



Curriculum Vitae

HONGJIE WANG



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EDUCATION

- 2013- 2018 **Ph.D.**, Coastal and Marine System Science Program (CMSS),
Texas A&M University-Corpus Christi (TAMUCC)
2010- 2013 **M.S.** Marine Chemistry, Xiamen University (XMU)
2006- 2010 **B.S.** Environmental Science, Ocean University of China (OUC)

PROFESSIONAL EXPERIENCE

- 08/2018-present **Postdoctoral Researcher**, University of Delaware
07/2018-08/2018 **Teaching Adjunct**, TAMUCC
06/2018-07/2018 **Research Associate**, TAMUCC

AWARDS

- 1st place Student Poster Presentation, 2017 Annual Research Forum, TAMUCC
Student Travel Award, Coastal & Estuarine Research Federation, 2017
Student Travel Award, Ocean Carbon Hot Spot Workshop, US CLIVAR, 2017
Outstanding Research Assistant Award, TAMUCC, 2016-2017
Gulf of Mexico Research Initiative Scholar, 2016
Graduate Student Fellowship, XMU, 2010-2013
Outstanding Award in Student Research Training Program, OUC, 2009
National Scholarship of China, 2008-2009
National Encouragement Scholarship of China, 2007-2008
Scholarship for Outstanding Undergraduate Students, OUC, 2006-2010

FUNDED RESEARCH

- Texas Sea Grant Grants-In-Aid of Graduate Research Program-Photochemical Degradation of
Dissolved Organic Carbon in Baffin Bay, Texas (06/06/2017-05/31/2018)

TEACHING EXPERIENCE

- Summer 2018, Teaching Adjunct for *General Chemistry I Laboratory CHEM 1411*, Department of
Physical and Environmental Science, TAMUCC
Spring 2018, Instructor for *General Chemistry I Laboratory CHEM 1411*, Department of
Physical and Environmental Science, TAMUCC
Fall 2015, Lecturer for *Professional Skills ESCI 3202*, Environmental Science, Department of
Physical and Environmental Science, TAMUCC

PUBLICATIONS

- Wang H.** and Hu X., Photochemical degradation of dissolved organic carbon in Baffin Bay,
Texas (under review, *Limnology and Oceanography Letter*).
Van Dam B. R. and **Wang H.**, Decadal-scale acidification trends in adjacent North Carolina
estuaries: competing role of anthropogenic CO₂ and riverine alkalinity loads, 2019,
Frontiers in Marine Science, doi: 10.3389/fmars.2019.00136

- Turk D., **Wang H.**, Hu X., Gledhill D.K., Kovach C., Wang Z.A., Jiang L., and Cai W.-J., Time of Emergence of Surface Ocean Carbon Dioxide Trends in the North American Coastal Margins in Support of Ocean Acidification Observing System Design, 2019, *Frontiers in Marine Science*, doi: 10.3389/fmars.2019.00091
- Wang H.**, Hu X., Wetz M., Hayes K., Oxygen consumption and organic matter remineralization in two subtropical, eutrophic coastal embayments, 2018, *Environmental Science & Technology*, doi: 10.1021/acs.est.8b02971.
- Wang H.**, Hu X., Rabalais N. N., Brandes J., 2018, Oxygen consumption in the Northern Gulf of Mexico hypoxic waters-A stable carbon isotope perspective, *Geophysical Research Letters*, 45, doi:10.1029/2018GL078571.
- Hu X., Nuttall M.F., **Wang H.**, Yao H., Staryk C.J., McCutcheon M.R., Eckert R.J., Embesi J.A., Johnston M.A., Hickerson E.L., Schmahl G.P., Manzello D., Enochs I.C., DiMarco S., Barbero L., 2018. Seasonal variability of carbonate chemistry and decadal changes in waters of a marine sanctuary in the Gulf of Mexico. *Marine Chemistry*, 205, 16-28, doi: 10.1016/j.marchem.2018.07.006.
- Reimer, J., **Wang H.**, Vargas, R., Cai, W.-J., 2017, Multi-decadal $f\text{CO}_2$ increase along the United States southeast coastal margin, *Journal of Geophysical Research-Ocean*, 122, 10061-10072, doi:10.1002/2017JC013170.
- Wang H.**, X. Hu, W.-J. Cai, and B. Sterba-Boatwright, 2017, Decadal $f\text{CO}_2$ trends in global ocean margins and adjacent boundary current-influenced areas, *Geophysical Research Letters*, 44, 8962-8970, doi:10.1002/2017GL074724.
- Qian W., Dai M., Xu M., Kao S-J, Du C., Liu J., **Wang H.**, Guo L., Wang L. 2017, Non-local drivers of the summer hypoxia in the East China Sea off the Changjiang Estuary, *Coastal and Shelf Science*, 198, 393-399, doi: 10.1016/j.ecss.2016.08.032.
- Wang H.**, Sterba-Boatwright B., Hu X., 2016, A new statistical approach for interpreting oceanic $f\text{CO}_2$ record, *Marine Chemistry*, 183, 41-49, doi:10.1016/j.marchem.2016.05.007.
- Wang H.**, Dai. M, Liu, Kao S-J, Zhang C., Cai W-J, Wang G., Qian W., Zhao M., Sun Z., 2016, Eutrophication-Driven Hypoxia in the East China Sea off the Changjiang Estuary, *Environmental Science & Technology*, 50, 2255-2263, doi: 10.1021/acs.est.5b06211.
- Hsiao SS-Y, Hsu T-C, Liu J-w, Xie, X, Zhang Y, Lin J, **Wang H.**, Yang J-YT, Hsu, S-C, Dai M., 2014, Nitrification and its oxygen consumption along the turbid Chang Jiang River plume, *Biogeosciences*, 11, 2083-2098, doi: 10.5194/bg-11-2083-2014.

