Reconstruction", Center for Resiliency, \$51,818, Matthew P. Hoch (PI), Elizabeth Silvy (co-PI), Garrick Karden (co-PI), Zhe Luo (co-PI), Xingya Liu (co-PI), John McCollough (co-PI), **Qin Qian** (co-PI). 02/01/2022-08/31/2022
- 15. "Enhancing Ubiquitous Water Monitoring Infrastructure Resiliency with IoT-based Wireless Sensor Networks and Deep Learning Neural Networks", Center for Resiliency, \$50,000, Bo Sun (PI), **Qin Qian** (co-PI), Jing Zhang (co-PI), Thinesh Selvaratnam (co-PI). 02/01/2022-08/31/2022
- 16. "Identification and quantification of economic benefits of climate-informed adaptation measures to reduce flood risk exposure of water supply infrastructures along the southeast Texas coast", NOAA-OAR-CPO, \$294,468, **Qin Qian** (PI, subcontract from UTA \$23,993), 09/01/2019-08/31/2024.

- 17. "Assessment of Stormwater infrastructure for mitigating flooding and non-point source pollution", Coastal Management Program, Texas General Land Office, \$162,821, **Qin Qian** (PI, subcontract from UTA \$35,000), 10/1/2019-03/31/2022.
- 18. "Water Quality Evaluation on Neches River Watershed Upstream using Wireless Sensor Networks and Deep Learning Neural Network," Center for Innovation, Commercialization and Commercialization (CICE), Bo Sun (PI), Jing Zhang (co-PI), **Qin Qian** (co-PI), \$4000, 05/01/2021-09/30/2021.
- 19. "Establishing a Solution to the Problem of Managing Dredge Waste", Center for Advances in Port Management, P. Bernazzani (PI), T. T. Nguyen (co-PI), **Qin Qian** (co-PI), X. Li (co-PI), and M. Jao (co-PI), \$33,000, 02/01/2021 08/31/2021.
- 20. "Southeast Texas Flood Coordination Study Genesis", Lower Neches River Authority, \$100,000, Liv Haselbach (PI), **Qin Qian** (co-PI), Xing Wu (co-PI), Nicholas Brake (Co-PI), Thinesh Selvartnam (co-PI). 05/07/2020-05/06/2021.
- 21. "Managing Dredge Waste in Navigation Channels", Center for Advances in Port Management, T. T. Nguyen (PI), P. Bernazzani (co-PI), **Qin Qian** (co-PI), and M. Jao (co-PI), \$35,000, 09/01/2018 08/31/2019.
- 22. "Quantification of hurricane storm damage in coastal waterway", REG from Lamar University, **Qin Qian** (PI), \$5,000, 09/2018 08/2019.
- 23. "Wake Wash in Sabine-Neches Waterway", Sabine-Neches River Waterway Navigation District, V. Zaloom (PI), **Qin Qian** (co-PI), M. Jao (co-PI), X. Wu (co-PI), K. Wang (co-PI), \$199,484, 11/2015–01/2019.
- 24. "Acquisition of Equipment to Develop a Ubiquitous Wireless Sensor Network for Measurement, Modeling, and Prediction in Water Resource Management", NSF URE, B. Sun (PI), **Qin Qian** (co-PI), \$16,000, 09/2014 –08/2018.
- 25. "Acquisition of Equipment to Develop a Ubiquitous Wireless Sensor Network for Measurement, Modeling, and Prediction in Water Resource Management", NSF MRI, B. Sun (PI), **Qin Qian** (co-PI), \$200,000, 09/2014 –08/2018.
- 26. "Multiscale Characterization and Modeling of Concrete Materials under Marine Tropical Environments", Center for Advances in Port Management (CAPM), X. Fan (PI), **Qin Qian** (co-PI), D. Su (co-PI), \$35,000, 02/2017–08/2018.
- 27. "Evaluation and Remediation of Water Contaminants Originating from Dredge Waste", Center for Advances in Water and Air Quality (CAWAQ), T. T. Nguyen (PI), P. Bernazzani (co-PI), **Qin Qian** (co-PI), and M. Jao (co-PI), \$25,000, 02/2016–05/2017.
- 28. "A multidisciplinary Research using EM2 Geomodel for Hydraulic Structures and Gulf Highway 87 Shoreline Protections", Presidential Faculty Fellowships from Lamar University, **Qin Qian** (PI), M. Jao (co-PI), K. Aung (co-PI), \$15,000, 08/2014–05/2015.
- 29. "Experimental Investigation on the Sediment Transport Process in Shallow-Grade Culverts and Storm Sewers", REG from Lamar University, **Qin Qian** (PI), \$5,000, 09/2014–08/2015.
- 30. "Ubiquitous Wireless Sensors Networks for Measurement, Modeling and Prediction in Water Resource Sustainability", REG from Lamar University, B. Sun (PI), **Qin Qian** (co-PI), \$5,000, 09/2013–08/2014.
- 31. "Modeling the Sediment Transport in Rio Grande River", REG from Lamar University, **Qin Qian** (PI), \$5,000, 09/2011 08/2012.
- 32. "Hydraulic Performance of Rectangular Deck Drains", TxDOT, **Qin Qian** (PI) X. Liu (co-PI), M.E. Barrett (co-PI) and R. J. Charbeneau (co-PI), \$317,948, 09/2010 08/2012.
- 33. "Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed", U.S. Agriculture Department T.C. Ho (PI), **Qin Qian** (co-PI), \$145,000, 09/2008 08/2013.
- 34. "Modeling the Solute Transport in the Interfacial Exchange Zone (IEZ)", **Qin Qian** (PI), \$5,000, REG from Lamar University, 09/2009 08/2010.

