CURRICULUM VITAE August 2021

DANNY DAVID REIBLE, PhD, PE(LA), BCEE, NAE

Donovan Maddox Distinguished Engineering Chair
Paul Whitfield Horn Professor

EDUCATION: Ph.D. Chemical Engineering, June 1982
California Institute of Technology, Pasadena, California
Thesis: Pollutant Transport in Complex Atmospheric Flows
M.S. Chemical Engineering, June, 1979
California Institute of Technology, Pasadena, California
B.S. Chemical Engineering with highest honors, May 1977
Lamar University, Beaumont, Texas

PROFESSIONAL EXPERIENCE:
Department of Civil, Environmental and Construction Eng./Chemical Eng. Texas Tech
Paul Whitfield Horn Professor (4/19 -)
Donovan Maddox Distinguished Engineering Chair (9/13-)
Department of Civil, Architectural and Environmental Engineering, University of Texas
Adjunct Prof (9/13-9/16)
Director, Center for Research in Water Resources (9/11-8/13)
Coordinator, Environmental and Water Resources (8/07-9/10)
Bettie Margaret Smith Chair of Environmental Health Engineering (8/04-9/13)
Department of Hydraulic Engineering, Tsinghua University
Distinguished Visiting Professor (2011-)
Department of Chemical Engineering, LSU
Professor (8/92 – 8/04)
Chevron Endowed Professor (1/98- 8/04), Emeritus (8/04-)
Director, Hazardous Substance Research Center/South & Southwest (7/05-9/07)
Department of Chemical Engineering, University of Sydney, Sydney, Australia (7/93-7/95)
Shell Professor of Environmental Engineering,

RECENT AWARDS AND ACTIVITIES:
2020 Gordon Maskew Fair Award, American Academy of Environmental Engineers and Scientists
2017 Kappe Lecturer, American Academy of Environmental Engineers and Scientists
2020- Chair, NAS Overarching Committee on *Progress Toward Ensuring an Outcome of a Safe, Healthy, & Resilient Gulf of Mexico*
2019 - Executive Editor in Chief, *Environmental Science and Ecotechnology* (Elsevier)
2018- Member, Programme Advisory Board - Unconventional Hydrocarbons in the UK Energy System
2018 -Lead Foreign Expert, 111 Project on Fluvial Ecohydraulics, Tsinghua University
2015-2019 Associate Editor, *Environmental Toxicology and Chemistry*
2014-2018 Chair, NAS Comm. *Habitat Conservation Plan of the Edwards Aquifer Authority*
2005 Elected Member of the National Academy of Engineering for the "development of widely used means of managing contaminated sediments"

Current Research Projects (PI unless noted)

- ESTCP – High Resolution Passive Profiling … (2017-2021) 987K (co-PI)
- ESTCP – Standardization of Polymeric Sampling….(2017-2021) 1,137 K (co-PI)
- SERDP - Development of Tools to Inform the Selection of Stormwater Controls at DoD Bases to Limit Potential Sediment Recontamination (2018-2022) 1.058 M
- Chevron – Availability of Mercury in Impacted Metals in Sediments (2017-2021) 505K
- NSF – IGE: Developing Reflective Engineers (2018-2021) 498K
- USACE – Low Density Polyethylene (LDPE) Sheet Field Deployment and Analytical Support, Bradford Island (2019-2021) 76K
- Oregon DEQ -Evaluation of Contaminant Mobility and Availability, McCormick and Baxter and Former Armstrong Facility, Portland, OR (2020-2022), 243K
- NSF - Planning Grant: Engineering Research Center for Hurricane Urban Planning Hazards Research, National Science Foundation (2018-2021) $100K (co-PI)
- ESTCP - Application of Passive Samplers to Support Risk Assessment and Long-term Monitoring (2020-2022) (co-PI, TTU share 210K)

RECENT PUBLICATIONS:

1. Li, X., Huang, L., Fang, H., Chen, M., Cui, Z., Sun, Z., & Reible, D. (2021). Phosphorus adsorption by sediment considering mineral composition and environmental factors. *Environmental Science and Pollution Research*, 1-11.
2. Fang, J., R. Z. Zhao, B. Rao, M. Rakowska, D. Athanasiou, K. Millerick, S. Y. Wei, X. Y. Lei, H. H. Lou and D. D. Reible (2021) "Removal of Polycyclic Aromatic Hydrocarbons from Water Using Mn(III)-Based Advanced Oxidation Process," *J. Environ. Eng*., 147(3), 04021002.
3. Pagnozzi, G., Carroll, S., Reible, D. D., & Millerick, K. (2021). Powdered activated carbon (PAC) amendment enhances naphthalene biodegradation under strictly sulfate-reducing conditions. *Environmental Pollution*, 268, 115641.
4. Zhang, X., & Reible, D. (2020). Exploring the Function of Ion-Exchange Membrane in Membrane Capacitive Deionization via a Fully Coupled Two-Dimensional Process Model. *Processes*, 8(10), 1312.
5. Pagnozzi, G., Reible, D. D., & Millerick, K. (2020). The effects of adsorptive materials on microbial community composition and PAH degradation at the sediment cap-water interface. *International Journal of Sediment Research*, Nov.
6. Pagnozzi, G., Carroll, S., Reible, D. D., & Millerick, K. (2020). Biological Natural Attenuation and Contaminant Oxidation in Sediment Caps: Recent Advances and Future Opportunities. *Current Pollution Reports*, 1-14.
7. Yan, S., Rakowska, M., Shen, X., Himmer, T., Irvine, C., Zajac-Fay, R., ... & Reible, D. D. (2020). Bioavailability assessment in activated carbon treated coastal sediment with in situ and ex situ porewater measurements. *Water Research*, 185, 116259.
8. Drygiannaki, I., Bejar, M., Reible, D. D., Dawson, J. A., Rao, B., Hayman, N. T., ... & Colvin, M. A. (2020). Assessing Biota Accumulation Due to Contamination of Sediments by Storm Water Heavy Metals. *Environ. Tox. and Chem.*, 39(12), 2475-2484.
9. Odetayo, A. A., Reible, D. D., Acevedo-Mackey, D., Price, C., & Thai, L. (2021). Application of polyoxymethylene passive air sampler to monitor hydrophobic organics in air around a confined disposal facility. *Chemosphere*, 263, 127827..
10. Bland, G. D., Rao, B., & Reible, D. (2020). Evaluating the transport of Hg (II) in the presence of natural organic matter through a diffusive gradient in a thin-film passive sampler. *Science of The Total Environment*, 141217.

