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EDUCATION

Ph.D. Hydrologic Sci. & Eng.	Colorado School of Mines, Golden, CO	2013
M.S. Environmental Sci. & Eng.	Colorado School of Mines, Golden, CO	2003
B.A. Geology	College of Charleston, Charleston, SC	1999

EMPLOYMENT

2018-present	Assistant Professor, Civil, Environmental, & Construction Engineering, Texas Tech University, Lubbock, TX
2015-2018	Postdoctoral Researcher & Engineering State Agencies Liaison, School of Engineering, Brown University, Providence, RI
2013-2015	Hydrogeologist, Soil and Groundwater Management, Shell Projects & Technology, Houston, TX
2009-2013	Research Assistant, Hydrologic Science & Engineering, Colorado School of Mines, Golden, CO
2007-2009	Hydrogeologist and Portfolio Manager, Groundwater & Environmental Services, Baton Rouge, LA
2004-2007	Hydrogeologist and Project Manager, Conestoga-Rovers & Associates, Baton Rouge, LA

RESEARCH SUPPORT

Combined In Situ / Ex Situ Treatment Train for Remediation of Per- and Polyfluoroalkyl Substance (PFAS) Contaminated Groundwater. SERDP ER-18-1306. Co-PI \$886,712 (\$298,834 TTU). September 2018-August 2021.

Occurrence, fate, transport, and treatment of per- and polyfluoroalkyl substances in landfill leachate. US Environmental Protection Agency (USEPA) STAR Early Career RD839670. PI. \$500,000. August 2019-July 2022.

Determination of Biomagnification Potentials for Per/Polyfluoroalkyl Substances in Terrestrial Food-webs. SERDP ER-19-1401. Co-PI \$1,289,165 (\$287,784 TTU). September 2019 – August 2022.

Occurrence of PFAS Compounds in US Wastewater Treatment Plants. Water Resources Foundation (WRF) Project 5031. Co-PI. \$899,693 (\$167,620 TTU). March 2020-February 2023.

Multi-taxa ecotoxicity of Novel Fluorine Foam verses New Generation Short Chain PFAS Aqueous Film Forming Foam Products. SERDP ER-20-1531. Co-PI \$451,020. August 2020-July 2023.

Development and Validation of Novel Techniques to Assess Leaching and Mobility of Per and Polyfluoroalkyl Substances (PFAS) in Impacted Media. SERDP ER-20-1126. PI. \$1,677,095. September 2020-August 2023.

Demonstration of a High Resolution Passive Profiler (HRPP) for Characterizing the Distribution of PFASs. ESTCP. co-PI. \$1,106,627. August 2021-July 2024.

Low-Cost, Passive In Situ Treatment of PFAS-Impacted Groundwater Using Foam Fractionation In an Air Sparge Trench. Environmental Security Technology Certification Program (ESTCP). Co-PI. \$200,990. September 2021-August 2024.

Cometabolic Transformation and Treatment of Polyfluorinated Precursors in PFAS-Impacted Soils and Aquifer Systems. SERDP. co-PI. \$124,474. September 2021-August 2022.

Develop Synergetic Novel Macrocyclic-based Absorbents with Thermal Destruction for Enhanced Per- and Polyfluoroalkyl Substances (PFAS) Removal in Groundwater and Drinking Water Treatment. co-PI. \$946,091. September 2021-August 2024.

Combustion Ion Chromatography Instrumentation for Analysis of Total Organic Fluorine in PFAS-impacted Media. SERDP. PI. \$226,737. September 2021-August 2022

Developing strategies to manage PFAS in land-applied biosolids. Legislative-Citizen Commission on Minnesota Resources (LCCMR). Co-PI. \$397,000. September 2021-2024.

PEER REVIEWED WORKS (*Corresponding, Student & Postdoctoral mentees underlined)

Shojaei, M., Kumar, N. and **Guelfo, J.*** An Integrated Approach for Improved Liquid Chromatography Mass Spectrometry Based Determinations of Total PFASs in AFFF and AFFF-impacted Soils. *Environmental Science & Technology*. In Revision.

Guelfo, J.*; Korzeniowski, S; Mills, Marc A.; Anderson, Janet; Anderson, Richard H.; Arblaster, Jennifer A.; Conder, Jason M.; Cousins Ian T.; Dasu, Kavitha; Henry, Barbara J.; Lee, Linda S.; Liu, Jinxia; McKenzie, Erica R.; and Willey, Janice. (2021) Environmental Sources, Chemistry, Fate and Transport of Per- and Polyfluoroalkyl Substances: State of the Science, Key Knowledge Gaps, and Recommendations Presented at the August 2019 SETAC Focus Topic Meeting. *Environmental Toxicology & Chemistry*. In Press. <https://doi.org/10.1002/etc.5182>

