

Curriculum Vitae

Qian Zhang

March 15, 2024

General Information

University address: Department of Civil and Environmental Engineering
FAMU-FSU College of Engineering
2525 Pottsdamer Street
Florida State University
Tallahassee 32310-FL
Phone: 8504106260

E-mail address: qzhang6@fsu.edu
qzhang@eng.famu.fsu.edu

Professional Preparation

- 2015 PhD, University of Michigan, Ann Arbor. Major: Civil and Environmental Engineering. Structures and Materials. Supervisor: Victor Li.
- Qian Zhang. (2015). *Durable Spray-applied Fire-resistive Material for Enhanced Safety of Steel Structures*. Unpublished doctoral dissertation, University of Michigan, Ann Arbor. Retrieved from https://deepblue.lib.umich.edu/bitstream/handle/2027.42/113583/maple_zq_1.pdf?sequence=1&isAllowed=y.
- 2015 M.S., University of Michigan, Ann Arbor. Major: Mechanical Engineering.
- 2010 M.S., University of Michigan, Ann Arbor. Major: Civil and Environmental Engineering.
- 2009 B.S., Tsinghua University, Beijing, China. Major: Civil Engineering.

Professional Experience

- 2019–present Assistant Professor, Civil and Environmental Engineering, Florida State University.
- 2016–2019 Assistant Professor, Civil Engineering, University of Louisiana at Lafayette.

2015–2016 Visiting Assistant Professor, Civil Engineering, University of Louisiana at Lafayette.

Current Membership in Professional Organizations

American Ceramic Society
American Concrete Institute

Teaching

Courses Taught

Prestressed Concrete (CES 5715)
Advanced Mechanics of Materials (CES5105)
Advanced Topics in Const Mats (CGN5905)
Civil Engineering Seminar (CGN5935)
Preliminary Exam Preparation (CGN6960)
Structural Analysis (CES 3100)
Modular Structures 3-D Printed (CGN4906)
Structural Steel Design (CIVE 426)
Plastic Analysis and Design (CIVE 622)
Structural Mechanics I (CIVE322)
Structural Engineering II (CIVE 336)
Reinforced Concrete Design (CIVE 427)

Doctoral Committee Chair

Islam, M. M., graduate. (2024). *Design of Sustainable Advanced Fiber Reinforced Concrete Using a Multi-Scale Framework.*
Peizhi Wang, doctoral candidate. *Crack Width Limit for UHPC Structural Members in Coastal and Marine Environment.*
Adhikari, A., doctoral student.
Qu, C., doctoral student.

Doctoral Committee Cochair

Kosarimovahhed, M., doctoral candidate. *Understanding the Basic Creep Behavior of 3D Printed Concrete Materials.* [This student is co-advised by Dr. Sungmoon Jung]
Nazemi, M., doctoral student. [This student is co-advised by Dr. Juyeong Choi]

Doctoral Committee Member

Alinejad, N., graduate. (2024). *Effect of Heterogeneous Terrain on Wind Loads on Buildings*.

Alagheband, M., doctoral candidate. *Enhancing Structural Performance and Energy Absorption Through 3D Printing Technology*.

Farhad Farzaneh, doctoral candidate. *Battery Module of Electric Vehicle*.

Master's Committee Chair

Mank, E., graduate. (2023). *Development of UHPC with Limestone Calcined Clay Cement (LC3) Binder – A Feasibility Study*.

Wang, X., graduate. (2021). *Understanding the Placement Mechanism of Wet-Mix Shotcrete and the Influence of Material Properties*.

Master's Committee Cochair

Tsouroukdissian, P., student. [This student is co-advised by Dr. Pedro Fernandez-Caban]

Master's Committee Member

Taondeyande, F., graduate. (2022). *Effect of Balconies on Surface Pressure Distribution on a Mid-Rise Building*.

Bachelor's Committee Chair

Grand, M., graduate. (2020). *3D-Printed Modular Structures*.