HONORS AND AWARDS

- 1. "Outstanding Service Award", Overseas Chinese Environmental Engineers and Scientists Association (OCEESA), 2019.
- "Anita Riddle Fellow" for Research Excellent Faculty, College of Engineering, Lamar University, 2017-2020.

- 3. "First Place Award" for Faculty Sponsor in Undergraduate Research Expo, Lamar University, 2016.
- 4. "Presidential Faculty Fellowships" for research from Lamar University, 08/2014–05/2015.
- 5. "James M. Robbins" Excellence in Teaching Award, Chi-Epsilon (The National Civil Engineering Honor Society) Southwest District, 2012.
- 6. Fellow, ASCE's Excellence in Civil Engineering Education (ExCEEd), 2012.
- 7. University Merit Award for Outstanding Young Professor, Lamar University, 2012
- 8. Marquis Who's Who in America, 64th Edition, 2010.
- 9. Montclair Who's Who (2009).
- 10. Excellent International Instructor, Center for Learning and Teaching Services, University of Minnesota (2005).
- 11. Advanced Science Prize (Application Division), Second Prize, Education Department of China (1999).
- 12. Best graduate student, Nanjing University, (1998~1999)
- 13. Advanced Science & Technology Award, Third Prize, Nanjing Science Committee (1998).
- 14. Best Paper Award, First Prize, Nanjing Construction Committee (1998).
- 15. Best Paper Award, Second Prize, Jiangsu Construction Committee (1998)
- 16. Best Paper Award, First Prize, Jiangsu Construction Committee (1997)

PUBLICATIONS

Book Chapter:

- Qin Qian, Saeid Eslamian, Mousa Maleki (2022), Chapter 19: Transboundary Resilience and Social-Hydrological Systems in Saeid Eslamin, ed. Handbook of Climate Change Impact on River Basin Management (HCCI-RBM), p 268-284, Taylor and Francis Group, CRC press. https://doi:10.1201/9781003473374-22
- Qin Qian, Saeid Eslamian (2023), Chapter 3: Canal Irrigation, In. Saeid Eslamin, ed. Handbook of Irrigation Hydrology and Management (HIHM), p33-50, Taylor and Franci Group, CRC press. https://doi: 10.1201/9780429290152-5
- 3. *Qin Qian*, (2021), Chapter 5: Impact of Urbanization on Flooding, In: Saeid Eslamian, ed. *Flooding Handbook*, *Vol III: Flood Impact and Management*, *p97-112*, Taylor and Francis Group, CRC press. https://doi.org/10.1201/9780429463327
- 4. *Qin Qian*, Saeid Eslamian (2022), Chapter 21: Closed Drainage Systems, In: Saeid Eslamian, ed. *Flood Handbook Vol 1: Flood Principles and Applications*, *p435-456*, Taylor and Francis Group, CRC press. https://doi.org/10.1201/9781003262640-26.
- 5. *Qin Qian*, Saeid Eslamian, Kaveh Ostad-Ali-Askari, Maryam Marani-Barzani, Farnaz Rafat and Ali Hasantabar-Amiri (2018), "Cofferdam", P.T. Bobrowsky, B. Marker (eds.), Encyclopedia of Engineering Geology, Springer International Publishing AG 2018, https://doi.org/10.1007/978-3-319-12127-7_59-1
- 6. **Qian, Q.** and Saeid Eslamian (2018), Chapter 20: Streamflow quality in low flow conditions, In: Saeid Eslamian and Faezeh A. Eslamian, ed. *Handbook of Drought and Water Scarcity, Vol 3: Analysis and Environmental, p375-386,* Taylor and Francis Group, CRC press. https://www.taylorfrancis.com/books/e/9781315226781/chapters/10.1201/9781315226781-20
- 7. **Qian, Q.,** (2016) Chapter II.1: Water Transport, In: Danial, C. Chen, ed. *Sustainable water Management and Technology, Volume II: p1-21*, Taylor and Francis Group, CRC press.
- 8. **Qian, Q.,** (2015), Chapter 61: Groundwater Recharge and Unconventional water: Design and Management Criteria, In: Saeid Eslamian, ed. *Handbook of Urban Water Reuse*, Taylor and Francis Group, CRC press, p809-816.
- 9. **Qian, Q.,** (2014), Chapter 15: Sediment Pollution, In: Saeid Eslamian ed., *Handbook of Engineering Hydrology, Vol 3: Environmental and water management*, Taylor and Francis Group, CRC press, p315-327.

