

QIN QIAN, Ph.D.

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▪ 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 Engineering, University of St. Thomas, St. Paul, MN, 12/2002

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

▪ PROFESSIONAL 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

▪ RESEARCH FUNDING

1. “Enhancing resilience of energy and water supply infrastructures along the Texas Coast against catastrophic coastal flooding through integration of climate-informed adaptation strategies”, NOAA-OAD-SG-2022-2007298, \$499,492, **Qin Qian** (PI, subcontract from Texas Sea Grant \$105,000), 02/01/2013-12/31/2026.
2. “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.
3. “Coastal Sociological-Ecological Restoration Group (CSERG) & Pilot Project: North Pleasure Island Reconstruction Continuation”, Center for Resiliency, \$50,976.90, 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.
4. “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 Jeffries (co-PI), Tianxing Cai (co-PI) and Matthew Hoch (co-PI), 10/1/2022-08/31/2027.
5. “Identify potential BMP tools to reduce bacteria loading in Neches River” Coastal Management Program, Texas General Land Office, \$166,495.00, **Qin Qian** (PI), Frank Sun (co-PI), Bo Sun (co-PI), Jing Zhang (co-PI), 10/1/2022-03/31/2024.
6. “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). 01/01/2022-12/31/2024

7. “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.
8. “Flood Coordination Study: Nonpoint Source Pollution (NPS) and Dredge Studies”, \$300,000, Center for Resiliency, Liv Haselbach (PI), **Qin Qian** (co-PI), Frank Sun (co-PI) 09/01/2021-08/31/2022.
9. “Coastal Sociological-Ecological Restoration Group (CSERG) & Pilot Project: North Pleasure Island Reconstruction”, Center for Resiliency, \$51,818.08, 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
10. “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
11. “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), 09/01/2019-08/31/2022.
12. “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.
13. “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.
14. “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.
15. “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 Selvaratnam (co-PI). 05/07/2020-05/06/2021.
16. “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.
17. “Quantification of hurricane storm damage in coastal waterway”, REG from Lamar University, **Qin Qian** (PI), \$5,000, 09/2018 – 08/2019.
18. “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.
19. “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.
20. “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.
21. “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.
22. “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.
23. “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.
24. “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.
25. “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.

26. “Modeling the Sediment Transport in Rio Grande River”, REG from Lamar University, **Qin Qian** (PI), \$5,000, 09/2011 – 08/2012.
27. “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.
28. “Assessment of the Impact of Airborne Particulate Pollutants on the Rio Grande Basin Watershed”, U.S. Agriculture Department T.C. Ho (PI), Q. Qian (co-PI), \$145,000, 09/2008 – 08/2013.
29. “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.
2. “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. Advanced Science & Technology Award, Third Prize, Nanjing Science Committee (1998).
13. Best Paper Award, First Prize, Nanjing Construction Committee (1998).
14. Best Paper Award, Second Prize, Jiangsu Construction Committee (1998).

▪ PUBLICATIONS

Book Chapter:

1. **Qin Qian**, Saeid Eslamian (2022), Chapter 1: Transboundary Resilience and Social-Hydrological Systems in Saeid Eslamin, ed. Handbook of Climate Change Impact on River Basin Management (HCCI-RBM) (*Accepted 05/2022, under print*)
2. **Qin Qian**, Saeid Eslamian (2022), Chapter 2: Canal Irrigation, In. Saeid Eslamin, ed. Handbook of Irrigation Hydrology and Management (HIHM) by Taylor and Francis (*Accepted 12/2020, under print*).
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. **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>
2. 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 author)
3. **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](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001672)
4. **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.
5. 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>
6. **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
7. 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](https://doi.org/10.1061/(ASCE)MT.1943-5533.0002391).
8. **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
9. 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.
10. **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
11. **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
12. **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
13. **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*
14. **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.
15. **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

16. **Qian, Q.**, Voller, V. and Stefan, H., (2007), Modeling of solute transport into sub-aqueous sediment. *Journal of Applied Mathematics Modelling* 31, 1461-1478.
17. **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
18. 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
19. Xiaoyun Chen, Yongjun Wu and **Qin Qian**, (1997), Comprehensive application of new construction technology Jinsili Tall Building in Nanjing, *Journal of Construction Technology*, 26(9), 40-41