Supervision of Student Research Not Related to Thesis or Dissertation

Panek, J. (Jan 2024–present).

Short, K. (Jan 2024–present).

Torres, M. (Jan 2024–present).

Bosshardt, C. (Sep 2023–present).

Iskandar, J. (Jan–Aug 2023).

Harris, A. (Sep 2022–Aug 2023).

Caldwell, C. (Jan–Apr 2023).

Henry Ng (2022).

Honors, Awards, and Prizes

Second place in poster competition, 13th Advances in Cement-Based Materials, AcerS Cement Division (2023).

CEE Graduate Student Research Excellence Award, Department of Civil and Environmental Engineering (2022). (\$1,000).

Certificated of Achievement in Sponsored Research, University of Louisiana at Lafayette (2019).

Tau Beta Pi Engineering Honor Society (2012).

Rackham International Student Fellowship, University of Michigan (2011).

Civil and Environmental Friends Association Fellowship, University of Michigan (2009).

Research and Original Creative Work

Publications

Refereed Journal Articles

Alagheband, M., Zhang, Q., & Jung, S. (submitted). Investigating the Influence of Infill Patterns and Mesh Modifiers on Fatigue Properties of 3D Printed Polymers. *International Journal of Fatigue*. Manuscript submitted for publication.

Farzaneh, F., Zhang, Q., & Jung, S. (submitted). Enhancing Electric Vehicle Battery Safety and Performance: Aluminum Tubes Filled with PCM. *Energy Storage Materials*. Manuscript submitted for publication.

Wang, X., Islam, M. M., & Zhang, Q. (2024). Influence of Materials and Nozzle Geometry on Spray and Placement Behavior of Wet-Mix Shotcrete. *Case Studies in Construction Materials*, 20. doi:<https://doi.org/10.1016/j.cscm.2024.e02852>

Men, P., Wang, Xiu-man, Liu, D., Zhang, Z., Zhang, Q., & Lu, Y. (2024). On use of polyvinylpyrrolidone to modify polyethylene fibers for improving tensile properties of high strength ECC. *Construction and Building Materials*, 417. doi:<https://doi.org/10.1016/j.conbuildmat.2024.135354>

Qu, C., Farzaneh, F., Jung, S., & Zhang, Q. (2024). Strengthening reinforced concrete bridge piers against heavy vehicle collisions with ultra-high performance concrete collars: A finite element analysis study. *Advances in Structural Engineering*. doi:<https://doi.org/10.1177/13694332241237575>