Peer Reviewed Journal Paper

- 1. **Qin Qian,** Darius J. Edwards, Yu Zhang and Liv Haselbach, *Improving Flood Inundation Mapping Accuracy Using HEC-RAS Modeling: A Case Study of the Neches River Tidal floodplain, Texas, USA, J. of hydrology Engineering*, 29(4) https://doi.org/10.1061/JHYEFF.HEENG-6037
- 2. **Qin Qian,** Mengjie He, Frank Sun, Xinyu Liu (2024), Monitoring and Evaluation of the Water Quality of the Lower Neches Rivers, Texas, USA, Water Science and Engineering. 17(1) https://doi.org/10.1016/j.wse.2023.10.002
- Saeed Rabbanifar, T. Thuy Minh Nguyen *, Qin Qian, Nicholas A Brake, Kyle Kibodeaux, Harold E Crochet, Soheil Oruji, Remington L Whitt, Joshua Farrow, Brandon G Belaire, Bernazzani Bernazzani *, Mien Jao (2023) Stabilization of Dredged Material using Bio-Enzyme Products, Buildings 2023, 13(10), 2618 https://doi.org/10.3390/buildings13102618
- 4. **Qian, Q.;** Su, L.; Zaloom, V.; Jao, M.; Wu, X.; Wang, K.-H. Field Measurements and Modelling of Vessel-Generated Waves and Caused Bank Erosion—A Case Study at the Sabine–Neches Waterway, Texas, USA. Water 2023, 15, 35. https://doi.org/10.3390/w15010035
- Guojian Wang, Qin Qian*, Ronald W. Kluswman, Min Wang & Zuozhen Han (2022) Experimental study on vertical light hydrocarbon microseepage mechanisms, Petroleum Science and Technology, DOI: 10.1080/10916466.2022.210805 (*corresponding arthor)
- Qin Qian, Milad Ketabdar, Mien Jao, Xianchang Li, (2022), "Modelling Sediment Load in Storm Drain System of South east Texas Coastal Region", J. Irrig. Drain Eng., Vol 148(4), https://doi.org/10.1061/ASCE)IR.1943-4774.0001672
- 7. **Qin Qian,** Bo Sun, Xianchang Li, Frank Sun, Che-Jen Lin, Liping Jiang, (2019), "Water Quality Evaluation on an Urban Stormwater Retention Pond Using Wireless Sensor Networks and Hydrodynamic Modeling", *J. Irrig. Drain Eng.*, 145(12),2019. DOI:10.1061/(ASCE)IR.1943-4774.0001434.
- 8. Jeffrey J. Clark, **Qin Qian**, Vaughan R. Voller, Heinz G. Stefan, (2018), Hyporheic Exchange in a Gravel Bed Flume with and without Traveling Surface Waves, Advances in Water Resources, doi: https://doi.org/10.1016/j.advwatres.2018.11.005
- 9. **Qin Qian,** Anthony Dundee, and Heath Thompson (2018), Experimental Study on Flow Measurement in Corrugated Metal Pipes Used in Irrigation Turnouts, J. Irrig. Drain Eng., 144(10): 06018006
- T. Thuy Minh Nguyen, Saeed Rabbanifar, Nicholas A. Brake, Qin Qian, Kyle Kibodeaux, Harold E. Crochet, Soheil Oruji, Remington Whitt, Jashua Farrow, Brandon Blaire, Paul Bernazzani, Mien Jao, (2018), "Stabilization of Silty Clayey Dredged Material" Journal of Materials in Civil Engineering, vol 30(9), https://doi.org/10.1061/(ASCE)MT.1943-5533.0002391.
- Qian, Q., Xinyu Liu, Michael E. Barrett and Randall J. Charbeneau, (2016) Physical Modeling on Hydraulic Performance of Rectangular Bridge Deck Drains, Water, 2016, 8(2), 67; doi:10.3390/w8020067
- 12. Bo Sun, Farhad Ahmed, Frank Sun, **Q. Qian** and Yang Xiao, (2016), Water quality monitoring using STORM 3 Data Loggers and a wireless sensor network, *Int. J. Sensor Networks, Vol. 20, No.1.*
- 13. **Qin Qian,** Badri Parajuli, Qi Fu, Kaiming Yan, John L. Gossage, Thomas C. Ho, (2013), Assessment of Acid Deposition Effects on Water Quality of the Upper Rio Grande River Section in Texas, *Journal of Water Resource and Protection.*2013,5, 792-800, doi:10.4236/jwarp.2013.58080
- Qian, Q., Voller, V. and Stefan, H., 2010, Conditions when anisotropy is negligible for solute transfer in sediment beds of lakes or streams, Advances in Water Resources 33 (2010) 1542–1550. DOI:10.1016/j.advwatres.2010.09.001
- 15. **Qian, Q.**, Voller, V. and Stefan, H., (2009), Modeling of vertical solute dispersion in a sediment bed enhanced by wave induced interstitial flow, *Journal of American Water Resources Association 45*(2): 343-354. DOI: 10.1111/j.1752-1688.2008.00297.x
- Qian, Q., Clark, J. J., Voller, V. and Stefan, H., (2009), A depth-dependent dispersion coefficient for modeling of vertical solute exchange in a lake bed under surface waves, J. Hydr. Engrg. Volume 135, Issue 3, pp. 187-197
- 17. **Qian, Q.**, Voller, V. and Stefan, H., (2008), A vertical dispersion model for solute exchange by underflow and periodic hyporheic flow in a stream grave bed, *Water Resour. Res.*, 44, W07422, doi:10.1029/2007WR006366.
- 18. Qian, Q. Stefan, H. and Voller, V. (2007), A physically based flux limiter for QUICK calculations of advective scalar transport, *International Journal for Numerical Methods in Fluids* 55:899-915

- 19. Qian, Q., Voller, V. and Stefan, H., (2007), Modeling of solute transport into sub-aqueous sediment. Journal of Applied Mathematics Modelling 31, 1461-1478.
- 20. **Qian, Q.**, Xiaofang Mu, Yuntao Lu (2000), Research on the Application of Pulverized Fuel Ash to Mortar in Building Work, *Journal of Architecture Technology*, 31(5), 320-321 (in Chinese)
- 21. Tan Qu-lin, Zhai Jian-ping, Zhou Wei-ke and **Qin Qian**, (1999), Analysis of toxic element in the vegetable growing in the soil mixed with coal ash. *Geological Journal of China universities*, 3, 298-305 (in Chinese).
- 22. Xiaoyun Chen, Yongjun Wu, **Qin Qian** and Guangrong Wu (1997), Comprehensive application of new construction technology Jinsili Tall Building in Nanjing, *Journal of Construction Technology*, 26(9), 40-41(in Chinese).

