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- 63. Li, A., and F. T.-C. Tsai, Understanding dynamics of groundwater flows in the Mississippi River Delta.
- 64. Li, An, Frank T.-C. Tsai, Brendan T. Yuill, and Chenliang Wu, Characterizing Stratigraphy of Mississippi River Delta and Implications to Subsidence and Erosion
- 65. Ye-Hong Chen, Frank T.-C. Tsai, Jack Cadigan, Navid H. Jafari, and Tzenge-Huey Shih, Relief well design and evaluation: three-dimensional modeling and blanket theory.
- 66. Jina Yin, and Frank T.-C. Tsai. Multi-objective Spatial Pumping Optimization for Groundwater Management in a Multi-Aquifer System.

Manuscripts Under preparation

- 67. Yin, J, Karakullukcu, R, F. T.-C. Tsai, K Paudel, and S-C. Kao, Complex alluvial aquifer modeling for Mississippi Alluvial Plain, Northeast Louisiana
- 68. Pham, H73Qand F. T.-C. Tsai, A Robust Experimental Design for Conceptual Model Discrimination based on Information Theory(n)3(T)-3(h)14(eo)-7(r)12(y)]TJETQq72.024 102.26 490.63 617.74 reW* nBT/F3 11

- 17. Pham*, H. V., A. S. Eshall*, F. T.-C. Tsai, L. Yan, Parallel Inverse Groundwater Modeling Using CMA-ES, 2013 World Environmental & Water Resources Congress, Cincinnati, Ohio, May 19-23, 2013
- 18. Tsai F. T.-C., and A. S. Bshall*, A Bayesian Model Averaging Method to Characterize the Baton Rouge Aquifer System, 2012 World Environmental & Water Resources Congress, Albuquerque, NM, May 20-24, 2012
- 19. Tsai, F. T.-C., and A.S. Elshall*. (2011). A Hierarchical Bayesian Model Averaging Approach to Cope With Sources of Uncertainty in Conceptual Ground Water Models, World Water & Environmental Resources Congress, Palm Springs, CA, May 22-26, 2011.

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- 35. Li, X, Z Lei, C White, G. Allen, G. Qin, F. T.-C. Tsai. (2007). Grid-Enabled Ensemble Subsurface Modeling, Proceedings of The 19th IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS2007), 6 pp, Cambridge, Massachusetts, November 19-21, 2007.
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- Chen, Y.-H., J. Cadigan, N. Jafari, F. T.-C. Tsai, T.-H. Shih, and T. E. West, Mississippi River Levee Underseepage Assessment, Abstract No. NS31C-0775, 2018 American Geophysical Union Meeting, Washington, D.C., 10-14 December, 2018
- 3. Li, A., and F.T.-C. Tsai, Integrated modeling of stratigraphy and groundwater flow for the Lower Mississippi River Delta Plain, Abstract No. EP23C-2350, 2018 American Geophysical Union Meeting, Washington, D.C., 10-14 December, 2018
- 4. Yin, J. and F. T.-C. Tsai, Bayesian Chance-constrained Saltwater Scavenging Design for Deep Aquifers under Surrogate Uncertainty, Abstract No. H21J-1783, 2018 American Geophysical Union Meeting, Washington, D.C., 10-14 December, 2018
- 5. Li, An, Frank T.-C. Tsai, Navid H. Jafari, Q. Jm Chen, Sam Bentley, A Geostatistical Toolset For