- Islam, M. M., Jung, S., & Zhang, Q. (2022). Mechanical Properties of Corroded Steel Rebars after 20 Years of Saltwater Exposure. *Journal of Failure Analysis and Prevention*, 22, 1714–1724. doi:10.1007/s11668-022-01460-3
- Islam, M. M., Zhang, Q., & Jin, Q. (2022). A review of existing codes and standards on design factors for UHPC placement and fiber orientation. *Construction and Building Materials*, 354. doi:https://doi.org/10.1016/j.conbuildmat.2022.128308
- Zhang, Z., Qian, S., Zhang, Q., & Li, L. (2022). Advanced Concrete Technology and Its Structural Applications. *Advances in Civil Engineering*, 2022. doi:https://doi.org/10.1155/2022/9781273
- Heidarnezhad, F., & Zhang, Q. (2022). Shotcrete Based 3D Concrete Printing: State of Art, Challenges, and Opportunities. *Construction and Building Materials*, 323. doi:https://doi.org/10.1016/j.conbuildmat.2022.126545
- Ye, J., Yu, K., Yu, J., Zhang, Q., & Li, L. (2021). Designing ductile, tough, nacre-inspired concrete member in metric scale. *Cement and Concrete Composites*, 118. doi:https://doi.org/10.1016/j.cemconcomp.2021.103987
- Zhang, P., Liao, W., Kumar, A., Zhang, Q., & Ma, H. (2020). Characterization of sugarcane bagasse ash as a potential supplementary cementitious material: Comparison with coal combustion fly ash. *Journal of Cleaner Production*, 277. doi:https://doi.org/10.1016/j.jclepro.2020.123834
- Das, A., Bhuyan, Mohammad, R., Khattak, Mohammad, M., & Zhang, Q. (2020). Mitigating reflective cracking in composite pavements through the use of a ductile concrete interlayer. *Construction and Building Materials*, 259. doi:https://doi.org/10.1016/j.conbuildmat.2020.120383
- Dang, Z., Feng, P., Yang, Jia-Qi, & Zhang, Q. (2020). Axial compressive behavior of engineered cementitious composite confined by fiber-reinforced polymer. *Composite Structures*, 243. Retrieved from https://doi.org/10.1016/j.compstruct.2020.112191 doi:https://doi.org/10.1016/j.compstruct.2020.112191
- Morshed, S. A., Sinha, A., Zhang, Q., & Tatar, J. (2019). Hygrothermal conditioning of wet-layup CFRP-concrete adhesive joints modified with silane coupling agent and core-shell rubber nanoparticles. *Construction and Building Materials*, 227, 116531. doi:https://doi.org/10.1016/j.conbuildmat.2019.07.257
- Zhang, Z., Zhang, Q., & Li, V. C. (2019). Multiple-scale investigations on self-healing induced mechanical property recovery of ECC. *Cement and Concrete Composites*, 103, 293-302. doi:https://doi.org/10.1016/j.cemconcomp.2019.05.014

- Baral, K., Tatar, J., & Zhang, Q. (2019). High-Performance Impact-Resistant Concrete Mixture for Transportation Infrastructure Applications. *Transportation Research Record*, 2673. doi:<https://doi.org/10.1177/0361198119873326>
- Yu, J., Wang, Y., Li, Z., Zhang, Q., Jiang, X., & Zhang, Z. (2019). Using DIC technique to characterize the Mode II interface fracture of layered system composed of multiple materials. *Composite Structures*, 230. doi:<https://doi.org/10.1016/j.compstruct.2019.04.011>
- Morshed, S. A., Young, T. J., Chirdon, W. M., Zhang, Q., & Tatar, J. (2018). Durability of wet lay-up FRP bonded to concrete with nanomodified epoxy adhesives. *The Journal of Adhesion*, 1-26. doi:<https://doi.org/10.1080/00218464.2018.1518464>
- Zhang, P., Gao, Z., Zhang, Q., Khattab, A., & Li, G. (2018). Fracture behavior characterization of arcan polycaprolactone based polymer composites prepared by polymerization induced phases separation. *Polymer Composites*, 40, 1198-1208. doi:<https://doi.org/10.1002/pc.24831>
- Zhang, Z., & Zhang, Q. (2018). Matrix tailoring of engineered cementitious composites (ECC) with non-oil-coated, low tensile strength PVA fiber. *Construction and Building Materials*, 161, 420-431. doi:<https://doi.org/10.1016/j.conbuildmat.2018.04.011>
- Liu, H., Zhang, Q., Li, V., Su, H., & Gu, C. (2017). Durability study on engineered cementitious composites (ECC) under sulfate and chloride environment. *Construction and Building Materials*, 133, 171-181.
- Liu, H., Zhang, Q., Gu, C., Su, H., & Li, V. (2017). Influence of microcrack self-healing behavior on the permeability of Engineered Cementitious Composites. *Cement and Concrete Composites*, 82, 14-22.
- Zhang, Z., & Zhang, Q. (2017). Self-healing ability of engineered cementitious composites (ECC) under different exposure environments. *Construction and Building Materials*, 156, 142-151.
- Liu, H., Zhang, Q., Gu, C., Su, H., & Li, V. (2017). Self-healing of microcracks in Engineered Cementitious Composites under sulfate and chloride environment. *Construction and Building Materials*, 153, 948-956.
- Zhang, Q., & Li, V. C. (2016). Ductile cement-based spray-applied fire-resistive materials. *Journal of Structural Fire Engineering*, 7(2), 114-125.
- Liu, H., Zhang, Q., Gu, C., Su, H., & Li, V. C. (2016). Influence of micro-cracking on the permeability of engineered cementitious composites. *Cement and Concrete Composites*, 72, 104-113.