Peer Reviewed Conference Abstracts, Presentations, and Proceedings

- 1. Zhang, Y., et al., Sengupta, D. et al., **Qian Q.,** et al., "Enhancing resilience of energy and water supply infrastructures along the Texas Coast through integration of climate-informed adaptation strategies" *Oral Presentation, The American Shore &Beach Preservation Association (ASBPA) national coastal conference, August 26-29, Galveston, Texas.*
- 2. Haselbach, L., Joshi, D., **Qian, Q.**, Selvaratnam, T., Schuster, W., and Hariri-Asli, H., "Realtime Rainfall and Infiltration Rates in a Pervious Concrete Test Bed" <u>Oral Presentation</u>, American Society of Civil Engineering International Conference on Transportation & Development, Atlanta, Georgia, June 15-18, 2024.
- 3. **Qian**, **Q.**, Fang, J., Selvaratnam, T., Jantrania, A. R., Bonaiti, G., and Zhang, Y., "Identify potential BMP tools to reduce bacteria loading caused by on-site sewage facilities (OSSFs) in the Lower Neches River Watershed", *Oral Presentation, American Society of Civil Engineering EWRI congress conference, May 19–22, 2024, Milwaukee, Wisconsin.*
- 4. **Qian**, **Q.**, He, M., Liu, X., Zhang, J., and Sun, F., "Dissolved oxygen prediction and forecasting with machine learning models in the Lower Neches River, Texas", *Oral Presentation*, *American Society of Civil Engineering EWRI congress conference, May 19–22*, 2024, *Milwaukee*, *Wisconsin*.
- 5. Haselbach, L., **Qian**, **Q**., "Green and Sustainable Stormwater Examples in Southeast Texas" <u>Oral Presentation</u>, American Society of Civil Engineering EWRI Operation & maintenance of Stormwater Systems Conference, April 7-10, 2024. Austin, TX
- 6. Farzaneh, H., **Qian, Q.**, and Zhang, Y., "Multi-scenario Analysis of Stormwater Runoff and Bacterial Loading Mitigation using Best Management Practices." <u>Poster Presentation</u>, American Geology Union (AGU) Fall meeting, December 11-15, 2023, San Francisco, CA.
- 7. Haselbach, L., **Qian, Q.,** and Selvaratnam, T. "Conjunctive deployment of pervious concrete and rain garden in Beaumont and Port Arthur, Texas" <u>Oral Presentation</u>, American Society of Civil Engineering International Low Impact Development conference, August 6-7, 2023, Oklahoma City, Oklahoma.
- 8. **Qian, Q.,** and Galindo. J. "Assessment of the Sediment Deposition at the Port of Port Arthur, Texas Using HEC-RAS Model" <u>Oral Presentation, American Society of Civil Engineering EWRI congress conference, May 21-25, 2023, Henderson, Nevada.</u>
- 9. **Qian, Q.,** He, M., Sun, F., Liu, X., "The relationship of flooding to surface water quality in the Lower Neches River" *Oral Presentation*, *American Society of Civil Engineering EWRI congress conference*, May 21-25, 2023, Henderson, Nevada.
- 10. **Qian, Q.,** Edwards, D., Zhang, Y., Haselbach, L. "Flood Prediction for Neches River Tidal Watershed Using HEC-RAS Modeling." *Oral Presentation, American Society of Civil Engineering EWRI congress conference, June 5-8, 2022, Atlanta, GA.*
- 11. **Qian, Q.,** Sun, F., Sun, B., Zhang, J., and Zhang, Y., "Forecasting water quality using AI with monitoring data collected by Wireless sensors. *Processing of "American Society of Civil Engineering EWRI congress conference"*, June 5-8, 2022, Atlanta, GA.
- 12. Jennifer Galindo*, **Qin Qian**, "Study on Causes of Port of Port Arthur Dredging", The Texas Chapter of COPRI Quality meeting, Nov. 10, 2020, Virtual conference.
- 13. Saeed Rabbanifar, T. Thuy Minh Nguyen, Chun-Wei Yao, **Qin Qian**, Paul Bernazzani, Mien Jao, "Adding Value to Dredged Material Using Lime and Ash Products", *Online Poster Presentation*, the