- 32. Hanor, J. S., E. L., Chamberlain*, and F. T.-C. Tsai. (2011). Evolution of the Permeability Architecture of the Baton Rouge Fault Zone, Louisiana Gulf Coastal Plain, 2011 American Geophysical Union Fall Meeting, December 5-9, 2011, San Francisco, CA.
- 33. Tsai, F. T.-C. (2010). Data Fusion using Co-Generalized Parameterization: Hydraulic Conductivity Estimation, 2010 Western Pacific Geophysics Meeting, 22 25 June 2010, Taipei, Taiwan
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- 36. Tsai, F. T.-C. (2009). Using Multimodel to Assess Model Structure Uncertainty in Groundwater Management, American Geophysical Union 2009 Fall Meeting, San Francisco, CA, Dec. 14-18, 2009.
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- 12. Tsai, F.T.-C. (2013). Reconstruction of Geological Architecture and Groundwater Model Development for Understanding Saltwater Intrusion in the Baton Rouge area, southeastern Louisiana, Baton Rouge Geological Society, Baton Rouge, Louisiana, October 11, 2013.
- 13. Tsai, F. T.-C. (2013). Characterization of Sliciclastic Aquifer-Fault System for Southeastern Louisiana, an invited presentation to National Central University, Graduate Institute of Applied Geology, Taiwan, May 31, 2013.
- 14. Tsai, F. T.-C. (2013). Reconstruction of geological architectures and groundwater model development for Southeastern Louisiana (and an application to Taiwan GW Systems), an invited presentation to National Cheng Kung University, Department of Hydraulic & Ocean Engineering, Taiwan, June 13, 2013.
- 15. Tsai, F. T.-C. (2013). Reconstruction of geological architectures and groundwater model development for Southeastern Louisiana, an invited presentation to National Chiao Tung University, Department of Civil Engineering, Taiwan, June 3, 2013.
- Tsai, F. T.-C. (2013). Reconstruction of geological architectures and groundwater model development for Southeastern Louisiana, 2013 Hydrogeology and Groundwater Model Architecture Workshop, Central Geological Survey, MOEA, Taiwan, June 18, 2013.
- 17. Tsai, F. T.-C. (2012). Saltwater Intrusion in the Baton Rouge Aquifer System, Tulane University, Department of Earth and Environmental Sciences, New Orleans, LA, November 9, 2012
- 18. Tsai, F. T.-C. (2011). Saltwater Intrusion Mitigation Designs, Subsidence, and Stratigraphy Modeling in Conduit-Barrier Fault Zones in the Baton Rouge Area, Louisiana, an invited talk to Water Resources Agency, Ministry of Economic Affairs, Taiwan, Oct. 25, 2011. (sabbatical leave)
- 19. Tsai, F. T.-C. (2011). Saltwater Intrusion Mitigation Designs, Subsidence, and Stratigraphy Modeling in Conduit-Barrier Fault Zones in the Baton Rouge Area, Louisiana, an invited talk to National United University, Department of Civil and Disaster Prevention Engineering, Taiwan, Oct. 26, 2011. (sabbatical leave)
- 20. Tsai, F. T.-C. (2011). Saltwater Intrusion Mitigation Designs, Subsidence, and Stratigraphy Modeling in Conduit-Barrier Fault Zones in the Baton Rouge Area, Louisiana, an invited talk to National Chung Hsing University, Department of Soil and Water Conservation, Taiwan, Oct. 24, 2011. (sabbatical leave)
- 21. Tsai, F. T.-C. (2011). Saltwater Intrusion Mitigation Designs, Subsidence, and Stratigraphy Modeling in Conduit-Barrier Fault Zones in the Baton Rouge Area, Louisiana, an invited talk to National Central University, Graduate Institute of Applied Geology, Taiwan, Oct. 20, 2011. (sabbatical leave)
- 22. Tsai, F. T.-C. (2011). Saltwater Intrusion Mitigation Designs, Subsidence, and Stratigraphy Modeling in Conduit-Barrier Fault Zones in the Baton Rouge Area, Louisiana, an invited talk to National Taiwan University, Department of Civil Engineering, Taiwan, Oct. 12, 2011. (sabbatical leave)
- 23. Tsai, F. T.-C. (2011). Saltwater Intrusion Mitigation Designs, Subsidence, and Stratigraphy Modeling in Conduit-Barrier Fault Zones in the Baton Rouge Area, Louisiana, an invited talk to National Taiwan University, Department of Bioenvironmental Systems Engineering, Taiwan, Sept. 29, 2011. (sabbatical leave)
- 24. Tsai, F. T.-C. (2010). Optimized Injection-Extraction Operations under Uncertainty for Saltwater Intrusion Remediation: A Case Study on "1,500-Foot" Sand Aquifer of Baton Rouge Area, Baton Rouge Geological Society, Baton Rouge, Louisiana, January 22, 2010.
- 25. Tsai, F. T.-C. (2006). Conditional Estimation on Aquifer Heterogeneity Using Bayesian Model Averaging and Generalized Parameterization, American Geophysical Union, 87(36), Western Pacific Geophysics Meeting, July 2006.
- 26. Tsai, F. T.-C. (2004) A Generalized Parameterization Method in Groundwater Inverse Modeling, National Taiwan University, Taiwan, May 26, 2004.