Peer Reviewed Conference Abstracts, Presentations, and Proceedings

1. **Qian, Q.**, Haselbach, L. and Selvaratnam, T. “Conjunctive deployment of pervious concrete and rain garden in Beaumont and Port Arthur, Texas” Accepted as Oral Presentation, *American Society of Civil Engineering International Low Impact Development conference*, August 6-7, 2023, Oklahoma City, Oklahoma.
2. **Qian, Q.**, and Galindo, J. “Assessment of the Sediment Deposition at the Port of Port Arthur, Texas Using HEC-RAS Model” Accepted as Oral Presentation, *American Society of Civil Engineering EWRI congress conference*, May 21-25, 2023, Henderson, Nevada.
3. **Qian, Q.**, He, M., Sun, F., Liu, X., “The relationship of flooding to surface water quality in the Lower Neches River” Accepted as Oral Presentation, *American Society of Civil Engineering EWRI congress conference*, May 21-25, 2023, Henderson, Nevada.
4. **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.
5. **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.
6. 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.
7. 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.
8. **Qin Qian**, Mien Jao, Victor Zaloom, “Streambank Erosion and Protection after Hurricane Harvey in the Sabine Neches Waterway”, Accepted as Oral Presentation for EWRI ASCE meeting, May 17-21, 2020, Henderson, NV (conference cancelled due to COVID-19).
9. Liv Haselbach, **Qin Qian**, Hayden Rice, Andre Trottier, Harley Myler, “Concrete pH Profiles in Marine and Freshwater Environments,” Oral Presentation, *2020 TRB Annual Meeting*, Washington, D.C., January 12-16, 2020.
10. **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”, Oral Presentation, *19th Mainland-Taiwan Environmental Protection Conference (MTEPC)*, Tianjin, China, May 17-21, 2019.
11. Harley Myler, Liv Haselbach, **Qin Qian**, “Assessing Environmental Impact of Artificial Reefs Using AUVs”, Poster Presentation, *2018 Lionfish Summit*, Florida Fish and Wildlife Conservation Commission, Cocoa Beach, FL, October 2-4, 2018.
12. **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.
13. **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

14. **Qin Qian**, Milad Ketabdar, “Sedimentation Considerations for Design of Sponge City Projects”, Keynote Presentation, *18th Mainland-Taiwan Environmental Protection Conference (MTEPC)*, Taipei, Taiwan, Nov 10-15, 2017
15. **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”, Oral Presentation and processing, *18th Mainland-Taiwan Environmental Protection Conference (MTEPC)*, Taipei, Taiwan, Nov 10-15, 2017
16. **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.
17. **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.
18. 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.
19. **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.
20. 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.
21. Milad Ketabdar, Kyle Storm, and **Qin Qian**, “A Literature Review on the Sediment Transport Process in Shallow-Grade Culverts and Storm Sewers”, Oral Presentation, *ASEE Gulf-Southeast Annual Conference*, March 25-27, 2015, San Antonio, TX.
22. **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.
23. 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.
24. Kendrick Aung, Rayn Underdown, **Qin Qian**, “Vertical assessment of math competency among Freshmen and sophomore engineering students”, Oral Presentation, *120th ASEE Annual Conference*, June 23-26, 2013, Atlanta, GA.
25. **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.
26. **Qin Qian**, Kaiming Yan, Jerry Lin, Pruek Pogprueksa, Thomas Ho, “Modeling the Sediment Transport in the Big Bend National Park Region”, Poster Presentation, *American Society of Civil Engineering EWRI Congress Conference*, May, 2013, Cincinnati, OH.
27. **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.
28. **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.
29. **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.
30. Santosh V. Khonde, **Qin Qian**, “Hydraulic performance of the bridge deck drain”, Oral Presentation, *American Society of Engineering Education Gulf Southeast annual conference*, March 2011, Houston, TX.

31. **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”, *Poster Presentation, Sea and Land Grant Conference, January 31-February 1, 2011, Washington D. C.*
32. 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.*
33. **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.*
34. **Qian, Q.**, Voller, V. and Stefan, H., “Solute Transfer by Pressure Induced Flows into the Sediment Beds of Streams and Lakes”, *Oral Presentation, American water resource association fall conference, Nov., 2008, New Orleans, LA.*
35. **Qian, Q.**, Voller, V. and Stefan, H., “Solute Transfer by Advective Flows into the Sediment Beds of Streams and Lakes”, *Poster Presentation, Minnesota Supercomputing Institution, April, 2008, Minneapolis, MN.*
36. **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. **Qin Qian**, “Dredging and Bank Erosion in Sabine Neches Waterway, Texas”, Coastal Science and Engineering workshop with USACE SWG, 12/13/2021.
2. 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.
3. **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.
4. **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.
5. **Qin Qian**, “A Summary of Solute Exchange between Surface Water and Sub-Aqueous Pores Scale Sediment”, Nanjing University, China, June 25, 2018.
6. **Qin Qian**, “Hydrodynamic and Water Quality Model to Predict Nitrogen and Phosphorus”, Beijing University of Technology, Beijing, China, June 19, 2018.
7. **Qin Qian**, “Summary on Modeling Hydrodynamics and Solute transport through Fractured Porous Media”, China Petrochemical Corporation, Beijing, China, June 29, 2016.
8. **Qin Qian**, “Solute Exchange between Surface Water and Sub-aqueous Sediments”, ShanDong University of Technology and Science, Qingdao, ShanDong, China, June 7, 2016.
9. **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.
10. **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.
11. **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.

▪ 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.
6. 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
9. Director of Overseas Chinese Environmental Engineers and Scientists Association (OCEESA), 2015~2017.

National Activities:

10. Board member of Chinese American Water Resources Association (CAWRA), 05/2021~current
11. National Council Member of Chinese Institute of Engineer/USA, 2016~2018
12. Committee Member of ASCE Groundwater Hydrology Committee, 2013~ current

State/regional Activities:

13. Technical Advisory Committee, Texas General Land Office, 2021~current
14. 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
15. Technical Assistant of the Technical Advisory Panel for the Research Management Committee 5 (RMC-5) of the Texas Department of Transportation (2008~current)
16. Board Member for the Gulf Coast Recovery and Protection District (2011).
17. Judge for the 1st International Sustainable World (Energy, Engineering, & Environment) Project Olympiad Competition, Houston, Texas, 2009

▪ **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