

CLIFFORD B. FEDLER

Professor of Civil, Environmental and Construction Engineering
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Professional Preparation

BSE in Agricultural Engineering, Iowa State University, 1979
MSE in Agricultural Engineering, Iowa State University, 1981
MSE in Civil (Sanitary) Engineering, Iowa State University, 1981
PhD in Agricultural Engineering, University of Illinois-Urbana/Champaign, 1985

Professional Chronology

Professor of Civil Engineering, Texas Tech University (Sept 1996-present)
Associate Dean of Graduate School, Texas Tech University (Sept 2005-December 2015)
Director, International Center for Arid and Semiarid Land Studies, Texas Tech University (August 2001-June 2003)
Associate Professor of Civil Engineering, Texas Tech University (Sept 1991-Sept 1996)
Associate Professor of Agricultural Engineering, Texas Tech University (Sept 1990-Sept 1991)
Assistant Professor of Agricultural Engineering, Texas Tech University (July 1985-Sept 1990)

Research Interests

Biological and physical processing and mathematical modeling of those processes
Water and wastewater reuse/recycling
Biomass processing and recycling
Renewable energy from such sources as algae and other non-traditional materials
Ethanol production
Ethanol production from agricultural crops

Honors/Awards

TTU Dads and Moms Association Spencer A. Wells Faculty Award for Creative Teaching (1998)
Engineer of the Year Award awarded by the Texas Section of the American Society of Agricultural Engineers (1997)
Top Paper Award, Gulf/Southwest Regional Conference of the ASEE (1992)
Halliburton Outstanding Teaching Award. College of Engineering, Texas Tech University (1990)
Recipient of two ASAE Top Paper Awards (annual award presented to authors of the top 2.5 percent of the published papers) (1988)
Halliburton Outstanding Researcher Award. College of Engineering, Texas Tech University (1986)

Synergistic Activities/Committee Membership

Licensed Professional Engineer, Texas, 65112
American Society of Civil Engineers - Member
American Society of Agricultural and Biological Engineers - Member
Water Environment Federation - Member
American Society for Engineering Education - Member
World Aquaculture Society - Member
Water Environment Association of Texas

Selected Publications (last 10 years)

Duan, R. C. B. Fedler. 2015. A denitrification field study at a wastewater land application site. ASCE Journal of Irrigation and Drainage Engineering. Accepted for Publication.

Duan, R. Fedler, C. B. 2015. Field study of soil TKN from land application of wastewater. Accepted for Publication in Ecological Engineering, Ref. No. ECOLENG-D-14-01293R1. Elsevier Publications.

Duan, R., and C.B. Fedler. 2013. Salt management for sustainable degraded water land application under changing climatic conditions. Environmental Science and Technology, 47(18). DOI:10.1021/es403619m.

Duan, R., Fedler, C.B. and Borrelli, J. 2012. Comparison of methods to estimate saturated hydraulic conductivity in Texas soils with grass. ASCE Journal of Irrigation and Drainage Engineering. 138(4):322-327.

Duan, Runbin and Clifford B. Fedler. 2011. Nitrogen and salts leaching from two typical Texas turf soils irrigated with degraded water. *Environmental Engineering Science*. 28(11):787-793.

Duan, R., Fedler, C.B. and Pearson, P.R. 2011. Environmental effects of using cotton burr compost mulch to establish roadside vegetation. Ecological Engineering, 39:90-94.

Fedler, C., Duan, R. (2011). Biomass production for bioenergy using recycled wastewater. *Resources Conservation & Recycling*. 55(8):793-800.

Fedler, C.B. 2005. Recycling Water Saves Future Drinking Supplies. Vol. 46(2):50-56. BioCycle-Journal of Composting and Organics Recycling. The JG Press, Inc. Emmaus, PS 18049.

Fedler, C.B., J.L. Hanson, M. Beruvides, J. Simonton, and C. Lyford. 2008. Utilizing Agricultural Biomass in Energy Production and Economic Development. Final Report for Project No. CM707. Texas State Energy Conservation Office, Austin, TX. 1 December 2008.

Duan, R. and C.B. Fedler. 2007. Quality and Quantity of Leachate in Land Application Systems. ASABE Annual International Meeting, Minneapolis, MN, June 17-20, 2007. Paper No. 074079. ASABE, 2950 Niles Road, St. Joseph, MI 49085-9659. USA.

Fedler, Clifford B. 2006. Potential Biomass Production from Recycled Wastewater. Vol. 47(7):46-50. Biocycle-Journal of Composting & Organics Recycling. The JG Press, Inc. Emmaus, PS 18049.

Landesman L, N.C. Parker, C.B. Fedler, and M. Konikoff. 2005. Modeling duckweed growth in wastewater treatment systems. Livestock Research for Rural Development. Vol. 17, Art. # 61. Accessed from <http://www.utafoundation.org/lrrd1706/land17061.htm>.

Fedler, C.B. 2002. Water: Use It, Reuse It, or Loose It. Resource, Engineering & Technology for a Sustainable World. Vol. 9(7):9-10. International Society of ASAE. 2950 Niles Road, St. Joseph, MI

Fedler, C.B., N.C. Parker, and J.B. Clayton. 1998. Development of design criteria for a constructed wetland for wastewater treatment at the DOE facility of Pantex. A report submitted to DOE Amarillo Office. Texas Tech University, Lubbock, Texas.

Fedler, C.B., N.C. Parker, H.L. Schramm, Jr. and J. Borrelli. 1991. Integrated Production of Algal Protein, Omega-3 Fatty Acids, and Fish in West Texas. Final Report to the U.S. Department of Commerce, Economic Development Administration, Project No. 08-06-02714. Austin, Texas.