Presentations at State/Local Conferences

- 19. Li, A. and F. T.-C. Tsai (2017). Groundwater pumping induced land subsidence in the Baton Rouge area, Southeast Louisiana, 11th Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, Baton Rouge, Louisiana, April 11-12, 2017.
- 20. Tsai, F. T.-C., and A. Mani (2017). Conjunctive management of water resources for northern Louisiana under projected future climate change scenarios, 11th Annual Louisiana Groundwater, Surface Water and 3/Vateri Red 50009309/12006107, 932+1)36 (Rbd 43061373/26) April reW120, 120/173 11.04 Tf 1 0 0 1 120.5 602.2
- 21. Pham, H. and F. T.-C. Tsai (2016). Baton Rouge groundwater model development. 10th Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, Baton Rouge, Louisiana, March 24-25, 2016.
- 22. Mani, A. and F. T.-C. 34a3q(3066). Conjunctive Use of Surface Water and Groundwater for Northern Louisiana. 10th Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, Baton
- fe Rouge, Louisiana, March 24-25, 2016.
- 23. Tsai, Frank T.-C. (2015). Geological architecture construction for Baton Rouge saltwater intrusion study,

- 24. Tsai) and Jeffrey S. Hanor, USGS-NIWR National Competitive Promotion Multiple Financial Competitive Promotion Remediation and Sampling Designs: A BM/ ch, \$217,645, 09/01.
- 25. Tsai, F. Rouge Water Works Company and Louisiana Car and Water Conserva was Scavenger Well Operation to Stop Saltwater ward The BRWC Water Well Suge Area, \$79,927, 05/2010-04/2012.
- 26. Tsai, F. T.-C. Water Resources Research Inc. Uncertainty Analysis for Chance-Con. Water Resources Research Inc. 2/2011
- 27. Tsai, F. T.-C. (PI) Design and Model Averaging for Saltwater Intrusion.

- Membership in Professional Organization
 Member, American Society of Civil Engineering (ASCE)
 Member, ASCE Environmental Water Resources Institute (EWRI)
- 3. Member, American Geophysical Union (AG5s69.34 Tm0 g0 G()) TJETQq72.024 75.38i4.29/ F3 11.04 Tf1 0

University Services - College Level

1. Member, College of Engineering, College Policy Committee (2012-2014)

University Services - Department level

- 1. OEE Department Water Resources and Coastal Coordinator (2018-present)
- 2. OEE Promotion & Tenure Committee (2018-present)
- 3. **CEE** Department Award Committee (2016-presnet)
- 4. Faculty search committee member for Environmental Engineering positions (2015-2016).
- 5. Faculty search committee member for joint CEE/CCT coastal positions (2013-2014)
- 6. Committee member of undergraduate civil engineering curriculum (2004-present).
- 7. Faculty Advisor to Chi Epsilon, the Civil Engineering Society, LSU Chapter (2009-2015)
- 8. Seminar coordinator to 10 more speakers per year (2005-2010).

Conference Organizer

- 1. Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, 2015
- 2. Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, 2016
- 3. Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, 2017
- 4. Annual Louisiana Groundwater, Surface Water and Water Resources Symposium, 2018

State Services

- 1. East Baton Rouge Parish Design and Planning Selection Board, 2016 2018
- 2. Planning and Specifications subcommittee, Capital Area Ground Water Conservation Commission, 2017-presnet
- 3. Ad Hoc Group, Capital Area Ground Water Conservation Commission, 2015-2017
- 4. Judge for Region VII Science and Engineering Fair, Louisiana, 2006
- 5. Judge for Louisiana Science and Engineering Fair, 2006

Professional Registration and Certification

Registered Professional Engineer (Discipline: Qvil) in Louisiana, License number (32164), 2006-present