- Conference of Recent Trends in Geotechnical Geo-Environmental Engineering and Education (RTGEE). September 10-11, 2020. Virtual conference.
- 14. **Qin Qian,** Mien Jao, Victor Zaloom, "Streambank Erosion and Protection after Hurricane Harvey in the Sabine Neches Waterway", <u>Accepted as Oral Presentation</u> for EWRI ASCE meeting, May 17-21, 2020, Henderson, NV (conference cancelled due to COVID-19).
- 15. Liv Haselbach, **Qin Qian**, Hayden Rice, Andre Trottier, Harley Myler, "Concrete pH Profiles in Marine and Freshwater Environments," <u>Oral Presentation</u>, 2020 TRB Annual Meeting, Washington, D.C., January 12-16, 2020.
- 16. Qin Qian, Bo Sun, Xianchang Li, Frank Sun, and Che-Jen Lin, "Water quality modeling with data collected by wireless sensor networks (WSNs) in an experimental pond: A case study", <u>Oral Presentation</u>, 19th Mainland-Taiwan Environmental Protection Conference (MTEPC), Tianjin, China, May 17-21, 2019.
- 17. Harley Myler, Liv Haselbach, **Qin Qian,** "Assessing Environmental Impact of Artificial Reefs Using AUVs", <u>Poster Presentation</u>, 2018 Lionfish Summit, Florida Fish and Wildlife Conservation Commission, Cocoa Beach, FL, October 2-4, 2018.
- 18. **Qin Qian**, Milad Ketabdar, Mien Jao, Kenrick Aung, "Using Diffusion Model to predict runoff for Assessment on Sediment Load and Transport in Storm Drain System", *Oral Presentation, American Society of Civil Engineering EWRI congress conference, June 2-6, 2018, Minneapolis, MN.*
- 19. Qin Qian, Fernando Aleman; Hayden Rice; Andre Trottier; Liv Haselbach; and Harley Myler, (2018), "pH Profiles around Pervious Concrete in Fresh Water", Processing of "International Low Impact Development Conference 2018", pp64-70, Aug 12-15, 2018, Nashville, USA
- Qin Qian, Milad Ketabdar, "Sedimentation Considerations for Design of Sponge City Projects", <u>Keynote Presentation</u>, 18th Mainland-Taiwan Environmental Protection Conference (MTEPC), Taipei, Taiwan, Nov 10-15, 2017
- 21. Qin Qian, Benjamin Kolkmeier, Lin Su, Xing Wu, Mien Jao, Robert Yuan, Keh-Han Wang, Victor Zaloom, "Stream bank erosion and protection due to wake wash in Sabine Neches Waterway", <u>Oral Presentation and processing</u>, 18th Mainland-Taiwan Environmental Protection Conference (MTEPC), Taipei, Taiwan, Nov 10-15, 2017
- 22. **Qin Qian**, Milad Ketabdar, Mien Jao, Kenrick Aung, "Sediment Transport mechanics in Coastal Plain Shallow Grade Storm Drain System", *Oral Presentation*, World Transportation Convention, Beijing, China, June 4-6, 2017.
- 23. **Qin Qian,** Mien Jao, Jeremiah Fox, "Experimental Study on Shoreline Erosion using EM2 Geomodel", *Proceeding of American Society of Civil Engineering EWRI congress conference, p324-333, May 22-26, 2016, West Palm Beach, FL.*
- 24. Bo Sun, Frank Sun, and **Qin Qian**, "Development of Wireless Sensor Networks (WSNs) for Water Quality Monitoring", *Proceeding of "American Society of Civil Engineering EWRI congress conference"*, p41-49, May 22-26, 2016, West Palm Beach, FL.
- 25. **Qin Qian**, and Kaiming Yan, "Assessment of Channel Change of the Lower Rio Grande River Section under different climate conditions", *Proceeding of "American Society of Civil Engineering EWRI congress conference"*, p962-972, May 17-21, 2015, Austin, TX.
- 26. Bo Sun, Frank Sun and **Qin Qian**, "Deployment of STORM 3 DATA loggers to Monitor Water Quality", *Proceeding of "American Society of Civil Engineering EWRI congress conference"*, p1312-1321, May 17-21, 2015, Austin, TX.
- Milad Ketabdar, Kyle Storm, and Qin Qian, "A Literature Review on the Sediment Transport Process in Shallow-Grade Culverts and Storm Sewers", <u>Oral Presentation</u>, ASEE Gulf-Southeast Annual Conference, March 25-27, 2015, San Antonio, TX.
- 28. **Qin Qian,** Vaughan R. Voller and Heinz G. Stefan, "Modeling of Solute Transport in Pore Scale Sediment Beds: A Summary of Hydrodynamic Interactions Induced by Surface Wave, Bed Form and Near Bed Turbulence", *Proceeding of "American Society of Civil Engineering EWRI congress conference"*, p262-271, June 1-5, 2014, Portland, OR.
- 29. Bo Sun, Farhad Ahmed, Francisco Retiz, and **Qin Qian**, "Development and Implementation of Wireless Sensor Networks (WSNs) for Measuring Water Quality", *Proceeding of "American Society of Civil Engineering EWRI congress conference"*, p836-845, June 1-5, 2014, Portland, OR.
- 30. Kendrick Aung, Rayn Underdown, **Qin Qian**, "Vertical assessment of math competency among Freshmen and sophomore engineering students", <u>Oral Presentation</u>, 120th ASEE Annual Conference, June 23-26, 2013, Atlanta, GA.

- 31. **Qin Qian,** Jeffrey J. Clark, Vaughan R. Voller and Heinz G. Stefan, "Solute Transport in the Interfacial Exchange Zone (IEZ) of Gravel Stream Bed due to Turbulent and Water Surface Wave", *Proceeding of American Society of Civil Engineering EWRI Congress Conference*, p550-559, May 2013, Cincinnati, OH.
- 32. **Qin Qian,** Kaiming Yan, Jerry Lin, Pruek Pogprueksa, Thomas Ho, "Modeling the Sediment Transport in the Big Bend National Park Region", <u>Poster Presentation</u>, American Society of Civil Engineering EWRI Congress Conference, May 2013, Cincinnati, OH.
- 33. Qian, Q., X. Liu, M. E. Barrett, and R. J. Charbeneau, "Physical Modeling Study on Hydraulic Performance of Rectangular Deck", *Proceeding of American Society of Civil Engineering EWRI Congress Conference*, p1523-1535, May 2012, Albuquerque, NM.
- 34. **Qian, Q.,** Chanachok Chokwitthaya, Jerry Lin, Jack Hopper, and Thomas Ho, "Effect of Acid Deposition on Water Acidity and Sediment Loading in the Upper Rio Grande River Sub-Basin", *Poster Presentation, Sea and Land Grant Conference, Feb. 2012, Portland, OG.*
- 35. **Qian, Q.,** Parajuli, B., Prinsloo, L., Lin, J., Hopper, J., and Ho, T., "Effect of Airborne Deposition on Water Acidity in the Rio Grande River Basin", *Oral Presentation, American Society of Chemical Engineering Conference, October 2011, Minneapolis, MN.*
- Santosh V. Khonde, Qin Qian, "Hydraulic performance of the bridge deck drain", <u>Oral Presentation</u>, American Society of Engineering Education Gulf Southeast annual conference, March 2011, Houston, TX.
- 37. **Qin Qian,** Jerry Lin, Hsing-wei Chu, Paul Chiou, and Thomas Ho, "Assessment and Modeling the Effect of Airborne Deposition on the Acidity of the Rio Grande River", <u>Poster Presentation</u>, Sea and Land Grant Conference, January 31-Februay 1, 2011, Washington D. C.
- 38. Thomas Ho, **Qian, Q.,** Lin, J., Chu, H., Chiou, P. and Ho, T., "The Impact of Airborne Particulate Pollutants on the Water Quality in Rio Grande Basin Watershed", *Oral Presentation, Rio Grande Basin Initiatives, May 2010, Alpine, TX.*
- 39. **Qian, Q.,** Parajuli, B., Lin, J., Chu, H., Chiou, P. and Ho, T., "Assessment of the Impact of Airborne Particulate Pollutants on the Water Quality in Rio Grande Basin Watershed", *Poster Presentation, Sea and Land Grant Conference, Feb 21-25. 2010, Hilton Head, SC.*
- 40. **Qian, Q.,** Voller, V. and Stefan, H., "Solute Transfer by Pressure Induced Flows into the Sediment Beds of Streams and Lakes", <u>Oral Presentation</u>, American water resource association fall conference, Nov. 2008, New Orleans, LA.
- 41. **Qian, Q.,** Voller, V. and Stefan, H., "Solute Transfer by Advective Flows into the Sediment Beds of Streams and Lakes", <u>Poster Presentation</u>, <u>Minnesota Supercomputing Institution</u>, <u>April 2008</u>, <u>Minneapolis</u>, <u>MN</u>.
- 42. **Qian, Q.,** Voller, V. and Stefan, H., "Enhancement of solute transfer into riverbed by wave motion and hyporheic flow", *Poster Presentation*, *American Geology Union (AGU) Fall meeting, December 2005, San Francisco, CA*.