Zhang, Q., & Li, V. C. (2015). Development of durable spray-applied fire-resistive Engineered Cementitious Composites (SFR-ECC). *Cement and Concrete Composites*, *60*, 10-16.

Zhang, Z., Zhang, Q., Qian, S., & Li, V. C. (2015). Low E Modulus Early Strength Engineered Cementitious Composites Material: Development for Ultrathin Whitetopping Overlay. *Transportation Research Record*, *2481*(1), 41-47.

Zhang, Q., & Li, V. C. (2014). Adhesive bonding of fire-resistive engineered cementitious composites (ECC) to steel. *Construction and Building Materials*, *64*, 431-439.

Zhang, Q., Ranade, R., & Li, V. C. (2014). Feasibility study on fire-resistive engineered cementitious composites. *ACI Materials Journal*, *111*(6), 651.

Felekoglu, B., Tosun-Felekoglu, K., Ranade, R., Zhang, Q., & Li, V. C. (2014). Influence of matrix flowability, fiber mixing procedure, and curing conditions on the mechanical performance of HTPP-ECC. *Composites Part B: Engineering*, *60*, 359-370.

Huang, X., Ranade, R., Zhang, Q., Ni, W., & Li, V. C. (2013). Mechanical and thermal properties of green lightweight engineered cementitious composites. *Construction and Building Materials*, *48*, 954-960.

Refereed Proceedings

Nazemi, M., Juyeong, C., & Zhang, Q. (2024). Reuse and recycling feasibility assessment for bridge components: a case study of a bridge investigation in Florida. In *ASCE Construction Research Congress 2024*. Des Moines, Iowa.

Islam, M. M., & Zhang, Q. (2023). An Evaluation of the Placement and Fiber Orientation Factors based on Existing UHPC Codes and Standards. In *International Interactive Symposium on Ultra-High Performance Concrete*. Willington, DE. Retrieved from <https://doi.org/10.21838/uhpc.16686>

Wang, P., Riding, K., & Zhang, Q. (2023). Impact of flexural loading induced cracks on chloride penetration of UHPC. In *International Interactive Symposium on Ultra-High Performance Concrete*. Willington, DE. Retrieved from <https://doi.org/10.21838/uhpc.16685>

Das, A., Bhuyan, Mohammad, R., Khattak, Mohammad, J., & Zhang, Q. (2020). Mitigating Reflective Cracking In Composite Pavements Through the Use of a Ductile Concrete Interlayer. In *Transportation Research Board Annual Meeting*. Washington, D.C. Retrieved from <https://doi.org/10.1016/j.conbuildmat.2020.120383>

Mohammad, B., Khattak, M., Zhang, Q., & Schlader, E. (2019). Experimental Evaluation of Engineered Cementitious Composites as Reflective Crack Control Interlayer for

Composite Pavements. In *MATEC Web of Conferences* (pp. 07002). San Antonio, Texas. Retrieved from <https://doi.org/10.1051/mateconf/201927107002>

Baral, K., Tatar, J., & Zhang, Q. (2018). Tailoring Ductile Concrete Material with Locally Accessible Raw Ingredients for Transportation Infrastructure Applications. In *TRB*. Washington D.C.

Zhang, Q., & Li, V. C. (2017). Micromechanics of an Ultra Lightweight Engineered Cementitious Composite Containing Polymeric Latex Admixture. In *International Conference on Strain-Hardening Cement-Based Composites* (pp. 70-78). Springer, Dordrecht.

