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A. Professional Preparation

2011 – 2017	Postdoctoral Fellow, Dalhousie University, Halifax, NS, Canada
Ph.D., 2011	Biological Oceanography, Dalhousie University, Halifax, Canada
M.Sc., 1999	Marine and Fisheries Sciences, University of Aberdeen, Scotland
BSc Honors, 1997	Marine Ecology, Pierre and Marie Curie University, Paris, France

B. Professional Experience

2017 – present	Research Associate, Department of Oceanography, Dalhousie University, Halifax, NS, Canada
2015 – present	Adjunct Ex Officio, Department of Oceanography, Dalhousie University, Halifax, NS, Canada

C. I. Five Most Relevant Publications

Laurent, A., Fennel, K., Modeling river-induced phosphorus limitation in the context of coastal Hypoxia, In: *Modeling Coastal Hypoxia: Numerical Simulations of Patterns, Controls and Effects of Dissolved Oxygen Dynamics*, Justic, D., Rose, K.A., Hetland, R.D., Fennel, K., (eds.), p. 149-171, Springer, doi:10.1007/978-3-319-54571-4_7 (2017).

Laurent, A., Fennel, K., Cai, W.-J., Huang, W.-J., Barbero, L., Wanninkhof, R., Eutrophication-induced acidification of coastal waters in the northern Gulf of Mexico: insights into origin and processes from a coupled physical-biogeochemical model, *Geophysical Research Letters*, **44**, doi:10.1002/2016GL071881 (2017).

Laurent, A., Fennel, K., Wilson, R., Lehrter, J., Devereux, R., Parameterization of biogeochemical sediment–water fluxes using in situ measurements and a diagenetic model, *Biogeosciences*, **13**, 77–94, doi:10.5194/bg-13-77-2016 (2016).

Laurent, A., Fennel, K., Simulated reduction of hypoxia in the northern Gulf of Mexico due to phosphorus limitation, *Elementa* **2**:000022, doi:10.12952/journal.elementa.000022 (2014)

Laurent, A., Fennel, K., Hu, J., Hetland, R., Simulating the effects of phosphorus limitation in the Mississippi and Atchafalaya River plumes, *Biogeosciences*, **9**, 4707–4723, doi:10.5194/bg-9-4707-2012 (2012).

C. II. Other Relevant Publications

Fennel, K., **Laurent, A.**, Hetland, R., Justić, D., Ko, D.S., Lehrter, J., Murrell, M., Wang, L., Yu, L.,

Zhang, W., Effects of model physics on hypoxia simulations for the northern Gulf of Mexico: A model intercomparison, *Journal of Geophysical Research-Oceans* **121**, doi:10.1002/2015JC011577 (2016)

Yu, L., Fennel, K., **Laurent, A.**, Murrell, M.C., Lehrter, J.C., Numerical analysis of the primary processes controlling oxygen dynamics on the Louisiana shelf, *Biogeosciences* **12**, 2063-2076, doi:10.5194/bg-12-2063-2015 (2015)

Yu, L., Fennel, K., **Laurent, A.**, A modeling study of physical controls on hypoxia generation in the northern Gulf of Mexico, *Journal of Geophysical Research-Oceans* **120**, 5019-5039, doi:10.1002/2014JC010634 (2015)

Fennel, K., Hu, J., **Laurent, A.**, Marta-Almeida, M., Hetland, R. (2013). Sensitivity of hypoxia predictions for the Northern Gulf of Mexico to sediment oxygen consumption and model nesting, *Journal of Geophysical Research-Oceans*, **118**, 990-1002, doi:10.1002/jgrc.20077

D. SYNERGISTIC ACTIVITIES

- Manuscript Reviewer
- Co-Chair, *CMOS Congress 2012 session "General Oceanographic Sciences"*
- Ph.D. committee member (Adjunct Ex Officio). Student: Liuqian Yu.
- Dalhousie Oceanography student retreat organizing committee, 2012