

Danny D. Reible, PhD PE BCEE NAE

Donovan Maddox Distinguished Engineering Chair

Environmental and Water Resources, Civil and Environmental Engineering, Texas Tech University

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EDUCATION

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|-----------------------------|----------------------|------------------------|------|
| • Lamar University | Chemical Engineering | B.S. w/ highest honors | 1977 |
| • California Inst. of Tech. | Chemical Engineering | M.S. | 1979 |
| • California Inst. of Tech. | Chemical Engineering | Ph.D. | 1981 |

PROFESSIONAL EXPERIENCE

- Donovan Maddox Distinguished Engineering Chair, Texas Tech University 9/13 to current
- Director, Center for Research for Water Resources University of Texas 9/11 – 9/13
- Bettie Margaret Smith Professor, Civil Engineering, The University of Texas at Austin 8/04 - 9/13
- Coordinator, Environmental and Water Resources, The University of Texas at Austin 8/07 -8/10
- Director, EPA Hazardous Substance Research Center/South and Southwest 8/95 to 8/07
- Chevron Professor of Chemical Engineering, Louisiana State University 10/81-8/04
- Shell Professor of Environmental Engineering, University of Sydney 7/93-7/95

STUDENT SUPERVISION

- Ph.D. Students: Advisor for 19 students who have completed their PhD and currently advising 4
- M.S. Students: Advisor to 42 students who have completed the M.S. degree with thesis

SUMMARY OF RESEARCH ACTIVITIES

Expertise includes sources, transport and fate of multimedia environmental contaminants and the assessment and remediation of contaminated sites. Studies have involved a wide range of scales and methods, including bench-scale, pilot, and field experiments, and computer modeling in air pollution and pollution treatment processes, sustainable water management, and contaminated site assessment and remediation. Dr. Reible has served as PI on projects totaling in excess of \$30 million and has authored/edited 6 books, more than 35 chapters in books, and more than 120 refereed journal papers.

RECENT HONORS AND AWARDS

2011 Malcolm Pirnie Frontier in Research Award, Assoc. for Environmental Engineering and Science Professors

2009 Fellow, American Association for the Advancement of Science

2007 Fellow, American Institute of Chemical Engineers

2005 National Academy of Engineering

Cited for the development of widely used methods of managing contaminated sediments

2004 Board Certified Environmental Engineer *by eminence*, American Academy of Environmental Engineers

2004 Professor and Director Emeritus, Louisiana State University

2001 L.K. Cecil Award of the Environmental Division of the American Institute of Chemical Engineers

RELEVANT PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science, Air & Waste Management Assoc., American Institute of Chemical Engineers, American Chemical Society, American Society of Civil Engineering, American Academy of Environmental Engineers, American Geophysical Union, American Society for Engineering Education, Association of Environmental Engineering and Science Professors, National Academy of Engineering, Sigma Xi, Society of Environmental Toxicology and Chemistry, Water Environment Federation

RECENT PROFESSIONAL ACTIVITIES

Member, EPA Science Advisory Board, Environmental Engineering Committee

Associate Editor or Editorial Board, *Chemical Engineering Journal* (2000-2007), *Journal of the Air and Waste*

Management Association (2004-), *Journal of Environmental Forensics* (2006-), *Journal of Environmental Engineering* (2006-), *Limnology and Oceanography: Fluids and Environments* (2010-)

SELECTED RECENT PUBLICATIONS:

Books (6 books and more than 35 book chapters)

1. Danny D. Reible, Ed: *Processess, Assessment and Remediation of Contaminated Sediments*, Springer (2013)
2. Danny D. Reible and Tomas Lanczos, Ed. *Assessment and Remediation of Contaminated Sediments*, NATO Science Series IV, Earth and Environmental Sciences Vol. 73. Springer-Verlag, Dordrecht, Netherlands (2006)
3. Calvin C. Chien; Miguel A. Medina, Jr.; George F. Pinder; Danny D. Reible; Brent E. Sleep; and Chunmiao Zheng, Ed. *Contaminated Ground Water and Sediment*, CRC Press (2004)
4. Choy, B. and D.D. Reible, *Diffusion Models of Environmental Transport*, CRC Press (2000) 184 pp.
5. Reible, D.D. *Fundamentals of Environmental Engineering*, CRC Press (1999) 526 pp.