Zhang, Q., & Li, V. C. (2015). Impact Resistance of Ductile Spray-Applied Fire-Resistive Materials. In *Structures Congress 2015* (pp. 1585-1595). Portland, Oregon.

Zhang, Q., & Li, V. (2014). Ductile Spray-Applied Fire-Resistive Material for Enhanced Fire Safety. In *8th International Conference on Structures in Fire* (pp. 1195-1202). Shanghai, China.

Zhang, Q., & Li, V. C. (2014). Ductile Fire-Resistive Material for Enhanced Fire Safety Under Multi-Hazards-A Feasibility Study. In *Structures Congress 2014* (pp. 1148-1158). Boston, Massachusetts.

Refereed Reports

Islam, M. M., & Zhang, Q. (2021). *Synthesis Study Quantifying the Effect of UHPC Fiber Dispersion and Orientation in Structural Members* (Technical Report). Florida Department of Transportation. Retrieved from https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/research/reports/fdot-bdv30-977-34-rpt.pdf?sfvrsn=49a68dde_1

Presentations

Nonrefereed Presentations at Conferences

Zhang, Q. (presented 2024). *An Evaluation of the Placement and Fiber Orientation Factors based on Existing UHPC Codes and Standards*. Presentation at American Concrete Institute Convention, American Concrete Institute, New Orleans. (National)

Kosarimovahhed, M., Zhang, Q., & Jung, S. (presented 2023, June). *Charactering the basic creep behavior of 3D printed concrete with layered structures*. Presentation at ASCE 2023 Engineering Mechanics Institute Conference (EMI 2023), ASCE, Atlanta, GA. (National)

- Mank, E., Lee, N., & Zhang, Q. (presented 2023, June). *Development of UHPC with limestone calcined clay cement (LC3) binder- a feasibility study*. Poster presentation at 13th Advances in Cement-based Materials, ACers, New York City. (National)
- Aparicio, D., Silva, J. P., Leon, M., Zhang, Q., Jin, Q., & Paul, A. (presented 2023, June). *Early-age and long-term performance of strain-hardening cementitious composite using high replacement of Chilean natural pozzolan*. Poster presentation at 13th Advances in Cement-based Materials, ACers, New York City. (National)
- Islam, M. M., & Zhang, Q. (presented 2023, June). *Experimental study of the effect of single fiber pullout behavior of recycled steel fiber on the performance of fiber reinforced concrete*. Presentation at ASCE 2023 Engineering Mechanics Institute Conference (EMI 2023), ASCE, Atlanta, GA. (National)
- Wang, P., Zeidan, R., Riding, K., & Zhang, Q. (presented 2023, June). *Influence of crack width on chloride penetration of UHPC under flexural loading*. Presentation at 13th Advances in Cement-based Materials, ACers, New York City. (National)
- Islam, M. M., Sweat, R., & Zhang, Q. (presented 2022, March). *A Multi-Scale Model for Design of Strain-Hardening Cementitious Composite (SHCC) using Finite Element Analysis*. Poster presentation at American Concrete Institute Convention, American Concrete Institute, Orlando, FL. (National)
- Morshed, S. A., Chirdon, W., Zhang, Q., & Tatar, J. (presented 2018). *Do Nanoparticle-Modified Adhesives Improve Strength and Durability of FRP-Concrete Adhesively Bonded Joints?* Presentation at Louisiana Transportation Conference, Louisiana Transportation Research Center, Baton Rouge, LA. (Regional)
- Baral, K., Tatar, J., & Zhang, Q. (presented 2018). *High-Performance Impact-Resistant Concrete Mixture for Transportation Infrastructure Applications*. Presentation at Transportation Research Board 98th Annual meeting, TRB, Washington D.C. (National)
- Baral, K., Zhang, Q., & Tatar, J. (presented 2018). *Tailoring Engineered Cementitious Composites with Locally Accessible Raw Ingredients for Applications in Transportation Infrastructures*. Presentation at Louisiana Transportation Conference, Louisiana Transportation Research Center, Baton Rouge, LA. (Regional)
- Zhang, Z., Zhang, Q., Qian, S., & Li, V. (presented 2015). *Investigation on the influence of self-healing on ECC's tensile mechanical properties*. Presentation at 5th International Conference on Self-Healing Materials, Duke University, the University of North Carolina – Chapel Hill and North Carolina State University, Durham, North Carolina. (International)

