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Edward B. Overton is a Professor Emeritus in the Department of environmental Sciences, School of Coast and the Environment at LSU

He received his B.S.(1965) and Ph.D.(1970) degrees from the University of Alabama, Tuscaloosa

His research interests include understanding the fates and distributions of hydrocarbons following an oil spill, the environmental chemistry of hazardous chemicals, and the detection of environmental pollutants at the site of sample collection. He has been active in understanding the fate and effects of petroleum hydrocarbons in marine environments from oil spills since the 1978 Well blowout at the US DOE Strategic Petroleum Reserve West Hackberry Site, flowed by the Amoco Cadiz Tanker wreck and the IXTOC 1 blowout in 1979, the Exxon Valdez wreck in 1989, and currently the Deepwater Horizon fire and blowout in 2010. Dr Overton has given hundreds of live interviews concerning the Deepwater Horizon oil spill to international print, radio, and TV media sources including an appearance on the Late Show with David Letterman as well as all major US TV network and cable news shows. He has also been an invited speaker at dozens of national and international scientific meetings and seminars on topics associated with the Oil Spill.

Dr. Overton held the Clairborne Chair in Environmental Toxicology and Air Quality prior to his retirement, and was honored as an LSU Distinguished Faculty in 2008, and was the 1996 Louisiana Technologist of the Year and the 2010 Louisiana Communicator of the Year.

He is married to Susan J. Overton (formerly Susan C. Jones)
They have two children: a son Tommy Overton LSU 2006, and a daughter Jennifer LSU 2008

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Education

University of Alabama, Ph.D., Chemistry 1970
University of Alabama, B.S., Chemistry 1965

Experience

Desig Professor & Clairborne Chair, Dept. of Environmental Sciences, LSU 2008-2009
Professor Department of Environmental Sciences, LSU 1984-2008
Adjunct Professor, Department of Chemistry, LSU 1986-2009
Research Associate, Center for BioOrganic Studies, UNO, 1976-1984
Assist Professor, Northeast Louisiana University, 1970-1976

Selected Publications:

- Christopher Clayton Stevens, 1 Louis J. Thibodeaux, * Edward B. Overton, 2 Kalliat T. Valsaraj, Krishnaswamy Nandakumar, Abhijit Rao, and Nan D. Walker, Sea Surface Oil Slick Light Component Vaporization and Heavy Residue Sinking: Binary Mixture Theory and Experimental Proof of Concept, *Environmental Engineering Science*, DOI: 10.1089/ees.2015.0022
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- Edward B. Overton, M Scott Miles, Buffy M Meyer, Heng Goa and R Eugene Turner, “Oil Source Fingerprinting in heavily weathered residues and coastal marsh samples”, *Proceeding of the 2014 international Oil Spill Conference*, Savannah GA, May 2014
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- Irv A. Mendelssohn, G. L. Anderson, D. A. Baltz, R. H. Caffey, K. R. Carmin, J. W. Fleeger, S. B. Joye, Q. Lin, E. Maltby, E. B. Overton, and L. P. Razos, ‘Oil Impacts on Coastal Wetlands: Implications for the Mississippi River Delta Ecosystem after the Deepwater Horizon Oil Spill’, *BioScience*, June 2012 / Vol 62 No.6

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- Eirico J. D'Sa, Edward B. Overton, Steven E. Lohrenz, Kanchan Maiti, R. Eugene Turner and Angelina Freeman, *Changing Dynamics of Dissolved organic Matter Fluorescence in the Northern Gulf of Mexico Following the Deepwater Horizon Oil Spill*, *Environ Sci Technol*. DOI:10.1021/acs.est.5b0492
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- Tarr, M.A., P. Zito, E.B. Overton, G.M. Olson, P.L. Adhikari, and C.M. Reddy. 2016. Weathering of oil spilled in the marine environment. *Oceanography* 29(3):126–135, <http://dx.doi.org/10.5670/oceanog.2016.77>.

Significant Early Oil Spill Publications:

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- Overton, E.B., McCarthy, L.V., Mascarella, S.W., Maberry, M.A., Antoine, S.R., Farrington, J.W., and Laseter, J.L., "Detailed Chemical Analysis of IXTOC I Crude Oil and Selected Environmental Samples from the Researcher and Pierce Cruises," Proc. of Researcher/Pierce IXTOC I Symposium, pp. 439-495 (1980).
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- Laseter, J.L., Lawler, G.C., Overton, E.B., Patel, J.R., Holmes, J.P., Shields, M.I., and Maberry, M.A., "Characterization of Aliphatic and Aromatic Hydrocarbons in Flat and Japanese Type Oysters and Adjacent Sediments Collected from L'Aber Wrach Following the Amoco Cadiz Oil Spill," Proc. of International Symposium on the Amoco Cadiz: Fates and Effects of the Oil Spill, Brest, France, pp. 633-644 (1980).
- Overton, E.B., Patel, J.R., and Laseter, J.L., "Chemical Characterization of Mousse and Selected Environmental Samples from the Amoco Cadiz Oil Spill," Proceedings of 1979 Oil Spill Conference, Los Angeles, CA, pp. 169-174 (1979).

Areas of Specialization/Synergistic Activities

Since 1984, Dr. Overton has been the lead chemist and Principle Investigator on a contract with NOAA's Office of Response and Restoration's Emergency Response Division (ERD) with primary responsibility for providing, evaluating and interpreting analytical, chemical, and physical data during oil and hazardous material spill incidents in all marine environments under U.S. jurisdiction. Dr. Overton and his group have also been involved in studying the fate and effects of oil spills since the 1978 blowout at the US Strategic Petroleum Reserve facility at West Hackberry Louisiana, as well as most major oil spills since that time, including the Amoco Cadiz, IXTOC-1, Exxon Valdez, Persian Gulf and Deepwater Horizon spills. Further, his research group has been developing field deployable analytical instrumentation designed to detect and identify volatile and semivolatile chemicals at toxic levels. Dr. Overton and his group first developed the forensic capability to fingerprint oils and identify the source of oil spills even as oil weathers in the environment following the SPR Cavern #6 and IXTOC spills. During the Deepwater Horizon Oil Spill, Dr. Overton provided facts-based public outreach information about the oil spill that was accurate and reliable through hundreds of live

interviews with virtually all major print, radio, and broadcast new outlets around the world including an appearance on the Late Show with David Letterman. He has also been an invited speaker at dozens of national and international scientific meetings and seminars on topics associated with the Deepwater Horizon Oil Spill.

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