BOOK CHAPTER

- Wang H.** and Hu X. (invited chapter) Multidecadal Variations of Sea Surface CO_2 Fugacity ($f\text{CO}_2$) in the Oyashio Current-Influenced Ocean Margin, *Changing Asia Pacific Marginal Seas* (Will be in print in early 2020).

PUBLICATIONS IN PROGRESS

- Wang H.**, Cai W.-J., Fennel K., Laurent A., Rabalais N., Benthic Respiration Enhanced Bottom-water Acidification in northern Gulf of Mexico (in prep)
- Wang H.**, Jiang L.-Q., Cai W.-J., Time of Emergence of Ocean Acidification in Global Ocean (in prep.)
- Wang H.**, Cai W.-J., Multi-decadal oceanic carbon dioxide changes in Bering Sea. (in prep.)

NON-REFEREED TECHNICAL PUBLICATION

Hu X., **Wang H.**, 2018. Mechanistic modeling of bottom water dissolved oxygen dynamics in Baffin Bay, Contract #1729. Department of Physical and Environmental Sciences, Texas A&M University-Corpus Christi, Corpus Christi, TX, 24 p.

PRESENTATIONS

- Wang H.** (Invited speaker), Jiang Li-Qing, Cai W-J., Time of emergence of ocean acidification in global ocean (Oral), *The Fourth Xiamen Symposium on Marine Environmental Sciences*, Xiamen, China, 2019
- Wang H.**, Hu X., Rabalais N.N., Multi-decadal acidification enhanced by eutrophication in the northern Gulf of Mexico (Oral), *Coastal & Estuarine Research Federation*, Providence, RI, 2017.
- Wang H.**, Hu X., Wetz M.S., Heyes K., Modeling of Dissolved Oxygen Dynamics in Baffin Bay (Oral), *Texas Bays and Estuaries Meeting*, Port Aransas, 2017.
- Wang H.**, Hu X., Decadal $f\text{CO}_2$ trends in global coastal margins (Oral), Brown Bag Talk, TAMUCC, 2016.
- Wang H.**, Heyes K., Wetz M.S., Hu X., Identification of organic matter that drives oxygen consumption in Baffin Bay, Texas (Oral), *Gulf Estuarine Research Society*, Pensacola Beach, 2016.
- Wang H.**, Heyes K., Wetz M.S., Hu X., A stable isotope study on organic matter driving oxygen consumption in Baffin Bay (Oral), *Texas Bays and Estuaries Meeting*, Port Aransas, 2016.
- Wang H.**, Dai M., Who is consuming oxygen: autochthonous or allochthonous organic material? (Oral), *ASLO Aquatic Sciences Meeting*, Lake Biwa, Japan, 2012.
- Wang H.**, Hu X., Wetz M.S., Heyes K., Mechanistic Modeling of Bottom Water Dissolved Oxygen Dynamics in Baffin Bay (Poster), *7th Annual Research Forum*, TAMUCC, 2017.
- Wang H.**, Hu X., Multi-decadal $f\text{CO}_2$ trends in Western Boundary Current- and Eastern Boundary Current-Dominated Margins (Poster), *Ocean Carbon Hot Spots Workshop (U.S. CLIVAR)*, Moss Landing, CA, 2017.
- Wang H.**, Hu X., Cai W-J, Rabalais N.N., Comparison of $f\text{CO}_2$ trends in a river dominated and an ocean dominated ocean margins (Poster). *Ocean Sciences 2016*, New Orleans, 2016.
- Wang H.**, Hu X., Rabalais N.N., What Drives Oxygen Consumption in the Northern Gulf of Mexico? – A Stable Isotope Perspective (Poster). *Ocean Sciences 2016*, New Orleans, 2016.
- Wang H.**, Sterba-Boatwright B., Hu X., A new statistical approach interpreting ocean $f\text{CO}_2$ record. *Gordon Research Conference on Chemical Oceanography*, Holderness, 2015.
- Wang H.**, Hu X., Turner R.E., Cai W-J, Rabalais N.N., Stable isotope composition of remineralizing organic carbon In the Northern Gulf of Mexico continental shelf sediments (Poster). *Gulf of Mexico Oil Spill & Ecosystem Science Conference*. Mobile, 2014.