Nonrefereed Presentations at Symposia

- Wang, P., & Zhang, Q. (presented 2023, August). Acceptable Crack Width Limit for UHPC Structural Members Under Coastal and Marine Environment. In *13th Annual Structures Research Update Meeting*. Presentation at the meeting of Florida Department of Transportation. (State)
- Islam, M. M., & Zhang, Q. (presented 2023, August). Assessment and Optimization of the Casting Procedure for Precast UHPC Structural Elements. In *13th Annual Structures Research Update Meeting*. Presentation at the meeting of Florida Department of Transportation. (State)
- Qu, C., & Zhang, Q. (presented 2023, August). Strengthening Piers to Resist Vehicular Collision BED70. In *13th Annual Structures Research Update Meeting*. Presentation at the meeting of Florida Department of Transportation. (State)
- Zhang, Q. (presented 2022, August). Quantifying the Effect of UHPC Fiber Dispersion and Orientation in Structural Members. In *12th Annual Structures Research Update Meeting*. Presentation at the meeting of Florida Department of Transportation. (State)
- Zhang, Q. (presented 2021, August). Synthesis Study-Quantifying the Effect of UHPC Fiber Dispersion and Orientation in Structural Members. In *11th Annual Structures Research Update Meeting*. Presentation at the meeting of Florida Department of Transportation. (State)

Patented Inventions

- Li, V., & Zhang, Q. (2016). *Sprayable Strain Hardening Brittle Matrix Composites with Fire-Resistance and High Ductility*. U.S. Patent 9,260,347.

Contracts and Grants

Contracts and Grants Funded

- Zhang, Qian (PI), & Zhang, Sungmoon (Co-PI). (May 2024–Apr 2027). *Experimental Evaluation of Strengthening Methods for Bridge Piers Against Vehicular Collision*. Funded by Florida Department of Transportation. Total award \$556,728.
- Zhang, Qian (PI), & Alamdari, Nasrin (Co-PI). (Sep 2023–Aug 2027). *REU Site: Research Experience for Undergraduates in Resilience Against Extreme Weather Events*. Funded by National Science Foundation. (2349250). Total award \$462,310.
- Choi, Juyeong (PI), Moon, Jinyeong (Co-PI), & Zhang, Qian (Co-PI). (Jul 2023–Jun 2024). *Planning: Establishing an Industry Partnership for Sustainable Demolition Research on*