Invited Talks and others

- 1. **Qian, Q.,** Fang, J., Selvaratnam, T., Jantrania, A. R., Bonaiti, G., Zhang, Y., "Bacteria loading caused by on-site sewage facilities (OSSFs) in the Lower Neches River Watershed," *Dec. 12, 2023, Southeast Texas Flood Coordination Study, Lamar University, Beaumont, TX*
- 2. **Qian, Q.,** Wang, K.-H., Zaloom, V., Jao, M., Wu, X., "Wake Wash Erosion and Sediment Deposition in the Sabine–Neches Waterway and Recommended Remedies" *Oct. 23, 2023, Texas GLO CMP26 Workshop, Houston, TX*
- 3. **Qian, Q.,** "Dredging and Bank Erosion in Sabine Neches Waterway, Texas", Coastal Science and Engineering workshop with USACE SWG, 12/13/2021.
- 4. Jennifer Galindo, **Qin Qian**, "Study on Causes of Port of Port Arthur Dredging", SETx Flood Coordination Study (SETx FCS) Activities 2020-2021, 02/22/2021.
- 5. **Qin Qian,** "Solute Exchange between Surface Water and Subaqueous Pore Scale Sediments" Department of Civil and Environmental Engineering, Cullen College of Engineering, University of Houston, February 25, 2019.
- 6. **Qin Qian**, "Development of Finite Volume Algorithms for Solute Transport Modeling of Advection-Dispersion Equation", Wuxi Research Institute of Petroleum Geology, Exploration and Production Research Institute, SINOPEC, Wuxi, Jiangsu, China, July 04, 2018.

- 7. **Qin Qian,** "A Summary of Solute Exchange between Surface Water and Sub-Aqueous Pores Scale Sediment", Naniing University, China, June 25, 2018.
- 8. **Qin Qian,** "Hydrodynamic and Water Quality Model to Predict Nitrogen and Phosphorus", Beijing University of Technology, Beijing, China, June 19, 2018.
- 9. **Qin Qian,** "Summary on Modeling Hydrodynamics and Solute transport through Fractured Porous Media", China Petrochemical Corporation, Beijing, China, June 29, 2016.
- 10. **Qin Qian,** "Solute Exchange between Surface Water and Sub-aqueous Sediments", ShanDong University of Technology and Science, Qingdao, ShanDong, China, June 7, 2016.
- 11. **Qian, Q.,** Voller, V. and Stefan, H., "Towards a management model for assessing the effects of stream modifications on hyporheic exchange", National Center for Earth Surface Dynamics (NCED) video conference, April 2007, Minneapolis, MN.
- 12. **Qin Qian,** Voller, V. and Stefan, H., "Enhancement of solute transfer into riverbeds by surface wave motion and hyporheic flow", St. Anthony Fall Laboratory (SAFL) seminar, April 2006, Minneapolis, MN.
- 13. **Qian, Q.,** Voller, V. and Stefan, H., "Enhancement of solute transfer into riverbeds by wave motion", National Center for Earth Surface Dynamics (NCED) site visit, August 2005, Minneapolis, MN.

Research Report:

- 1. Zhang, Y. et al. and **Q. Qian,** 2022, "Assessment of stormwater infrastructure for mitigating flooding and non-point source pollution", Final report 10/01/2019-09/30/2021, Texas Coastal Management Program, Texas General Land Office, Austin. 20-028-final-rpt.pdf (texas.gov)
- 2. T. T. Nguyen, P. Bernazzani, Q. Qian, and M. Jao, "Managing Dredge Waste in Navigation Channels", Final Report, 09/01/2018 08/31/2019, Report to Center for Advances in Port Management, Lamar University
- Q. Qian, "Quantification of hurricane storm damage in coastal waterway", Final Report for REG, 09/2018 08/2019, Lamar University.
- 4. V. Zaloom, **Q. Qian,** M. Jao, X. Wu, K. Wang, "Wake Wash in Sabine-Neches Waterway", Final Report for phase II, 05/2017–01/2019, Sabine-Neches River Waterway Navigation District.
- 5. V. Zaloom, **Q. Qian,** M. Jao, X. Wu, K. Wang, "Wake Wash in Sabine-Neches Waterway", Final Report for phase I, 11/2015–04/2017, Sabine-Neches River Waterway Navigation District.
- 6. **Q. Qian**, "Numerical Simulation of Fluid Transport in Shale Rock Microscopic Pore Structure due to Hydraulic Fracturing", Final Report, 09/2017– 08/31/2018, State Key Laboratory of Shale Oil and Gas Enrichment Mechanisms and Effective Development of China Petrochemical Corporation (in Chinese).
- 7. B. Sun, **Q. Qian,** "Acquisition of Equipment to Develop a Ubiquitous Wireless Sensor Network for Measurement, Modeling, and Prediction in Water Resource Management", *Final Report*, 09/2014 –08/2018, NSF MRI & URE.
- 8. B. Sun, **Q. Qian,** "Acquisition of Equipment to Develop a Ubiquitous Wireless Sensor Network for Measurement, Modeling, and Prediction in Water Resource Management", *Annual Report*, 09/2016 –08/2017, NSF MRI&URE.
- B. Sun, Q. Qian, "Acquisition of Equipment to Develop a Ubiquitous Wireless Sensor Network for Measurement, Modeling, and Prediction in Water Resource Management", Annual Report, 09/2015 –08/2016, NSE MPL& URE
- 10. B. Sun, **Q. Qian,** "Acquisition of Equipment to Develop a Ubiquitous Wireless Sensor Network for Measurement, Modeling, and Prediction in Water Resource Management", *Annual Report*, 09/2014 –08/2015, NSF MRI&URE.
- 11. Qian, Q., Aleman*, F., Trottier*, A., Haselbach, L. and Myler, H. (2017). "pHybot Pilot Tank Tests to Develop a pH Gradient Using Pervious Concrete", Final Report, 02/2017–08/2018, Center for Advances in Port Management (CAPM), Lamar University.
- 12. X. Fan, Q. Qian, D. Su, "Multiscale Characterization and Modeling of Concrete Materials under Marine Tropical Environments", *Final Report*, 02/2017–08/2018, *Center for Advances in Port Management (CAPM)*, *Lamar University*.
- T. T. Nguyen, P. Bernazzani, Q. Qian, and M. Jao, "Evaluation and Remediation of Water Contaminants Originating from Dredge Waste", Final report, 02/2016–05/2017. Center for Advances in Water and Air Quality (CAWAQ)

- 14. **Q. Qian,** M. Jao, K. Aung, "A multidisciplinary Research using EM2 Geomodel for Hydraulic Structures and Golf Highway 87 Shoreline Protections", *Final Report for Presidential Faculty Fellowships*, 08/2014–05/2015, *Lamar University*,
- 15. **Qin Qian,** Experimental Investigation on the Sediment Transport Process in Shallow-Grade Culverts and Storm Sewers", *Final report for REG*, 09/2014–08/2015, *Lamar University*
- 16. Bo Sun, **Qin Qian**, "Ubiquitous Wireless Sensors Networks for Measurement, Modeling and Prediction in Water Resource Sustainability", *Final report for REG*, 09/2013–08/2014, *Lamar University*.
- 17. **Qian, Q.,** Liu, X., Charbeneau, R., and Barrett, M., 2013, FHWA/TX-12/0-6653-1 "Hydraulic Performance of Small Scale Bridge Deck Drains", *Department of Transportation (TxDOT), Austin, Texas.*
- 18. Thomas Ho, Jerry Lin, Hsing-wei Chu, **Qin Qian**, Paul Chiou, "Assessment of Impact of Airborne Particulate Pollution on the Rio Grande Basin Watershed", *Final Report*, 07//01/2010-07/31/2013, *Sustainable Agricultural Water Conservation-Texas*, U.S. Department of Agriculture.
- 19. **Qin Qian** "Modeling the Sediment Transport in Rio Grande River" Q. Qian (PI), *Final Report for REG*, 09/2011 08/2012, *Lamar University*.
- 20. Thomas Ho, Jerry Lin, Hsing-wei Chu, **Qin Qian**, Paul Chiou, "Assessment of Impact of Airborne Particulate Pollution on the Rio Grande Basin Watershed", *Semi-Annual Report*, 04//01/2011-9/30/2011, *Sustainable Agricultural Water Conservation-Texas*, U.S. Department of Agriculture.
- 21. Thomas Ho, Jerry Lin, Hsing-wei Chu, **Qin Qian**, Paul Chiou, "Assessment of Impact of Airborne Particulate Pollution on the Rio Grande Basin Watershed", *Semi-Annual Report*, 10//01/2010-03/31/2011, *Sustainable Agricultural Water Conservation-Texas*, U.S. Department of Agriculture.
- 22. Thomas Ho, Jerry Lin, Hsing-wei Chu, **Qin Qian**, Paul Chiou, "Assessment of Impact of Airborne Particulate Pollution on the Rio Grande Basin Watershed", *Semi-Annual Report*, 04//01/2010-9/30/2010, *Sustainable Agricultural Water Conservation-Texas*, U.S. Department of Agriculture.
- 23. **Qin Qian** "Modeling the Solute Transport in the Interfacial Exchange Zone (IEZ)" *Final Report for REG*, 09/2009 08/2010, *Lamar University*.
- 24. Thomas Ho, Jerry Lin, Hsing-wei Chu, **Qin Qian**, Paul Chiou, "Assessment of Impact of Airborne Particulate Pollution on the Rio Grande Basin Watershed", *Semi-Annual Report*, 10//01/2009-03/31/2010, *Sustainable Agricultural Water Conservation-Texas*, U.S. Department of Agriculture.
- 25. Thomas Ho, Jerry Lin, Hsing-wei Chu, **Qin Qian,** Paul Chiou, "Assessment of Impact of Airborne Particulate Pollution on the Rio Grande Basin Watershed", *Annual Report*, 09/01/2008-08/31/2009, *Sustainable Agricultural Water Conservation-Texas*, U.S. Department of Agriculture.
- 26. **Qian, Q.**, Clark, J., Voller, V. and Stefan, H., "Solute Exchange Induced by Progressive Periodic Flow in a Lake Bed: Numerical Solution of the 2-D Advection/Dispersion Equation and Derivation of 1-D Dispersion Coefficient", *University of Minnesota Supercomputing Institute Research Report* UMDI 2008/17
- 27. Qian, Q., Voller, V. and Stefan, H., "Solute Exchange Induced by Underflow and Periodic Hyporheic Flow in a Stream Gravel Bed: Numerical Solution of the 2-D Advection/Dispersion Equation and Derivation of 1-D Dispersion Coefficient", *University of Minnesota Supercomputing Institute Research Report* UMDI 2008/4
- 28. **Qian, Q.**, Voller, V. and Stefan, H., "Solute Transfer into a Stream Gravel Bed under a Standing Water Wave and Hyporheic Flow: Numerical Solution of the 2-D Advection/Dispersion Equation and Derivation of 1-D Dispersion Coefficient", *University of Minnesota Supercomputing Institute Research Report* UMDI 2006/108
- 29. **Qian, Q.**, Voller, V. and Stefan, H., "Benchmark of QUICK scheme in environmental application", *University of Minnesota Supercomputing Institute Research Report* UMDI 2006/57
- 30. **Qian, Q**., Voller, V. and Stefan, H., "Solute Transfer into a Sediment Layer under a Moving Water Wave: Numerical Solution of the 2-D Advection/Dispersion Equation and Derivation of a 1-D Dispersion Coefficient", *University of Minnesota Supercomputing Institute Research Report* UMDI 2006/49
- 31. **Qian, Q.**, Voller, V. and Stefan, H., "Solute Transfer into a Sediment Layer under a Standing Water Wave: Numerical Solution of the 2-D Advection/Diffusion Equation and Derivation of a 1-D Dispersion Coefficient", *University of Minnesota Supercomputing Institute Research Report* UMDI 2005/94.

