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EDUCATION

University of New Orleans	New Orleans, LA	Engineering and Applied Sciences	Ph.D., 2002
	New Orleans, LA	Civil and Environmental Engineering, Water Resources	MS, 1999
Louisiana State University	Baton Rouge, LA	Civil and Environmental Engineering	BS, 1997
Higher Technical Institute	Lefkosia, Cyprus	Civil Engineering	HND, 1992

RESEARCH INTERESTS

Coastal, estuarine, and fluvio-deltaic hydrodynamics and morphology, coastal processes and geomorphology, landscape evolution, dynamics of coastal plains and barrier systems.

PROFESSIONAL EXPERIENCE

The Water Institute	Director of Coastal and Deltaic Systems Modeling	2019–Present
University of New Orleans	Research Professor <i>Gratis</i>	2019–Present
	Olga Braunstein Endowed Professor in Sedimentary Geology	2017–2019
University of New Orleans, Earth and Environmental Sciences	Associate Professor	2012–2019
Pontchartrain Institute for Environmental Sciences, University of New Orleans	Director	2013–2019
University of New Orleans, Earth and Environmental Sciences	Assistant Professor	2007–2012
Pontchartrain Institute for Environmental Sciences, University of New Orleans	Assistant Professor <i>Research</i>	2005–2007
	Post-Doctoral Associate	2002–2004

University of New Orleans, College of Engineering	Adjunct Professor	2002–2004
University of New Orleans, College of Science	Adjunct Professor	2002–2004

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Geophysical Union
- Coastal and Estuarine Research Federation
- American Society of Civil Engineers
- Environmental Water Resources Institute
- Geological Society of America

AWARDS AND HONORS

- Reviewer Distinction Recognition, Estuarine Coastal and Shelf Science, Elsevier, 2018
- Outstanding Reviewer Award, Estuarine Coastal and Shelf Science, Elsevier, 2017
- Olga Braunstein Endowed Professorship in Sedimentary Geology, 2017–2019
- Reviewer Distinction Recognition, Journal of Hydrology, Elsevier, 2008
- Team Achievement Award, presented by the U.S. Army Corps of Engineers and the State of Louisiana for contribution to the Louisiana Coastal Area Ecosystem Restoration Study, 2005
- Crescent City Doctoral Fellowship, University of New Orleans, 2000–2002
- Freeport McMoRan Graduate Research Assistantship, Freeport McMoRan, Inc., 1999–2001
- Urban Water Research Assistantship, Environmental Protection Agency, 1997–1999

TEACHING EXPERIENCE

I taught introductory and advance senior and graduate level courses at the University of New Orleans, College of Sciences, Department of Earth and Environmental Sciences, and College of Engineering, Department of Civil and Environmental Engineering

Coastal Processes and Geomorphology (2008–2021)

Introduction to Physical Oceanography (2012–2019)

Coastal Restoration Management (2015–2019)

Data Analysis and Statistical Methods in Earth and Environmental Sciences (2015–2017)

Earth Surface Processes and Environment Dynamics (2011–2018)

Barrier Island Dynamics Seminar (2010–2018); Physical Geology (2007–2011)

Methods in Earth and Environmental Sciences (2008 – 2016)

Physical Geology (2007 – 2011)

Hydrology (2003–2005) and Hydraulic Engineering Systems (2003–2005).

Mentored high-school (HS), undergraduate (UG), graduate students (MS; PhD), research associates (RA) and post-doctoral researchers (PD). From 2007 to 2025 mentored 3 HS, 10 UG, 15 MS, 10 PhD (5 as primary advisor and 5 as secondary advisor), 3 RA, and 3 PD.

COMMUNITY SERVICE

Committee member for MS and PhD students, University of New Orleans and other universities	35 (UNO) 3 (LSU) 1 (Boston University) 1 (Virginia Institute of Marine Sciences) 1 (Carnegie Mellon University)	2005–Present
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NOTABLE PROJECTS

Principal and Modeling Lead/Morphodynamic Evolution of the Assateague-Chincoteague Coastal System, Virginia Eastern Shore 2019–2022

The Water Institute

Developed and used a coupled wave-flow-sediment model (Delft3D) with multiclass sediment transport to evaluate the hydrodynamic controls and local-to-regional processes contributing to the morphologic evolution of the coast and evaluate restoration options to inform planning by the Chincoteague Island community.