11. Bailon, M. X., Park, M., Choi, Y. G., Reible, D., & Hong, Y. (2020). The application of DGTs for assessing the effectiveness of in situ management of Hg and heavy metal contaminated sediment. *Membrane Water Treatment*, 11(1), 11-23.
12. Hayman, N. T., Rosen, G., Colvin, M. A., Chadwick, B. D., Rao, B., Athanasiou, D., ... & Reible, D. D. (2020). Seasonal Toxicity Observed with Amphipods (Eohaustorius estuarius) at Paleta Creek, San Diego Bay, USA. *Environmental Toxicology and Chemistry*, 39(1), 229-239.
13. Drygiannaki, I., Rao, B., Dawson, J. A., Rakowska, M., Reible, D. D., Hayman, N. T., ... & Otto, M. (2020). Assessing sediment recontamination from metals in stormwater. *Science of The Total Environment*, 139726.
14. Odetayo, A. A., Reible, D. D., Acevedo-Mackey, D., Price, C., & Thaic, L. (2020). Development of polyoxymethylene passive sampler for assessing air concentrations of PCBs at a confined disposal facility (CDF). *Environmental Pollution*, 114720.
15. Bryant, W.L., Camilli, R., Fisher, G.B., Overton, E.B., Reddy, C.M., Reible, D., Swarthout, R.F. and Valentine, D.L.(2020) Harnessing a decade of data to inform future decisions: Insights into the ongoing hydrocarbon release at Taylor Energy's Mississippi Canyon Block 20 (MC20) site. *Marine Pollution Bulletin*, 155, p.111056.
16. Honarparvar, S. and Reible, D. (2020). Modeling Multicomponent Ion Transport to Investigate Selective Ion Removal in Electrodialysis. *Environmental Science and Ecotechnology*, 100007.
17. Jonker, M.T., Burgess, R.M., Ghosh, U., Gschwend, P.M., Hale, S.E., Lohmann, R., Lydy, M.J., Maruya, K.A., Reible, D. and Smedes, F. (2020) Ex situ determination of freely dissolved concentrations of hydrophobic organic chemicals in sediments and soils: basis for interpreting toxicity and assessing bioavailability, risks and remediation necessity. *Nature Protocols*, 15(5), pp.1800-1828.
18. Honarparvar, S., Zhang, X., Chen, T., Na, C., & Reible, D. (2019). Modeling technologies for desalination of brackish water—toward a sustainable water supply. *Current Opinion in Chemical Engineering*, 26, 104-111.
19. Li, X., Huang, L., Fang, H., He, G., Reible, D., & Wang, C. (2019). Immobilization of phosphorus in sediments by nano zero-valent iron (nZVI) from the view of mineral composition. *Science of the Total Environment*, 694, 133695.
20. Liu, Y., Reible, D., Hussain, F., Fang, H. (2019). Role of bioroughness, bioirrigation and turbulence on oxygen dynamics at the Sediment-Water Interface. *Water Resources Research*, 55(10), 8061-8075.
21. He, G. J., Han, X., Fang, H. W., Reible, D., & Huang, L. (2019). Effects of roughness Reynolds number on scalar transfer mechanisms at the sediment-water interface. *Water Resources Research*, 55. https://doi.org/ 10.1029/2018WR024493
22. Shen, X., & Reible, D. (2019). An analytical model for the fate and transport of performance reference compounds and target compounds around cylindrical passive samplers. *Chemosphere*, 232, 489-495.
23. Oleszczuk, P., Rakowska, M., Bucheli, T. D., Godlewska, P., & Reible, D. D. (2019). Combined Effects of Plant Cultivation and Sorbing Carbon Amendments on Freely Dissolved PAHs in Contaminated Soil. *Environ. Sci & Tech*, 53(9), 4860-4868.
24. Schneider, H., Jackson, A., Rainwater, K., Reible, D., Morse, S., Hatzinger, P., Garcia-Rubalcalva, U. (2019) "Estimation of Interstitial Velocity Using a Direct Drive High Resolution Passive Profiler" *Groundwater*, DOI:10.1111/gwat.12874