PROFESSIONAL SERVICE

International Activities:

- 1. Board Member of Chinese American Water Resources Association (CAWRA), 06/2020~current.
- 2. Co-organizer and executive consultative committee member: The 19th Mainland-Taiwan Environmental Protection Conference (MTEPC), May 17 22, 2019, Tianjin, China.
- 3. Co-organizer and executive consultative committee member: The 18th Mainland-Taiwan Environmental Protection Conference (MTEPC), *Nov 10-15*, *2017*, Taipei, Taiwan.
- 4. Ex-Officio of Overseas Chinese Environmental Engineers and Scientists Association (OCEESA), 2019.
- 5. Co-chair of geometric design and drainage design section for the World Transport Convention, Beijing, China, 2017, 2018, 2019.
- President of Overseas Chinese Environmental Engineers and Scientists Association (OCEESA), 2018.
- 7. Vice President of Overseas Chinese Environmental Engineers and Scientists Association (OCEESA), 2017.
- 8. Co-editor of special issue: "water quality modeling and monitoring in lakes", for journal of "water", 2017, https://www.mdpi.com/journal/water/special issues/water quality lakes#editors
- Director of Overseas Chinese Environmental Engineers and Scientists Association (OCEESA), 2015~2017.

National Activities:

- 10. Mentor, NSF Mentoring Institute for Sediment Transport (MIST) for Early Carer Professionals, 2023
- 11. Board member of Chinese American Water Resources Association (CAWRA), 05/2021~current
- 12. National Council Member of Chinese Institute of Engineer/USA, 2016~2018
- 13. Committee Member of ASCE Groundwater Hydrology Committee, 2013~ current

State/regional Activities:

- 14. Technical Advisory Committee, Texas General Land Office, 2021~current
- 15. Provided consult service to assist local community on flood mitigation assessment for University of Texas at San Antonio funded by Community Development and Revitalization program from Texas General Land Office, 2019
- 16. Technical Assistant of the Technical Advisory Panel for the Research Management Committee 5 (RMC-5) of the Texas Department of Transportation (2008~current)
- 17. Board Member for the Gulf Coast Recovery and Protection District (2011).
- 18. Judge for the 1st International Sustainable World (Energy, Engineering, & Environment) Project Olympiad Competition, Houston, Texas, 2009

Reviewer - peer-reviewed journals:

2009 - present

- 1. Advance in Water Resources
- 2. British Journal of Environmental & Climate Change
- 3. Environmental Fluid Mechanics
- 4. Energies
- 5. Geophysical Research Letter
- 6. Hydrological Science Journal
- 7. International Journal of Environmental Engineering Science
- 8. International Journal of Environmental Research and Public Health
- 9. International Journal of Hydrological Science and Technology (IJHST)
- 10. Journal of American Water Resources Association (JAWEA)
- 11. Journal of Applied Science
- 12. Journal of Coastal Research
- 13. journal of Marine Science and Engineering
- 14. Journal of Irrigation and Drainage Engineering
- 15. Journal of Hydrological Engineering
- 16. Journal of Hydrology Science and Technology
- 17. Sustainability

- 18. Science of the Total Environment
- 19. Water

Reviewer- book proposal and book chapters

- 1. Spring-Nature.
- 2. Wiley.
- 3. CRC Press, Taylor & Francis Group.
- 4. Cambridge University Press.
- 5. Oxford University Press.

Panel Reviewer - National Science Foundation; NOAA sea grants

PROFESSIONAL MEMBERSHIP

- Member of American Society of Civil Engineers (ASCE), 09/2004~current
- Member of American Geophysical Union (AGU), 06/2005~current
- Member of Overseas Chinese Environmental Engineers and Scientists Association (OCEESA), 05/2009~current
- Member of Chi Epsilon, Honor Society of ASCE, 05/2010~ current
- Member of Chinese American Water Resources Association (CAWRA), 05/2012~current