Principal and Modeling Lead/Local to Regional Sediment Dynamics at Wallops Island and Impacts to Downdrift Sandy Coastlines 2024–2028

The Water Institute

Developed and used a coupled wave-flow-sediment model (Delft3D-FM) with multiclass sediment transport to evaluate existing beach and barrier shoreline erosion control measures, sediment transport pathways of nourished shorelines, and quantify the potential impacts to sediment budgets at downdrift barrier islands and inlets.

Principal and Modeling Lead/Offshore Analysis of Seafloor Instability of Sediments (OASIS) 2023–2027

Bureau of Ocean Energy Management and Louisiana State University

A partnership between LSU and federal partners, this project seeks to comprehensively understand submarine landslides around the Mississippi River Delta Front, the submerged muddy part around the mouth of the Mississippi River. These landslides reshape the seabed and can have significant impacts to infrastructure and are considered important geohazards. The project aims to understand the preconditioning factors in sediments that lead to initiation of movement and ultimately to failure, and inform BOEM on future hazard risk, monitoring, and management.

Principal Investigator/Hurricane Sedimentation on Salt Marshes: Extent, Provenance, and Processes 2020–2024

The Water Institute

Collaborative study (with Boston University, Virginia Institute of Marine Science) to understand sediment provenance and processes driving mineral sedimentation onto salt marshes using storm surge and morphological modeling (ADCIRC, Delft3D FM) assessing storm-induced sedimentation in the Sapelo Island backbarrier basin, and the coastal reaches of the Altamaha River.

Principal Investigator/Mid-Breton Sediment Diversion Environmental Impact statement (EIS) support and evaluation of diversion operation 2019–2022

The Water Institute

Numerical modeling to assess impacts of the planned Mid-Breton Sediment Diversion in southeast Louisiana on geomorphology, salinity, flooding, and water quality in the receiving area, as well as the Mississippi River and delta. Technical lead for various analyses, including water and sediment budget, sedimentation and dredging, conveyance analysis, impacts to marine mammals, and river, delta, and receiving basin impacts resulting from crevassing in the lowermost Mississippi River.

SYNERGISTIC ACTIVITIES, PRESENTATIONS, AND SERVICE

- 2026: Chincoteague Town Council Presentation, Chincoteague Island, VA
- 2023: US Army Corps of Engineers, New Orleans District, New Orleans LA
- 2022: Louisiana State University, Baton Rouge LA
- 2022: University of Hawaii, Monoa
- 2018: U.S. Army Corps of Engineers, New Orleans District, New Orleans LA.
- 2017: Naval Research Laboratory, Physical Sciences, Stennis Space Center, MS
- 2016: Deltares and Technical University Delft (TUDelft), Delft, The Netherlands
- 2016: Tulane University, Department of Earth and Environmental Sciences, New Orleans LA
- 2016: Universidade Federal de Santa Catarina, Centro de Filosofia e Ciências Humanas, Florianopolis, Santa Catarina, Brazil
- 2016: University of Southern Mississippi, Dept. of Marine Sciences, Stennis Space Center, MS
- 2015: Louisiana State University, Dept. of Oceanography and Coastal Studies, Baton Rouge LA
- 2013: Louisiana State University, School of the Coast and Environment, Baton Rouge, LA
- 2010: US Army Corps of Engineers, Engineering Research and Development Center, Coastal Hydraulics Laboratory, Vicksburg, MS
- 2009: US Army Corps of Engineers, New Orleans District, Hydraulics and Hydrology Division, New Orleans LA
- 2009: Louisiana Universities Marine Consortium (LUMCON), Cocodrie, LA
- 2009: American Society of Civil Engineers, Annual Conference, Baton Rouge Chapter.
- 2005, 2006: Louisiana State University, School of the Coast and Environment, Baton Rouge, LA

Journal review: Journal of Geophysical Research – Oceans Earth Surface Dynamics, Geophysical Research Letters, Journal of Coastal Research, Journal of Hydraulic Engineering, Journal of Hydrology, Journal of Hydraulic Research, Journal of Climate Research, Nature Climate Research, Continental Shelf Research, Estuarine Coastal and Shelf Science, Estuaries and Coasts, Journal of Hydrologic Engineering, Journal of Hydraulic Engineering, Journal of Marine Geology, Ecological

