

## Curriculum Vitae

### Chuanmin Hu

#### 1. Address

College of Marine Science (CMS), University of South Florida (USF)  
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#### 2. Professional Preparation

Ph.D. in Physics, 1997, University of Miami, Coral Gables, Florida, U.S.A.  
M.S. in Physics, 1992, Institute of Physics, Academia Sinica, Beijing, China  
B.S. in Physics, 1989, University of Sci. and Tech. of China, Hefei, China

#### 3. Professional Appointments

2014 – present, Professor, University of South Florida  
2009 – 2014, Associate Professor, University of South Florida  
2006 – 2008, Associate Research Professor, University of South Florida  
2001 – 2005, Assistant Research Professor, University of South Florida  
1998 – 2000, Post-doctorate Research Associate, University of South Florida

#### 4. Recent Awards

2016 Global Achievement Group Award, University of South Florida  
2014 Faculty Outstanding Research Achievement Award, University of South Florida  
2014 Outstanding Faculty Award, University of South Florida  
2013 Group Achievement Honor Award, NASA Ames Research Center  
2013 Gulf Guardian Award, U.S. Environmental Protection Agency  
2013 STEM Collaborative Partnership Award, ARCS

#### 5. Refereed Publications (as of 11/27/2018)

*Total: 243 journal articles and 20 book chapters; Hu as first author: 48 journal articles and 6 book chapters; 10 appeared on journal covers, many highlighted by AGU, NASA, and IOCCG through press releases.*

*Citation statistics from scholar.google.com on 11/27/2018:*

*Total citations: 11,477; h-index: 59.*

##### a. Professional Journals

*Underlined names are students or postdocs*

- 243 2019 Barnes, B. B., J. P. Cannizzaro, D. English, and **C Hu** (2019) Validation of VIIRS and MODIS reflectance data in coastal and oceanic waters: An assessment of methods. *Remote Sensing of Environment* 220:110-123.
- 242 2018 Le, C., Zhou, X., **Hu, C.**, Lee, Z., Li, L., & Stramski, D. (2018). A color-index-based empirical algorithm for determining particulate organic carbon

- concentration in the ocean from satellite observations. *Journal of Geophysical Research: Oceans*, 123, 7407–7419. <https://doi.org/10.1029/2018JC014014>.
- 241 2018 Wang, M., C. Hu, J. Cannizzaro, D. English, X. Han, D. Naar, B. Lapointe, R. Brewton, and F. Hernandez (2018). Remote sensing of Sargassum biomass, nutrients, and pigments. *Geophys. Res. Lett.*, 45 [doi:10.1029/2018GL078858](https://doi.org/10.1029/2018GL078858)
- 240 2018 Jo, Y-H., H-C. Kim, **C. Hu**, V. V. Klemas, and K. R. Turpie (2018). Potential Applications of HypSIRI for the Observation of Sea-Margin Processes. *J. Coastal Research*, DOI: 10.2112/JCOASTRES-D-17-00089.1.
- 239 2018 Lee, Z., R. Arnone, D. Boyce, B. Franz, S. Greb, **C. Hu**, S. Lavender, M. Lewis, B. Schaeffer, S. Shang, M. Wang, M. Wernand, and C. Wilson (2018). Global Water Clarity: Continuing a Century-Long Monitoring. *Eos*, 99, <https://doi.org/10.1029/2018EO097251>.
- 238 2018 Hardy, R. F., C. Hu, B. Witherington, B. Lapointe, A. Meylan, E. Peebles, L. Meirose, and S. Hiram (2018). Characterizing a Sea Turtle Developmental Habitat Using Landsat Observations of Surface-Pelagic Drift Communities in the Eastern Gulf of Mexico. *IEEE J. Selected Topics in Applied Earth Observations and Remote Sensing*, 11:3646-3659. doi:10.1109/JSTARS.2018.2863194.
- 237 2018 Sun, S., C. Hu, O. Garcia-Pineda, V. Kourafalou, M. L. Henaff, and Y. Androulidakis (2018). Remote sensing assessment of oil spills near a damaged platform in the Gulf of Mexico. *Marine Pollution Bulletin*. 136:141-151. <https://doi.org/10.1016/j.marpolbul.2018.09.004>.
- 236 2018 Qi, L., **C. Hu**, P. M. Visser, and R. Ma (2018). Diurnal changes of cyanobacteria blooms in Taihu Lake as derived from GOCI observations. *Limnol. Oceanogr.*, 63:1711-1726. doi: 10.1002/lno.10802.
- 235 2018 Feng, L., C. Hu, and J. Li (2018). Can MODIS Land Reflectance Products be Used for Estuarine and Inland Waters? *Water Resources Research*, 54, 35833601. <https://doi.org/10.1029/2017WR021607>. (cover article)
- 234 2018 Zhang, M., C. Hu, J. Cannizzaro, D. English, B. B. Barnes, P. Carlson, and L. Yarbro (2018). Comparison of two atmospheric correction approaches applied to MODIS T measurements over North American waters. *Remote Sens. Environ.*, 216:442-455.
- 233 2018 Putman, N. F., G. J. Goni, L. J. Gramer, **C. Hu**, E. M. Johns, J. Trinanes, and M. Wang (2018). Simulating transport pathways of pelagic Sargassum from the Equatorial Atlantic into the Caribbean Sea. *Progress in Oceanography*, 165:205-214.
- 232 2018 Androulidakis, Y., Kourafalou, V., Ozgokmen, T., Garcia-Pineda, O., Lund, B., Le Henaff, M., **Hu, C.**, Haus, B. K. et al. (2018). Influence of river-induced fronts on hydrocarbon transport: A multiplatform observational study. *Journal of Geophysical Research: Oceans*, 123. <https://doi.org/10.1029/2017JC013514>
- 231 2018 **Hu, C., L. Feng**, J. Holmes, G. A. Swayze, I. Leifer, C. Melton, O. Garcia, I. MacDonald, M. Hess, F. Muller-Karger, G. Graettinger, and R. Green (2018). Remote sensing estimation of surface oil volume during the 2010 Deepwater