- Climate Change*. Funded by National Science Foundation. (2331975). Total award \$100,000.
- Zhang, Q., & Duarte, R. (May 2023–Apr 2024). *Educating the next generation of engineers on sustainable demolition practices*. Funded by Florida A&M University. Total award \$5,000.
- Zhang, Qian (PI). (Apr 2023–Mar 2025). *Assessment and Optimization of the Casting Procedure for UHPC Structural Elements*. Funded by Florida Department of Transportation. (BED30 TO#977-08). Total award \$402,002.
- Zhang, Qian (PI), & Riding, Kyle (Co-PI). (Jun 2022–Oct 2025). *Acceptable Crack Width Limit for UHPC Structural Members Under Coastal and Marine Environment*. Funded by FDOT. (BED30 TWO 977-05). Total award \$494,378.
- Zhang, Qian (PI), & Jung, Sungmoon (Co-PI). (Jun 2022–Apr 2024). *Strengthening Piers to Resist Vehicular Collision*. Funded by FDOT. (BED70). Total award \$149,889.
- Zhang, Qian (PI), & Jung, Sungmoon (Co-PI). (Jun 2021–Jun 2022). *Understanding the Creep of 3D Printed Concrete Materials*. Funded by FSU CRC. Total award \$24,492.
- Zhang, Qian (PI). (Feb 2021–Nov 2021). *A Rapid Laboratory Testing Protocol to Evaluate Pavement Interlayer System*. Funded by FSU Research Foundation. Total award \$28,988.
- Zhang, Qian (PI). (Jan 2021–Jan 2022). *Synthesis Study Quantifying the Effect of UHPC Fiber Dispersion and Orientation in Structural Members*. Funded by Florida Department of Transportation. (BDV30 TWO 977-34). Total award \$58,756.
- Zhang, Q. (May 2020–Aug 2020). *FYAP: Innovative 3D Printed Concrete Structures Enabled Via Integrated Structural and Material Design*. Funded by FSU CRC. Total award \$20,000.
- Zhang, Q. (Jun 2018–Jul 2019). *Mitigating Elevated Temperature Effect on Ductile Fiber Reinforced Concrete Through the Use of High Temp. Resistant Fibers & Nanofibers*. Funded by Louisiana Board of Regents. (LEQSF(2018-21)-RD-A-25). Total award \$240,717.
- Zhang, Qian (PI), Tatar, Jovan (Co-PI), & Gopu, Vijaya (Co-PI). (Apr 2018–Jul 2019). *REU Site: Research Experience for Undergraduates in Advanced Infrastructural Materials*. Funded by National Science Foundation. (1757786). Total award \$357,012.
- Zhang, Qian (PI). (Jul 2017–Jun 2018). *Development of high performance impact resistant concrete mixtures for crash barrier application*. Funded by Louisiana Transportation Research Center. (DOTLD1000190). Total award \$29,920.

Service

Florida State University

FSU University Service

Faculty advisor, Undergraduate Research Opportunity Program (2023–present).

Member, President's Council on Inclusive Excellence and Civility (2021–2024).

FSU Department Service

Member, Tenure-track faculty search committee (Infrastructure systems) (2023–present).

Member, Lab committee (2019–present).

Liaison, Honors in the Major Program (2019–present).

Member, Teaching faculty search committee (Civil/Transportation) (2022–2023).

Member, Tenure-track faculty search committee (Geo-Materials) (2021–2022).

The Profession

Guest Editing for Refereed Journals

Zhang, Z., Zhang, Q., Zhang, C., & Weng, Y. (Eds.). (2022, August). Advanced Concrete Technology and its Structural Applications [Special Issue]. *Advances in Civil Engineering*.

Zhang, Z., Wang, F., Shi, X., & Zhang, Q. (Eds.). (2022, January). Advanced Concretes and Their Structural Applications [Special Issue]. *Frontiers in Materials*.

Guest Reviewer for Refereed Journals

Journal of Cleaner Production (2024–present).

Journal of the Air & Waste Management Association (2023–present).

Engineering Structures (2022–present).

MDPI Sustainability (2020–present).

Case Studies in Construction Materials (2018–present).

Cement and Concrete Research (2018–present).

Structural Concrete (2018–present).

Composites Part B: Engineering (2017–present).

Fire Technology (2017–present).

Journal of Materials in Civil Engineering (2017–present).

Advances in Structural Engineering (2016–present).

Cement and Concrete Composites (2016–present).

Construction and Building Materials (2016–present).

Fire Safety Journal (2016–present).

Journal of Bridge Engineering (2016–present).

Chair of a Symposium

Jin, Q., Zhang, Q., & Paul, A. (Chair). (2024, March). *ACI Convention session organizer: Fiber Orientation in Ultra High-Performance Concrete: Quantification, Characterization, and Implications for Design and Performance*. Symposium conducted at the meeting of American Concrete Institute, New Orleans.

Reviewer or Panelist for Grant Applications

US Department of Energy (2022–present).

National Science Foundation (2016–present).

The Community

Speaker and engineering role model, SciGirls Summer Camp, SciGirls (2021–2022).