- Engineering, Science of the Total Environment, Nature communications, Journal of Marine Sciences and Engineering, Nature: Scientific Reports.
- Proposal Review*: NOAA Sea Grant (Louisiana, MS, and AL – 2008, 2010–2011), NSF – Geomorphology and Earth Surface Dynamics Program (2008-2024), NSF – Marine Geology program (2009–Present), NMFS Cooperative Research Program (2011–13), Louisiana CREST Program (2005–2008). Hudson River Foundation (2018–2019), NOAA Restore (2012-Present)
- 2013 – 2016 – Served on the State of the Coast (SOC) Program Committee
- 2013 – Member of the Operational Science Advisory Team for Coast Guard during the Deepwater Horizon
- 2012 – 2017, Sciences and Education Advisory Council member for the Louisiana Universities Marine Consortium (LUMCON)
- 2011 – 2013, Served in advisory capacity for the Bayou St. John Alliance group
- 2010 – 2015, NASA Develop Program External Reviewer
- 2010 – Appeared on several news casts, interviews, and provided service to organizations, news agencies, and NGOs regarding the oil spill.
- 2010 – U.S. Coast Guard advisory role in booming operations (Grand Isle Emergency Response unit) – guided booming operations in the vicinity of tidal inlets and in Barataria Bay during the BP Deepwater Horizon Oil Spill.
- 2010 – Member of the SERT Advisory Committee during the BP Deepwater Horizon Oil Spill, Office of Coastal Protection and Restoration and LSU
- 2009 – Invited participant on table discussion on Desktop Modeling, April 9, LSU Coast and Environment Building.
- 2007 – Served on Multiple Lines of Defense Assessment Team, Lake Pontchartrain Basin Foundation
- 2006 – Served on the advisory board for the development of the Bayou St. John Comprehensive Management Plan
- 2006 – Served as advisor for scientific development regarding State of Louisiana restoration initiatives, Coastal Louisiana Ecosystem Assessment and Restoration Program (CLEAR), LSU
- 2006 - Conceptual Ecological Modeling Workshop, Reducing flood damage in Coastal Louisiana, Communities, Culture, commerce, CLEAR Program, Louisiana State University.
- 2005 – Served on the Science Committee for the Comprehensive Habitat Management Plan, Lake Pontchartrain Basin Foundation

PUBLISHED WORKS

For a more updated and recent list of publications, please visit [Ioannis' Google Scholar page](#).

Peer-Reviewed Publications

- Liu, B., Shrestha, S., Li, J., Huang, W., Baustian, M.M., D'Sa, E., J., Bargu, S., Messina, F., Georgiou, I.Y., Kumar, A., Freeman, A., 2025, Phytoplankton Biomass Dynamics in Wet (2019) and Dry (2023) Years in Lake Pontchartrain Estuary, Louisiana from Sentinel 2-MSI and PACE-OCI Observations, Science of the Total Environment. <https://doi.org/10.1016/j.scitotenv.2025.181126>.
- Shawler, J. L., Hein, C. J., Georgiou, I. Y., Messina, F., & Sakib, M. M. (2025). Local versus regional controls on the morphology and texture of preserved beach and foredune ridges. *Journal of Geophysical Research: Earth Surface*, 130, e2025JF008429 <https://doi.org/10.1029/2025JF008429>
- Foster-Martinez, M. Georgiou, I.Y., FitzGerald, D.M., Sakib, Md.M., Hughes, Z.H., Novak, A. (2025). Understanding wave attenuation across marshes: Insights from numerical modeling. *J. Mar. Sci. Eng.* 2025, 13(6), 1188; <https://www.mdpi.com/2077-1312/13/6/1188>.
- Georgiou, I. Y., FitzGerald, D. M., Sakib, M. M., Messina, F., Kulp, M. A., & Miner, M. D. (2024). Storm dynamics control sedimentation and shelf-bay-marsh sediment exchange along the Louisiana coast. *Geophysical Research Letters*, 51(22), e2024GL111344.
- Carruthers, T.J., Jones, B., Terrell, M.K., Scheibly, J.F., Player, B.J., Black, V.A., Ehrenwerth, J., Biber, P., Connolly, R.M., Crooks, S., Curole, J.P., Darnell, K.M., Dausman, A., DeJong, A.L., Doyle, S.M.,