- Horizon oil blowout in the Gulf of Mexico: scaling up AVIRIS observations with MODIS measurements. *J. Appl. Remote Sens.* 12(2), 026008 (2018), doi: 10.1117/1.JRS.12.026008.
- 230 2018 Sun, S., Lu, Y., Liu, Y., Wang, M., & **Hu, C.** (2018). Tracking an oil tanker collision and spilled oils in the East China Sea using multisensor day and night satellite imagery. *Geophysical Research Letters*, 45. <https://doi.org/10.1002/2018GL077433>
- 229 2018 Liu, Y., **C. Hu**, C. Sun, W. Zhan, S. Sun, B. Xu, and Y. Dong (2018). Assessment of offshore oil/gas platform status in the northern Gulf of Mexico using multi-source satellite time-series images. *Remote Sens. Environ.*, 208:63-81. <https://doi.org/10.1016/j.rse.2018.02.003>
- 228 2018 Barnes, B. B., Garcia, R., **C. Hu**, Z. Lee (2018). Multi-band spectral matching inversion algorithm to derive water column properties in optically shallow waters: An optimization of parameterization. *Remote Sensing of Environment*, 204:424-438. <http://dx.doi.org/10.1016/j.rse.2017.10.013>
- 227 2018 Cao, F., M. Tzortziou, **C. Hu**, A. Mannino, C. G. Fichot, R. Del Vecchio, R. G. Najjar, and M. Novak (2018). Remote sensing retrievals of colored dissolved organic matter and dissolved organic carbon dynamics in North American estuaries and their margins. *Remote Sens. Environ.* 205:151-165. <https://doi.org/10.1016/j.rse.2017.11.014>.
- 226 2018 Han, X., L. Feng, **C. Hu**, X. Chen (2018). Wetland changes of China's largest freshwater lake and their linkage with the Three Gorges Dam. *Remote Sens. Environ.*, 204:799-811.
- 225 2018 Lee, Z., R. Arnone, D. Boyce, B. Franz, S. Greb, **C. Hu**, et al. (2018). Global water clarity: continuing a century-long monitoring. *Eos*, 99, <https://doi.org/10.1029/2018EO097251>. Published on 07 May 2018.
- 224 2018 Liu, Y., **C. Hu**, W. Zhan, C. Sun, B. Murch, and L. Ma (2018). Identifying industrial heat sources using time-series of the VIIRS Nightfire product with an object-oriented approach. *Remote Sensing of Environment*, 204:347-365. <http://dx.doi.org/10.1016/j.rse.2017.10.019>
- 223 2018 Long, J. S., **C. Hu** & M. Wang (2018) Long-term spatiotemporal variability of southwest Florida whiting events from MODIS observations, *International Journal of Remote Sensing*, 39:3, 906-923, DOI: 10.1080/01431161.2017.1392637
- 222 2018 Wang, M., and **C. Hu** (2018). On the continuity of quantifying floating algae of the Central West Atlantic between MODIS and VIIRS. *Int. J. Remote Sens.* 39:12, 3852-3869, DOI: 10.1080/01431161.2018.1447161.
- 221 2018 Zhang, M., **C. Hu**, J. Cannizzaro, M. G. Kowalewski, and Scott J. Janz (2018). Diurnal changes of remote sensing reflectance over Chesapeake Bay: Observations from the Airborne Compact Atmospheric Mapper. *Estuarine, Coastal and Shelf Science*. 200:181-193. <https://doi.org/10.1016/j.ecss.2017.10.021>.