Recent Journal Publications (more than 120 total journal publications)

1. Smith, A., M.J. Kirisits, D.D. Reible, Assessment of Potential Anaerobic Biotransformation of Organic Pollutants in Sediment Caps, *New Biotechnology*, Volume 30, Issue 1, 80–87, 15 November 2012.
2. Yan, F., D. Reible, PAH Degradation and redox control in an electrode enhanced sediment cap, 87, 9, 1222-1228, September , 2012
3. Sun, M., D. Reible, G.V. Lowry and K.B. Gregory Effect of Applied Voltage, Initial Concentration, and Natural Organic Matter on Sequential Reduction/Oxidation of Nitrobenzene by Graphite Electrodes, *Environ Sci Technol.* 46,11, 6174-6181 (2012)
4. Yang, W., D Lampert, N Zhao, D Reible, W Chen "Link between black carbon and resistant desorption of PAHs on soil and sediment." *Journal of Soils and Sediments*: 12, 5 713-723 (2012)
5. Rosen, G, D.B. Chadwick, G.A. Burton, W.K. Taulbee, M.S. Greenberg, G.R. Lotufo and D.D. Reible (2011) A sediment ecotoxicity platform for in situ measures of chemistry bioaccumulation and toxicity. Parts 1 and 2.. *Environmental Pollution*, (Nov 2011)
6. Lampert, D.J., W.V. Sarchet, D.D. Reible. Assessing the Effectiveness of Thin-Layer Sand Caps for Sediment Management through Passive Sampling, *Environ. Sci Technol*, 45 (19), 8437–8443 (2011)
7. Erten, M.B., R. Gilbert, C.S. El Mohtar, D.D. Reible, Development of a laboratory procedure to evaluate the consolidation potential of soft contaminated sediments, *Geotechnical Testing Journal*, 34, 5, September (2011)
8. Hong, YS., K. A. Kinney, D.D. Reible, Effects of cyclic changes in pH and salinity on metals release from sediments, *Environ. Toxicology and Chemistry*, Accepted manuscript online: 17 MAY 2011
9. Gschwend, P.M, J. K. MacFarlane, D.D. Reible, X. Lu, S.B. Hawthorne, D. V. Nakles, and T. Thompson Comparison of PDMS-, POM- and LDPE-based polymeric samplers for accurately assessing PCBs in sediment pore waters , *Environ. Toxicology and Chemistry*, 30, Issue 6, June 2011, Pages: 1288–1296, (2011).
10. Lu, X., B. Drake, A. Skwarski, D. Reible, Predicting bioavailability of PAHs and PCBs with pore water concentrations measured by disposable solid-phase micro-extraction fibers, *Environ. Toxicology and Chemistry*, 30, Issue 5, May 2011, Pages: 1109–1116 (2011).
11. Hong, YS, K. Kinney, D. Reible, Acid Volatile Sulfides Oxidation and Metals (Mn, Zn) Release upon Sediment Resuspension: Laboratory Experiment and Model Development, *Environ. Toxicology and Chemistry* 30, Issue 3, March 2011, Pages: 564–575 (2011).
12. Sun, M., F. Yan, R. Zhang, D. D. Reible, G.V. Lowry, K.B. Gregory, Redox Control and Hydrogen Production in Sediment Caps Using Carbon Cloth Electrodes, *Environ Sci and Technol.* 44 (21), 8209–8215 (2010).
13. Johnson, N., D.D. Reible, L. Katz, Biogeochemical changes and mercury methylation beneath an in-situ sediment cap, *Environ. Sci. Technol.*, 44 (19), 7280–7286 (2010)
14. Ma, X., D.D. Reible, M. Harris, Assessing the feasibility of in-situ capping and contaminant mobility in NAPL-contaminated sediments, *International Journal of Geotechnical Engineering*, 4, 71-78 (2010).

CURRENT RESEARCH PROJECTS

- EPA/USACE – Evaluation of Capping Sorbent Material (2009-2013) 856K
- USACE – Passive Sampling and In-Situ Treatment – Technology Reviews PI (2012-2013) 70K
- Industry – DGT for the assessment of porewater concentrations of mercury (2009-2014) 430 K
- Industry – Mercury biogeochemistry & management via amended capping (2011-2014) 824K
- EPRI – Water Management in Hydraulic Fracturing (2012-2013) 75K