- Esposito, C.R., Friess, D., Fourqurean, J.W., Georgiou, I. Y., Grimsditch, G.D., He, S., Hillman, E.R., Holm, G.O., Howard, J., Jung, H., Jupiter, S., Kiskaddon, E., Krauss, K.W., Lavery, P.S., Liu, B., Lovelock, C., Mack, S.K., Macreadie, P.I., McGlathery, K., Megonigal, J.P., Roberts, B.J., Settlemyer, S., Staver, Stevens, H.J., Sutton-Grier, A., Villa, J.A., White, J.R., Waycott, M. (2024) Identifying and filling critical knowledge gaps can optimize financial viability of blue carbon projects in tidal wetlands. *Frontiers in Environmental Science*, 12.
- Bastian, M.M., Jung, H., Liu, B., Moss, L.C., Foster-Martinez, M., Esposito, C.R., Georgiou, I.Y., Bregman, M.C, Di Leonardo, D., McMann, B., Hemmerling, S.A., Miner, M.D. (2024). Current and future potential net greenhouse gas sinks and sources of existing, converted, and restored marsh and mangrove forest habitats, *Restoration Ecology*.
- Georgiou, I. Y., FitzGerald, D. M., & Hanegan, K. C. (2024). Storm and tidal interactions control sediment exchange in mixed-energy coastal systems. *PNAS Nexus*, 3(2).
- Hein, C. J., Connell, J. E., FitzGerald, D. M., Georgiou, I. Y., Hughes, Z. J., & King, K. (2024). Vertical accretion trends project doughnut-like fragmentation of saltmarshes. *Communications Earth & Environment*, 5(1), 74.
- Courtois, A., Bentley, S., Maloney, J., Xu, K., Chaytor, J., Georgiou, I. Y., Miner, M. D., Obelcz, J., Jafari, N. H., & Damour, M. (2024). Short-term sediment dispersal on a large retreating coastal river delta via ²³⁴Th and ⁷Be sediment geochronology: The Mississippi River delta front. *Water*, 16(3).
- Figueredo, N., Bentley, S. J., Chaytor, J. D., Xu, K., Jafari, N., Georgiou, I. Y., Damour, M., Duxbury, J., Obelcz, J., & Maloney, J. (2024). Sedimentary processes and instability on the Mississippi River delta front near the shipwreck of the SS Virginia. *Water*, 16(3).
- Brogdon, J. N., Baer, A., Constant, G., Glaspie, C. N., Miner, M. D., Georgiou, I. Y., & Dance, M. A. (2024). Variability in estuarine habitat use of a threatened species in the northern Gulf of Mexico: Implications for coastal restoration. *Global Ecology and Conservation*, 49, e02766. 2
- Hanegan, K. C., FitzGerald, D. M., Georgiou, I. Y., & Hughes, Z. J. (2023). Long-term sea level rise modeling of a basin-tidal inlet system reveals sediment sinks. *Nature Communications*, 14(1), 7117.
- Liu, B., D'Sa, E. J., Messina, F., Baustian, M. M., Maiti, K., Rivera-Monroy, V. H., Huang, W., & Georgiou, I. Y. (2023). Dissolved organic carbon dynamics and fluxes in Mississippi-Atchafalaya deltaic system impacted by an extreme flood event and hurricanes: A multi-satellite approach using Sentinel-2/3 and Landsat-8/9 data. *Frontiers in Marine Science*, 10.
- Georgiou, I. Y., Messina, F., Sakib, M. M., Zou, S., Foster-Martinez, M., Bregman, M., Hein, C. J., Fenster, M. S., Shawler, J. L., McPherran, K., & Trembanis, A. C. (2023). Hydrodynamics and sediment-transport pathways along a mixed-energy spit-inlet system: A modeling study at Chincoteague Inlet (Virginia, USA). *Journal of Marine Science and Engineering*, 11(5).
- Souza, P., Georgiou, I. Y., Fitzgerald, D. M., Hughes, Z. J., Howes, N. C., & Kulp, M. A. (2023). Hydrodynamic controls on sedimentary facies of tidal point bars: A case study in the Georgia coastal plain, USA. *Sedimentology*, 70(3), 895–926.
- Hemmerling, S. A., DeMyers, C., Parfait, J., Piñero, E., Baustian, M. M., Bregman, M., Di Leonardo, D., Esposito, C. R., Georgiou, I. Y., Grismore, A., Jung, H., McMann, B., & Miner, M. D. (2023). A community-informed transdisciplinary approach to coastal restoration planning: Maximizing the social and ecological co-benefits of wetland creation in Port Fourchon, Louisiana, USA. *Frontiers in Environmental Science*, 11.
- Houttuijn Bloemendaal, L. J., FitzGerald, D. M., Hughes, Z. J., Novak, A. B., & Georgiou, I. Y. (2023). Reevaluating the wave power-salt marsh retreat relationship. *Scientific Reports*, 13(1), 2884.
- Caffey, R. H., Petrolia, D. R., Georgiou, I. Y., Miner, M. D., Wang, H., & Kime, B. (2022). The economics of sediment quality on barrier shoreline restoration. *Journal of Environmental Management*, 319, 115730.
- Houttuijn Bloemendaal, L., FitzGerald, D. M., Hughes, Z. J., Novak, A., & Georgiou, I. Y. (2022). Dispelling myths concerning the wave power-marsh retreat relationship. *Research Square*.
- Cadigan, J. A., Jafari, N. H., & Georgiou, I. Y. (2022). Mobilized shear strengths of Mississippi River Delta Front sediments during submarine landslides. *Geo-Marine Letters*, 42(2), 8.
- FitzGerald, D. M., Hughes, Z. J., Staro, A., Hein, C. J., Sakib, M. M., Georgiou, I. Y., & Novak, A. (2022). Following the sand grains. *Journal of Marine Science and Engineering*, 10(5).
- FitzGerald, D. M., Hein, C. J., Connell, J. E., Hughes, Z. J., Georgiou, I. Y., & Novak, A. B. (2021). Largest marsh in New England near a precipice. *Geomorphology*, 379, 107625.
- Bendonì, M., Georgiou, I. Y., & Novak, A. (2021). Chapter 14: Marsh edge erosion. In D. M. FitzGerald & Z. Hughes (Eds.), *Marshes: Function, Dynamics and Stresses*.