- 220 2018 Zhang, M., C. Hu, M. G. Kowalewski, and S. J. Janz (2018). Atmospheric correction of hyperspectral GCAS airborne measurements over the North Atlantic Ocean and Louisiana Shelf. *IEEE Trans. Geosci. Remote Sens.*, 56: 168-179. doi:10.1109/TGRS.2017.2744323.
- 219 2017 Chen, S., C. Hu, W-J. Cai, and B. Yang (2017). Estimating surface pCO<sub>2</sub> in the northern Gulf of Mexico: Which remote sensing model to use? *Cont. Shelf Res.*, 151:94-110. <https://doi.org/10.1016/j.csr.2017.10.013>
- 218 2017 Mitchell, C., C. Hu, B. Bowler, D. Drapeau, and W. M. Balch (2017). Estimating particulate inorganic carbon concentrations of the global ocean from ocean color measurements using a reflectance difference approach. *Journal of Geophysical Research: Oceans*, 122. <https://doi.org/10.1002/2017JC013146>
- 217 2017 Qi, L., C. Hu, M. Wang, S. Shang, and C. Wilson (2017). Floating algae blooms in the East China Sea. *Geophysical Research Letters*, 44. <https://doi.org/10.1002/2017GL075525>
- 216 2017 Sun, D., Y. Huan, Z. Qiu, C. Hu, S. Wang, Y. He (2017). Remote- sensing estimation of phytoplankton size classes from GOCI satellite measurements in Bohai Sea and Yellow Sea. *Journal of Geophysical Research: Oceans*, 122, 8309–8325. <https://doi.org/10.1002/2017JC013099>.
- 215 2017 Zhang, M., I. Leifer, and C. Hu (2017). Challenges in Methane Column Retrievals from AVIRIS-NG Imagery over Spectrally Cluttered Surfaces: A Sensitivity Analysis. *Remote Sensing* 2017, 9(8), 835; doi:10.3390/rs9080835
- 214 2017 Li, J., C. Hu, Q. Shen, B. B. Barnes, B. Murch, L. Feng, M. Zhang, and B. Zhang (2017). Recovering low quality MODIS-Terra data over highly turbid waters through noise reduction and regional vicarious calibration adjustment: A case study in Taihu Lake. *Remote Sens. Environ.*, 197:72-84, <http://dx.doi.org/10.1016/j.rse.2017.05.027>
- 213 2017 Feng, L., and C. Hu (2017), Land adjacency effects on MODIS Aqua top-of-atmosphere radiance in the shortwave infrared: Statistical assessment and correction, *J. Geophys. Res. Oceans*, 122, 4802–4818, doi:10.1002/2017JC012874.
- 212 2017 Chen, S., and C. Hu (2017). Estimating sea surface salinity in the northern Gulf of Mexico from satellite ocean color measurements. *Remote Sens. Environ.*, 201:115-132. <http://dx.doi.org/10.1016/j.rse.2017.09.004>.
- 211 2017 Long, J. S., C. Hu, L. L. Robbins, R. H. Byrne, J. H. Paul, and J. L. Wolny (2017). Optical and biochemical properties of a southwest Florida whiting event. *Estuarine, Coastal and Shelf Science*. 196:258-268, <http://dx.doi.org/10.1016/j.ecss.2017.07.017>
- 210 2017 Shang, S., Z. Lee, G. Lin, C. Hu, L. Shi, Y. Zhang, X. Li, J. Wu, and J. Yan (2017). Sensing an intense phytoplankton bloom in the western Taiwan Strait from radiometric measurements on a UAV. *Remote Sens. Environ.*, 198:85-94. <http://dx.doi.org/10.1016/j.rse.2017.05.036>

