CURRICULUM VITAE May 2025

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

Donovan Maddox Distinguished Engineering Chair
Paul Whitfield Horn Professor

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EDUCATION: Ph.D. Chemical Engineering, June 1982 (MS, 1979)
California Institute of Technology, Pasadena, California
Dissertation: Pollutant Transport in Complex Atmospheric Flows
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 University
Interim Chair of ChE (22/23), Interim Director of the Water Resources Center (22/23)
Paul Whitfield Horn Prof. (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)
Tsinghua University, Distinguished Visiting Professor (2011-2024)
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)
Shell Professor of Environmental Engineering, University of Sydney, Australia (7/93-7/95)

RECENT AND NOTABLE HONORS AND AWARDS:

2024 Big 12 TTU Faculty Member of the Year
2024 Fellow, Chinese Academy for Environmental Sciences
2023 Fellow, National Academy of Inventors
2022 ACS Symposium "Sustainable Water & Sediment Management" in my honor
2020 Gordon Maskew Fair Award, AAEES
2017 Kappe Lecturer, American Academy of Environmental Engineers and Scientists
2014 Lifetime Achievement Award, Association of Environmental Health Sciences
2011 Malcolm Pirnie Frontier in Research Award- AEESP
2009 Fellow, American Association for the Advancement of Science (187 ESE Fellow)
2007 Fellow, American Institute of Chemical Engineers
2006 Presidential Service Award for environmental mentoring of former Soviet defense scientists
2005 Elected to the National Academy of Engineering for "managing contaminated sediments"
2004 Board Certified Environmental Engineer, American Academy of Env. Engineers *by eminence*
2002 Charles E. Coates Award - American Chemical Society/American Institute of Chemical Eng.
2001 Lawrence K. Cecil Award of the American Institute of Chemical Engineers
1991 Senior Visitor, Cambridge University Department of Applied Math and Theoretical Physics
1986 New Engineering Educator Excellence Award, American Society for Engineering Educatio

CURRENT ACTIVITIES:

Dr. Reible is currently the Paul Whitfield Horn Professor and Donovan Maddox Distinguished Engineering Chair at Texas Tech University. He previously served as Director of the multi- university consortium, the Hazardous Substance Research Center (HSRC) South and Southwest (1995-2007) while at Louisiana State University and as the Bettie Margaret Smith Chair of Environmental Health Engineering (2004-2013) and Director of the Center for Research in Water Resources (2011-2013) at the University of Texas. Dr. Reible was inducted into the National Academy of Engineering in 2005 for "the development of widely used approaches to managing contaminated sediments". His current research is focused on sustainable water management and the assessment and remediation of contaminated sites. Specific research activities include the development of passive sampling to assess and manage risks in contaminated sediment sites and development and application of technologies for desalination and beneficial reuse of produced water. A second major research area is the development of sustainable energy resources including geologic hydrogen where his efforts are focused on stimulation subsurface hydrogen production and extraction. Dr. Reible's efforts are focused on Dr. Reible has served as PI on projects totaling approximately $50 million and has authored/edited 6 books, 50 chapters in books, and more than 200 refereed journal papers.

CURRENT AAND RECENT RESEARCH PROJECTS (PI UNLESS NOTED)

- **TWDB**: Texas Produced Water Consortium (co-PI) $6M
- **USACE** – Bioaccumulation and Bioavailabilty Assessment, Passive Sampling Advanced Oxidation of Contaminated Sediments >$1M multiple grants (co-PI, PI)
- **ARPA-E** - Production of Geologic Hydrogen Through Stimulation $2.0 MM
- **DHS CIRI** - Building Resilience and Security in Drinking Water Systems 530K (co-PI)
- **SERDP**: Tools for Stormwater Control at DoD Bases, $1.058M
- **ESTCP**: Standardization and High-Resolution Passive Profiling Projects (co-PI) $2M
- **NSF IGE**: Developing Reflective Engineers ($498K)
- **Chevron**: Mercury Bioavailability in Sediments ($505K)
- **ODEQ/ExxonMobil** – Multiple environmental passive sampling projects set to begin summer 2025

TEN RECENT RELEVANT PUBLICATIONS

(~200 total publications, h-index, Web of Science 35, Scopus 36, Google Scholar 46, >7600 citations)

1. Reible, D.D. *Fundamentals of Environmental Engineering*, CRC/ Lewis Publishers (1999) (2nd Ed., 2025)
2. Choy, B. and D.D. Reible, *Diffusion Models of Environmental Transport,* CRC/Lewis Publishers (2000).
3. Chen, Z.L., He, G., Huang, L., Shen, X., Reible, D. and Fang, H (2024) Analytical model of contaminant advection, diffusion and degradation in capped sediments and sensitivity to flow and sediment properties. *Journal of Hydrology*, 640, p.131685.
4. Alborzi, A., Hsieh, I. M., Reible, D., & Malmali, M. (2022). Analysis of fouling mechanism in ultrafiltration of produced water. *Journal of Water Process Engineering*, 49, 102978.
5. Chen, T., Honarparvar, S., Reible, D. and Chen, C.C. (2022) Thermodynamic modeling of calcium carbonate scale precipitation: aqueous Na+-Ca2+-Cl−-HCO3−-CO32−-CO2 system. *Fluid Phase Equilibria*, 552, p.113263.
6. Kim, J. H., Nguyen, N. T., Campbell, R. C., Yoo, S., Taraban, R., & Reible, D. D. (2021). Developing

reflective engineers through an arts-incorporated graduate course: A curriculum inquiry. *Thinking Skills and Creativity*, *42*, 100909.

7. Honarparvar, S., Zhang, X., Chen, T., Alborzi, A., Afroz, K., & Reible, D. (2021). Frontiers of Membrane Desalination Processes for Brackish Water Treatment: A Review. *Membranes*, 11(4), 246.
8. Shen, X., Lampert, D., Ogle, S., & Reible, D. (2018). A software tool for simulating contaminant transport and remedial effectiveness in sediment environments. *Environmental Modelling & Software*, 109, 104-113.
9. Honarparvar, S., Saravi, S. H., Reible, D., & Chen, C. C. (2018) Comprehensive Thermodynamic Modeling of Saline Water with Electrolyte NRTL Model: A Study of Aqueous Sr2+-Na+-Cl−-SO42− Quaternary System, *Fluid Phase Equilibria*, 470, 221-231
10. Honarparvar, S., Saravi, S. H., Reible, D., & Chen, C. C. (2017). Comprehensive thermodynamic modeling of saline water with electrolyte NRTL model: A study on aqueous Ba 2+-Na+-Cl−-SO 4 2− quaternary system. *Fluid Phase Equilibria*. 447, 29-38.