

## IOANNIS Y. GEORGIU

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### EDUCATION

Ph.D., Engineering and Applied Sciences	University of New Orleans, New Orleans, LA	2002
M.S., Civil & Environmental Engineering	University of New Orleans, New Orleans, LA	1999
B.S., Civil & Environmental Engineering	Louisiana State University, Baton Rouge, LA	1997
HND, Civil Engineering,	Higher Technical Institute, Lefkosia, Cyprus	1992

### PROFESSIONAL EXPERIENCE

<i>Associate Professor</i>	Dept. of Earth and Environmental Sciences, University of New Orleans	2012 – Present
<i>Director,</i>	Pontchartrain Institute, University of New Orleans	2013 – Present
<i>Assistant Professor,</i>	Dept. of Earth and Environmental Sciences, University of New Orleans	2007 – 2012
<i>Asst. Prof. Res.,</i>	Pontchartrain Institute for Env. Sciences, University of New Orleans	2004 – 2007
<i>Postdoctoral Scholar,</i>	Pontchartrain Institute, University of New Orleans	2003 – 2004
<i>Water Resources Engineer,</i>	C-K Associates LLC	2002 – 2003

### RESEARCH INTERESTS

Hydrodynamics and sediment transport in estuaries, lakes, and rivers (deltas), often along the connection of these systems to the coastal ocean. How natural and anthropogenic change affects estuarine gradients and resulting exchange with the coastal ocean, and the transport of sediment across the coastal environment. Beach and barrier island sediment transport using field observations and numerical modeling.

### PUBLICATIONS (\* student of Georgiou)

#### Five most relevant to the project

- Esposito, C.R.\*, Georgiou, I.Y., Kolker, A.K., 2013, Hydrodynamic and Geomorphic controls on mouth bar evolution, *Geophysical Res. Letters*, doi: 10.1002/grl.50333, 40, 8, 1540-1545
- Hanegan, K.\*, Georgiou, I. Y., 2015, Tidal modulated flow and sediment flux through Wax Lake Delta distributary channels: Implications for delta development. *International Association of Hydrological Sciences*, 367, 391–398. doi:10.5194/piahs-367-391-2015
- Meselhe, E., Georgiou, I.Y., Allison, M.A., McCorquodale, J.A., 2012, Numerical modeling of hydrodynamics and sediment transport in lower Mississippi at a proposed delta building diversion, *Journal of Hydrology*, 472, 340-354.
- Barbier, E., Georgiou, I.Y., Enchelmayr, B., Reed, D.J., 2013, The Value of Wetlands in Protecting Southeast Louisiana from Hurricane Storm Surges. *PLoS ONE* 8(3): e58715. doi:10.1371/journal.pone.0058715
- Hein, C.J., FitzGerald, D.M., \*de Souza, L.H.P., Georgiou, I.Y., Buynevich, I.V., Klein, A.H.F., de Menezes, J.T., Cleary, W.J., \*Scolaro, T., 2016, Complex coastal change in response to autogenic basin infilling: An example from a sub-tropical Holocene strandplain, *Sedimentology*, doi: 10.1111/sed.12265.

#### Five other significant publications

- 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.
- 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, v. 107, 32, 14014-14019, doi/10.1073/pnas.0914582107.

3. Li, C., C. Chen, 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
4. Georgiou, I.Y., Fitzgerald, D., Stone, G., 2005, Physical Processes Along the Louisiana Coastal Waters, *J. of Coastal Research*, Vol. 44, pp. 72-89.
5. 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.

#### **LIST OF DATASETS**

1. Monitoring of Natural Resources in the Pontchartrain Basin following the Deepwater Horizon Oil Spill: Processes, Habitats, and Fisheries, DOI: 10.7266/N7TB14W0
2. CTD casts for process monitoring the inner shelf and coastal sounds, Rigolets to Chandeleur Island, November 2010, December 2010, January 2011.  
<https://data.gulfresearchinitiative.org/data/Y1.x034.000:0002>

#### **SYNERGISTIC ACTIVITIES**

*Invited Lectures and Seminars:* Tulane University 2016, Universidade Federal de Santa Catarina, Centro de Filosofia e Ciências Humanas, 2016, University of Southern Mississippi 2012, 2016, Louisiana State University, 2005, 2006 and 2010, 2013, 2015, US Army Corps of Engineers 2009-2010, Louisiana Universities Marine Consortium 2009, American Society of Civil Engineers – Baton Rouge Chapter, 2009. *Academic Service:* Journal review - *Journal of Geophysical Research – Oceans*, *Earth Surface*, *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 Marine Geology*. Proposal review: NOAA Sea Grant (Louisiana, MS, and AL – 2008, 2010-2011), NSF – Geomorphology and Earth Surface Dynamics Program (2008-present), NSF – Marine Geology program (2009-present), NMFS Cooperative Research Program (2011-13), Louisiana CREST Program (2005-2008).

#### **COLLABORATIONS AND OTHER AFFILIATIONS**

##### **Collaborators (last 48 months) (35)**

Kyle Straub, Michael Blum, Caz Taylor, Andrew Englande (Tulane Univ.), Duncan M. FitzGerald (Boston University), Zoe Hughes, Steve Pennings (Univ. of Houston), Chunyan Li, Sam Bentley, Kehui Xu, John Purdue, Robert Twilley, Jeffrey Carney, Rex Caffrey (Louisiana State Univ.), Alex McCorquodale, Mark Kulp, Martin Guillot, William Stein III, Nikolaos Xiros, (University of New Orleans), M.D. Royhan Gani (University of Western Kentucky), Mead Allison, Ehab Meselhe, Denise Reed (The Water Institute of the Gulf), Alex Kolker (LUMCON), Jim Flocks, Jack Kindinger (USGS), Katy Haralampides (Univ. of New Brunswick), Matthew Wolinsky, Nick Howes, John Martin (Shell Clastics Research), Michael D. Miner (BOEM), Christopher Hein (VIMS), Reid Corbett (East Carolina Univ.), Davin Wallace (Univ. of Southern Mississippi), Antonio Klein (Federal U. Santa Catarina, Brazil), Daniel Petrolia (Mississippi State Univ.).

**Post-doctoral Advisors (2):** Patrick S. Penland (Pontchartrain Institute, New Orleans, LA); John A. McCorquodale (FMI Center for Environmental Modeling, New Orleans, LA)

**Ph.D. Advisor (1):** J. Alex McCorquodale (University of New Orleans, New Orleans, LA)

**Graduate and Postdoctoral Advisees (10):** Joshua Flathers (MS, 2016), Tara Yocum (MS, 2016), Timothy Nelson (MS, 2017), Benjamin Bearsley (MS, 2018), Brittany Kime (MS, 2017), Joshua Alarcon (MS, 2017), Alison S. Grzegorzewski (PhD student, medical withdrawal), Kevin Hanegan (PhD Candidate, 2018), Pricilla Souza (PhD Candidate, 2018), Sean Kenny (PhD student, 2018); Post-doc: Ahmed Gaweesh, PhD (University of Louisiana Lafayette, LA)