Shojaei, M., Kumar, N., Chaobol, S., Wu, K., Crimi, M, and **Guelfo, J.*** (2021) Enhanced recovery of per- and polyfluoroalkyl substances (PFASs) from impacted soils using heat activated persulfate. *Environmental Science & Technology*. (55)14, 9805-9816. <https://doi.org/10.1021/acs.est.0c08069>

Charbonnet, J., Rodowa, A., **Guelfo, J.**, Field, J., Jones, G., Higgins, C., Helbling, D., and Houtz, E. (2021) Environmental Source Tracking of Per- and Polyfluoroalkyl Substances within a Forensic Context: Current and Future Techniques. *Environmental Science & Technology*. 59 (11), 7237-7245. <https://doi.org/10.1021/acs.est.0c08506>. (1 citation)

Schaefer, C. E., Nguyen, D., Culina, V. M., **Guelfo, J.**, & Kumar, N. (2020). Application of Rapid Small-Scale Column Tests for Treatment of Perfluoroalkyl Acids Using Anion-Exchange Resins and Granular Activated Carbon in Groundwater with Elevated Organic Carbon. *Industrial & Engineering Chemistry Research*, 59(38), 16832-16837. <https://doi.org/10.1021/acs.iecr.0c02290>

Guelfo, J.*; Wunsch, A; McCray, J; Higgins, C. (2020). Subsurface Transport Potential of Perfluoroalkyl Acids (PFAAs): Column Experiments and Modeling. *Journal of Contaminant Hydrology*. 233, 103661. <https://doi.org/10.1016/j.jconhyd.2020.103661> (13 citations)

Zhang, M., Yamada, K., Bourguet, S., **Guelfo, J.**, & Suuberg, E. M. (2020). Vapor Pressure of Nine Perfluoroalkyl Substances (PFASs) Determined Using the Knudsen Effusion Method. *Journal of Chemical & Engineering Data*, 65(5), 2332-2342. <https://doi.org/10.1021/acs.jced.9b00922> (1 citation)

McDonough, C; **Guelfo, J.**; and Higgins, C.P. (2019). Measuring Total PFASs in Water: The Tradeoff between Selectivity and Inclusivity. *Current Opinion in Environmental Science Health*. 7, 13-18. DOI: [10.1016/j.coesh.2018.08.005](https://doi.org/10.1016/j.coesh.2018.08.005). (30 citations)

Guelfo, J.*; Marlow, T.; Klein, D.; Savitz, D.; Frickel, S.; Crimi, M.; Suuberg, E. (2018) Evaluation and management strategies for per- and polyfluoroalkyl substances (PFASs) in drinking water aquifers: perspectives from impacted U.S. Northeast communities. *Environmental Health Perspectives*. 126 (6), 065001-1 – 065001-13. DOI: 10.1289/EHP2727. (23 citations)

Guelfo, J.*; and Adamson, D. (2018) Evaluation of a national data set for insights into sources, composition, and concentrations of per- and polyfluoroalkyl substances (PFASs) in U.S. drinking water. *Environmental Pollution*. 236, 505-513. DOI: 10.1016/j.envpol.2018.01.066. (58 citations)

McGuire, Meghan E., Schaefer, C.; Richards, T.; Backe, Will J.; Field, Jennifer A.; Houtz, Erika; Sedlak, David; **Guelfo, J.**, Wunsch A.; and Higgins, C.P. (2014) Evidence of remediation-induced alteration of subsurface poly-and perfluoroalkyl substance (PFAS) distribution at a former firefighter training area. *Environmental Science & Technology*. 48, 6644-6652. DOI: 10.1021/es5006187. (110 citations)

Guelfo, J. and Higgins, C.P. Subsurface transport potential of perfluoroalkyl substances at aqueous film-forming foam (AFFF)-impacted sites. (2013) *Environmental Science & Technology*. 47, 4164-4171. DOI: 10.1021/es3048043. (148 citations)

Sepulvado, J.; Blaine, A.; Hundal, L. S.; Higgins, C. P. (2011) Occurrence and fate of perfluorochemicals in soil following the land application of municipal biosolids. *Environmental Science & Technology*. 45, 8106-8112. DOI: 10.1021/es103903d. (178 citations)

SELECT INVITED PRESENTATIONS

Guelfo, J. PFAS Stability in Soils in Biosolids, AWMA The Science of PFAS: Chemistry, Health, and Multimedia Measurements, 15 - 17 Sept 2020. Virtual

Guelfo, J. Enhanced PFAS Recovery from Impacted Soil Using In Situ Pre-Treatment, Addressing the next generation of persistent contaminants: Per- and polyfluoroalkyl substances (PFASs), University Consortium Fall Focus Meeting, 29 Sept - 1 Oct 2020. Virtual

Guelfo, J. Oxidation of Forever Chemicals: Applications for Analysis and Remediation, University of Minnesota Environmental Engineering Seminar, 25 Sept 2020. Virtual

Guelfo, J. Per and Polyfluoroalkyl Substances in the Environment: Key Challenges and Strategies for source-pathway evaluation and prioritization, SETAC PFAS Focused Topic Meeting, 12 Aug 2019. Durham, NC

Guelfo, J., Interstate Technology and Regulatory Council (ITRC), PFAS Short Course, Fate and Transport, 15 Apr 15, 2019, Baltimore, MD.