FIELD WORK

- Monthly Water Quality Monitoring in Baffin Bay and Oso Bay, 30 days, 2014-2016 (30 cruises).
- Annual Shelfwide Cruise in northern Gulf of Mexico, 12 days, 2016 (2 cruises).
- China National Sharing Cruise at East China Sea, 20 days, 2011.
- Oxygen Minimum Zone in Changjiang Estuary, 15 days, 2011.
- Carbon Cycle Cruise in Pearl River Estuary, 7 days, 2010.
- Seawater Quality in Qingdao Coastal Region, 4 days, 2009.

PROFESSIONAL SERVICES

Convener, for session “*Time-series analysis of ocean biogeochemical and ecological data*”, The Fourth Xiamen Symposium on Marine Environmental Sciences, Xiamen, China (Jan 4-9, 2019).

PROFESSIONAL SOCIETIES

Coastal & Estuarine Research Federation
American Geophysical Union
Gulf Estuarine Research Society

MANUSCRIPT REVIEWS FOR

Earth System Science Data
Limnology & Oceanography
Biogeoscience
Journal of Geophysical Research - Ocean
Scientific Reports-Nature
Global Biogeochemical Cycles
Marine Chemistry
Estuaries and Coasts
Journal of Hydrology
Journal of Marine Systems
Frontiers in Marine Science
Journal of Ocean University of China

PROFESSIONAL SERVICES

Review Editor, *Frontiers in Marine Science*, 2018-

MEDIA COVERAGE

March/April 2019 Newsletter, “Decadal Scale Acidification Trends in Adjacent North Carolina Estuaries.” *Southeast Ocean and Coastal Acidification Network*, <https://myemail.constantcontact.com/SOCAN-March-April-Newsletter.html?soid=1103098301442&aid=8D1n6r-CDqU>

August 3, 2018, ‘Shelf-wide pCO₂ increase across the South Atlantic Bight’, *Ocean Carbon & Biogeochemistry*, <https://www.us-ocb.org/pco2-increase-across-sab/>

May 29, 2018, “Coastal Ocean Warming Adds to CO₂ Burden”, *EOS, Transactions, American Geophysical Union, Editors’ Vox*, <https://eos.org/editors-vox/coastal-ocean-warming-adds-to-co2-burden>

September 28, 2017, “Student uncovers story hidden in data”, *Islander Waves* <http://islandwavesnews.com/2017/09/student-uncovers-story-hidden-in-data/>

September 11, 2017, “A&M-CC Ph.D. Student Uncovers New Carbon Cycle Information”, *TAMUCC*

<http://tamucc.edu/news/2017/09/091117%20co2%20research.html#.Wi8gBLQ-czY>

August 03, 2017, “15 Island University Students Receive Texas Sea Grant Funds”, *TAMUCC*
<https://tamucc.edu/news/2017/08/080517%20Sea%20Grant.html#.XMcjrZNKiWw>