- 209 2017 Qi, L., Z. Lee, **C. Hu**, and M. Wang (2017), Requirement of minimal signal-to-noise ratios of ocean color sensors and uncertainties of ocean color products, *J. Geophys. Res. Oceans*, 122, 2595–2611, doi:10.1002/2016JC012558.
- 208 2017 Wang, M., and **C. Hu** (2017), Predicting Sargassum blooms in the Caribbean Sea from MODIS observations, *Geophys. Res. Lett.*, 44, 3265–3273, doi:10.1002/2017GL072932.
- 207 2017 Qi, L., **C. Hu**, B. B. Barnes, and Z. Lee (2017). VIIRS captures phytoplankton vertical migration in the NE Gulf of Mexico. *Harmful Algae*, 66:40-46. <http://dx.doi.org/10.1016/j.hal.2017.04.012>.
- 206 2017 Feng, L., **C. Hu**, B. B. Barnes, A. Mannino, A. K. Heidinger, K. Strabala, and L. T. Iraci (2017). Cloud and Sun-glint statistics derived from GOES and MODIS observations over the Intra-Americas Sea for GEO-CAPE mission planning. *J. Geophys. Res. Atmospheres*. 122:1725-1745, doi:10.1002/2016JD025372.
- 205 2017 **Hu, C.**, and L. Feng (2017). Modified MODIS fluorescence line height data product to improve image interpretation for red tide monitoring in the eastern Gulf of Mexico. *J. Appl. Remote Sens.* 11(1), 012003 (2016), doi: 10.1117/1.JRS.11.012003.
- 204 2017 Hu, L., **C. Hu**, and M-X. He (2017). Remote estimation of biomass of *Ulva prolifera* macroalgae in the Yellow Sea. *Remote Sens. Environ.*, 192:217-227. <http://dx.doi.org/10.1016/j.rse.2017.01.037>.
- 203 2017 Le, C., J. C. Lehrter, **C. Hu**, H. MacIntyre, and M. W. Beck (2017). Satellite observation of particulate organic carbon dynamics on the Louisiana continental shelf. *J. Geophys. Res. Oceans*, 122:555-569, DOI: 10.1002/2016JC012275..
- 202 2017 Lee, C. C., S. C. Sheridan, B. B. Barnes, **C. Hu**, D. E. Pirhalla, V. Ransibrahmanakul, and K. Shein (2017). The development of a non-linear autoregressive model with exogenous input (NARX) to model climate-water clarity relationships: reconstructing a historical water clarity index for the coastal waters of the southeastern USA. *Theor. Appl. Climatol.*, 130: 557-569, DOI 10.1007/s00704-016-1906-7.
- 201 2017 Pirhalla, D. E., S. C. Sheridan, C. C. Lee, B. B. Barnes, V. Ransibrahmanakul, and **C. Hu** (2017). Water clarity patterns in South Florida coastal waters and their linkages to synoptic-scale wind forcing. *Satellite Oceanography and Meteorology*, vol.1(2): 1-15. <http://dx.doi.org/10.18063/SOM.2016.02.003>.
- 200 2017 Soto, I. M., F. E. Muller-Karger, **C. Hu**, and J. Wolny (2017). Characterization of *Karenia brevis* blooms on the West Florida Shelf using ocean color satellite imagery: implications for bloom maintenance and evolution. *J. Appl. Remote Sens.* 11(1), 012002 (2017), doi: 10.1117/1.JRS.11.012002. (published online in Dec 2016).
- 199 2017 Walsh, J. J., J. M. Lenos, R. H. Weisberg, L. Zheng, **C. Hu**, K. A. Fanning, R. Snyder, and J. Smith (2017). More surprises in the global greenhouse: Human health impacts from recent toxic marine aerosol formations, due to centennial