Guelfo, J., ITRC PFAS Short Course, Atlanta, GA, Aqueous Film-Forming Foam, and Fate and Transport, 10 Jan 2019, Atlanta, GA

Guelfo, J.L. Strategies for contaminant mixture evaluation: lessons learned from per- and polyfluoroalkyl substances, University of Rhode Island Superfund Research Program seminar series, 18 Apr 2018. Kingston, RI.

TEACHING

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| 2018-present | Environmental Organic Chemistry (CECE 5331), Fundamentals of Environmental Engineering (ENVE 3301), and Solid and Hazardous Waste Management (CECE 5395) |
| 2013 | Co-Instructor, Environmental Organic Chemistry (ESGN 555), Colorado School of Mines |
| 2009-2013 | Teaching Assistant and Guest Lecturer, Environmental Water Chemistry (ESGN 500) and Environmental Organic Chemistry (ESGN 555), Colorado School of Mines |

SERVICE

Guest Editor: AWWA Water Science Topical Collection on PFAS (2020-); Journal of Environmental Engineering Special Collection on PFAS (2020-)

Journal Reviews: Science, Environmental Science & Technology (ES&T), ES&T Letters, Environmental Science: Processes & Impacts, Science of the Total Environment, Critical Reviews in Environmental Science & Technology, Groundwater Monitoring & Remediation, Journal of Environmental Engineering, Journal of Hazardous Materials

Advisory Boards: Massachusetts Department of Environmental Protection (MADEP) Technical Work Group on PFAS in Residuals (2020-); Rhode Island Department of Health, PFAS Drinking Water Technical Advisory Group (June 2019-); Expert advisory council, Connecticut Academy of Science and Engineering (CASE), Connecticut Department of Engineering and Environmental Protection (DEEP) Emerging Contaminant/PFAS Fellowship, (April 2019-); Interstate Technology and Regulatory Council (ITRC) 2017 trainer for 8-hr PFAS workshops (2019) and PFAS focus team (Feb. 2017-).

Conference Sessions: Co-Chair, PFAS in the Environment: Where We Are Now, SERDP Symposium (2020); Co-chair, Legacy and Emerging Per- and Polyfluoroalkyl Substances (PFAS): Identification, Fate, Transport, Exposure, and Treatment, AEESP 2021 (Aug. 2020-); Co-chair, Society for Environmental Toxicology and Chemistry (SETAC) PFAS Focused Topic Meeting, (Aug 2018-); Co-Chair, Fate, Transport, and Remediation of Contaminants in the Environment. AIChE Annual Meeting. (Oct. 2017).; Co-Chair, Gordon Research Seminar on Environmental Sciences: Water. (2012-2014).

Professional Societies: Association of Environmental Engineering and Science Professors (2016 –), American Chemical Society (2019-)

Student Groups: Faculty advisor, Society for Environmental Professionals (SEP) (2019-)

Student Advising: Advising of 9 undergraduate students enrolled in the TTU Five-Year Environmental Engineering (MEV) Program

Community Service: Design and implementation of a drinking water PFAS sampling program to sample small community drinking water systems throughout the state of Rhode Island.

STUDENTS MENTORED

Marzieh Shojaei	Ph.D. Committee Chair (2018-)
Zhao Yang	Ph.D. Committee Chair (2019-)
Ci Ma	Ph.D. Committee Chair (2019-)
Isreq Real	Ph.D. Committee Chair (2020-)
Mohammad Khosravikia	Ph.D. Committee co-Chair (2021-)
Alonso Doria Manzur	Ph.D. Committee Chair (2021-)
Kaylin McDermott	Ph.D. Committee Member (2019-)
Alex Smith	Ph.D. Committee Member (2020-)
Dr. Steven Lasse	Ph.D. Committee Member (2018-2020)
Dr. Fiona Mosley	Ph.D. Committee Member (2018-2020, Clarkson University)
Dr. Naveen Kumar	Postdoctoral Advisor (2019-2021)
Dr. Ke Wu	Postdoctoral Advisor (2020-)
Suparada Chaobol	Undergraduate Research Advisor (2019-2021)
Raneem Bizri	Undergraduate Research Advisor (2020-)

HONORS AND AWARDS

2017 National Institute of Environmental Health Sciences (NIEHS), KC Donnelley Award