- Torres, J., Kulp, M. A., FitzGerald, D.M., Georgiou, I.Y., & Lepper, K. (2020). Geomorphic and temporal evolution of a Mississippi delta flanking barrier island: Grand Isle, LA. *Marine Geology*, 430, 106341.
- FitzGerald, D. M., Hughes, Z. J., Georgiou, I. Y., Black, S., & Novak, A. (2020). Enhanced, climate-driven sedimentation on salt marshes. *Geophysical Research Letters*, 47(10), e2019GL086737.
- FitzGerald, D. M., Ryerson, O., Hughes, Z. J., Black, S., Georgiou, I. Y., Hein, C. J., & Novak, A. (2020). Long-term variability in inorganic sediment contributions to the Great Marsh, Massachusetts. *Journal of Coastal Research*, 95(SI), 490–494.
- Esposito, C.R., Georgiou, I.Y., & Straub, K.M. (2020). Flow loss in deltaic distributaries: Impacts on channel hydraulics, morphology, and stability. *Water Resources Research*, 56(5).
- Maloney, J.M., Bentley, S.J., Xu, K., Obelcz, J., Georgiou, I.Y., Jafari, N. H., & Miner, M.D. (2020). Mass wasting on the Mississippi River subaqueous delta. *Earth-Science Reviews*, 200, 103001.
- Shawler, J. L., Hein, C. J., Canuel, E. A., Kaste, J. M., Fitzsimons, G. G., Georgiou, I. Y., & Willard, D. A. (2019). Tidal erosion and upstream sediment trapping modulate records of land-use change in a formerly glaciated New England estuary. *Anthropocene Coasts*, 2(1), 340–361.
- Bendonì, M., Georgiou, I.Y., Roelvink, D., & Oumeraci, H. (2019). Numerical modelling of the erosion of marsh boundaries due to wave impact. *Coastal Engineering*, 152, 103514.
- Hein, C. J., Fallon, A. R., Rosen, P., Hoagland, P., Georgiou, I. Y., FitzGerald, D. M., Morris, M., Baker, S., Marino, G. B., & Fitzsimons, G. (2019). Shoreline dynamics along a developed river mouth barrier island: Multi-decadal cycles of erosion and event-driven mitigation. *Frontiers in Earth Science*, 7.
- FitzGerald, D. M., J. Hein, C.J., Hughes, Z. J., Kulp, M. A., Georgiou, I. Y., & Miner, M. D. (2018). Runaway barrier island transgression concept: Global case studies. In L. J. Moore & A. B. Murray (Eds.), *Barrier Dynamics and Response to Changing Climate* (pp. 3–56). Springer International Publishing.
- Maloney, J.M., Bentley, S.J., Xu, K., Obelcz, J., Georgiou, I.Y., & Miner, M.D. (2018). Mississippi River subaqueous delta is entering a stage of retrogradation. *Marine Geology*, 400, 12–23.
- Carney, J. A., Twilley, R. R., Agre, C., Hird, J., Georgiou, I. Y., & Shelden, J. (2018). The giving delta. In *Sustainable Coastal Design and Planning* (1st ed., pp. 239–254). CRC Press.
- Maloney, J. M., Bentley, S. J., Xu, K., Obelcz, J., Georgiou, I.Y., & Miner, M. D. (2018). Mississippi River subaqueous delta is entering a stage of retrogradation. *Marine Geology*, 400, 12–23.
- FitzGerald, D. M., J. Hein, C.J., Hughes, Z. J., Kulp, M. A., Georgiou, I.Y., & Miner, M.D. (2018). Runaway barrier island transgression concept: Global case studies. In L. J. Moore & A. B. Murray (Eds.), *Barrier Dynamics and Response to Changing Climate* (pp. 3–56). Springer International Publishing.
- Darnell, K. M., Carruthers, T. J. B., Biber, P., Georgiou, I.Y., Michot, T. C., & Boustany, R. G. (2017). Spatial and temporal patterns in *Thalassia testudinum* leaf tissue nutrients at the Chandeleur Islands, Louisiana, USA. *Estuaries and Coasts*, 40(5), 1288–1300.
- Obelcz, J., Xu, K., Georgiou, I.Y., Maloney, J., Bentley, S. J., & Miner, M. D. (2017). Sub-decadal submarine landslides are important drivers of deltaic sediment flux: Insights from the Mississippi River delta front. *Geology*, 45(8), 703–706.
- Keller, G., Bentley, S.J., Georgiou, I.Y., Maloney, J., Miner, M. D., & Xu, K. (2017). River-plume sedimentation and ²¹⁰Pb/⁷Be seabed delivery on the Mississippi River delta front. *Geo-Marine Letters*, 37(3), 259–272.
- FitzGerald, D.M., Georgiou, I.Y., & Kulp, M. (2016). Deltas. In J. Harff, M. Meschede, S. Petersen, & J. Thiede (Eds.), *Encyclopedia Geosciences* (p. 17).
- Hein, C.J., FitzGerald, D. M., de Souza, L.H.P., Georgiou, I.Y., Buynevich, I. V., Klein, A. H. da F., de Menezes, J. T., Cleary, W. J., & Scolaro, T. L. (2016). Complex coastal change in response to autogenic basin infilling: An example from a sub-tropical Holocene strandplain. *Sedimentology*, 63(6), 1362–1395.
- FitzGerald, D.M., Georgiou, I.Y., & Miner, M.D. (2014). Chapter 12: Estuaries and tidal inlets. In G. Masselink & R. Gehrels (Eds.), *Environments and Global Change* (pp. 356–465). Wiley Press.
- Kulp, M.A., FitzGerald, D.M., & Georgiou, I.Y. (2014). The Mississippi River Delta. In *Encyclopedia of the worlds' deltas* (p. 17). Elsevier.
- Hanegan, K., & Georgiou, I.Y. (2014). Tidal modulated flow and sediment flux through Wax Lake Delta distributary channels: Implications for delta development. *International Association of Hydrological Sciences*, 367, 391–398.
- El Kheishy, K., Mccorquodale, J., Georgiou, I.Y., & Meselhe, E. (2014). Bed forms resistance dependency on numerical model grid size spatial resolution. *Journal of Spatial Science*, 59, 363–372.
- Esposito, C.R., Georgiou, I.Y., & Kolker, A.S. (2013). Hydrodynamic and geomorphic controls on mouth bar evolution. *Geophysical Research Letters*, 40(8), 1540–1545.

- Barbier, E. B., Georgiou, I. Y., Enchelmeier, B., & Reed, D. J. (2013). The value of wetlands in protecting southeast Louisiana from hurricane storm surges. *PLoS ONE*, 8(3), e58715.
- Meselhe, E., Georgiou, I. Y., Allison, M., & McCorquodale, A. (2012). Delta building diversions: Numerical modeling of hydrodynamics and sediment transport in Lower Mississippi River near Myrtle Grove River Bend. *Journal of Hydrology*, 472, 340–354.
- Grzegorzewski, A. S., & Georgiou, I. Y. (2011). Sediment transport trends along an island terminus: A model study during storms at the northern Chandeleur Islands. In P. Wang, J. Rosati, & T. Roberts (Eds.), *Coastal Sediments* (Vol. 3, pp. 2198–2211). World Scientific Publishing Company.
- Georgiou, I. Y., Kulp, M., FitzGerald, D., & Miner, M. (2010). The Louisiana coastline. In E. C. F. Bird (Ed.), *Encyclopedia of the World's Coastal Landforms* (pp. 61–68). Springer.
- El Kheishy, K., McCorquodale, J.A., Georgiou, I.Y., and Meselhe, E. (2010). *Three dimensional hydrodynamic modeling over bed forms in open channels*, International Journal of Sediment Research, Vol. 25, No.4, 2010, pp. 431 - 440.
- Howes, N.C., FitzGerald, D.M., Hughes, Z.J., Georgiou, I.Y., Kulp, M.K., Miner, M.D., Smith, J.M., and Barras, J.A. (2010). *Hurricane Induced failure of low salinity wetlands*, Proceedings of the National Academy of Science, v. 107, 32, 14014-14019, doi/10.1073/pnas.0914582107.
- Meselhe, E., Pereira, J.F., Georgiou, I.Y., Allison, M.A., McCorquodale, J.A., Davis, M.A. (2010). *Numerical modeling of mobile bed hydrodynamics in the lower Mississippi River*, in World Environmental and Water Resources Congress, Richard N. Palmer, Ed., ASCE, New York, pp. 1433-1442
- Georgiou, I.Y., McCorquodale, J. A., Schindler, J., Retana A.G., FitzGerald, D.M., Hughes, Z., Howes, N. (2009). *Impact of Multiple Freshwater Diversions on the Salinity Distribution in the Pontchartrain Estuary under Tidal Forcing*, Journal of Coastal Research, Vol. 54, pp. 59 – 70.
- McCorquodale, J.A., Roblin, R.J., Georgiou, I.Y., Haralampides, K. (2009). *Salinity, nutrient, and sediment dynamics in the Pontchartrain Estuary*, Journal of Coastal Research, Vol. 54, pp. 71- 87.
- Pereira, J.F., J.A. McCorquodale, E.A. Meselhe, I.Y. Georgiou and M.A. Allison (2009). *Numerical Simulation of Bed Material Transport in the Lower Mississippi River*, Journal of Coastal Research, v. 56, ISSN 0749-0248, pp. 1449 – 1453.
- Georgiou, I.Y., Schindler, J. (2009). *Wave forecasting and longshore sediment transport gradients along a transgressive barrier island; Chandeleur Islands, Louisiana*, GeoMarine Letters, DOI 10.1007/s00367-009-0165-3, pp. 467 – 476.
- Miner, M.D., Kulp, M.A., FitzGerald, D.M., and Georgiou, I.Y. (2009). *Hurricane-associated ebb-tidal delta sediment dynamics: Geology*, v. 37, no. 9, p. 851-854, doi: 10.1130/G25466A.1.
- Georgiou, I.Y., and Schindler, J. (2009). *Numerical simulation of waves and sediment transport along a transgressive barrier island, Chapter H.*, in Lavoie, D., ed., Sand resources, regional geology, and coastal processes of the Chandeleur Islands coastal system—an evaluation of the Breton National Wildlife Refuge: U.S. Geological Survey Scientific Investigations Report 2009–5252, Reston, VA, p. 143–168.
- Li, C, N., Walker, A., Hou, Georgiou I.Y., H., Roberts, E., Laws, E., Weeks, X., Li, J., Crochet. (2008). *Circular Plumes in Lake Pontchartrain under Wind Straining*, Estuarine Coastal and Shelf Science, v. 80, iss. 1, p. 161-172.
- Li, C., C. Chen, D. Guadagnoli, I.Y. Georgiou. (2008). *Geometry-Induced Residual Eddies in Estuaries with Curved Channels: Observations and Modeling Studies*, J. Geophys. Res, 113, C01005, doi:10.1029/2006JC004031.
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