- alterations of world-wide coastal food webs. *Marine Pollution Bulletin*. 116:9-40, <http://dx.doi.org/10.1016/j.marpolbul.2016.12.053>.
- 198 2017 Marechal, J-P., C. Hellio, and **C. Hu** (2017). A simple, fast, and reliable method to predict Sargassum washing ashore in the Lesser Antilles. *Remote Sensing Applications: Society and Environment*. 5:54-63. <http://dx.doi.org/10.1016/j.rsase.2017.01.001>.
- 197 2017 Salisbury, J., C. Davis, A. Erb, **C. Hu**, C. Gatebe, C. Jordan, Z. Lee, A. Mannino, C. B. Mouw, C. Schaaf, B. A. Schaeffer, and M. Tzortziou (2017). Coastal observations from a new vantage point. *EOS*, 98(1):20-25. doi:10.1029/2016EO062707.
- 196 2017 Zhang, M., **C. Hu**, M. G. Kowalewski, S. J. Janz, Z. Lee, and J. Wei (2017). Atmospheric correction of hyperspectral airborne GCAS measurements over the Louisiana Shelf using a cloud shadow approach. *International Journal of Remote Sensing*, 38(4): 1162-1179, doi: 10.1080/01431161.2017.1280633.
- 195 2016 Barnes, B. B., **C. Hu** (2016) Island building in the South China Sea: detection of turbidity plumes and artificial islands using Landsat and MODIS data. *Sci. Rep.* 6, 33194; doi: 10.1038/srep33194
- 194 2016 Barnes, B.B. and **C. Hu** (2016) Dependence of satellite ocean color data products on viewing angles: A comparison between SeaWiFS, MODIS, and VIIRS. *Remote Sens. Environ.* 175:120-129
- 193 2016 Chen, J., Z. Lee, **C. Hu**, and J. Wei (2016), Improving satellite data products for open oceans with a scheme to correct the residual errors in remote sensing reflectance, *J. Geophys. Res. Oceans*, 121, 3866–3886, doi:10.1002/2016JC011673.
- 192 2016 Chen, S., **C. Hu**, R. H. Byrne, L. L. Robbins, and B. Yang (2016). Remote estimation of surface pCO<sub>2</sub> on the West Florida Shelf. *Cont. Shelf. Res.*, 128:10-25. <http://dx.doi.org/10.1016/j.csr.2016.09.004>
- 191 2016 Feng, L., X. Han, **C. Hu**, and X. Chen (2016). Four decades of wetland changes of the largest freshwater lake in China: Possible linkage to the Three Gorges Dam? *Remote Sens. Environ.*, 176:43-55. doi10.1016/j.rse.2016.01.011.
- 190 2016 Feng, L., and **C. Hu** (2016). Cloud adjacency effects on top-of-atmosphere radiance and ocean color data products: A statistical assessment. *Remote Sens. Environ.*, 174:301-313. doi:10.1016/j.rse.2015.12.020.
- 189 2016 Feng, L., and **C. Hu** (2016). Comparison of Valid Ocean Observations Between MODIS Terra and Aqua Over the Global Oceans. *IEEE Trans. Geosci. Remote Sens.* 54:1575-1585.
- 188 2016 Hiester, H. R., S. L. Morey, D. S. Dukhovskoy, E. P. Chassignet, V. H. Kourafalou and **C. Hu** (2016). A topological approach for quantitative comparisons of ocean model fields to satellite ocean color data. *Methods in Oceanography*, 17:232-250. <http://dx.doi.org/10.1016/j.mio.2016.09.005>

- 187 2016 **Hu, C., B. B. Barnes, L. Qi, C. Lembke, and D. English** (2016). Vertical migration of *Karenia brevis* in the northeastern Gulf of Mexico observed from glider measurements. *Harmful Algae*. 58:59-65, doi:10.1016/j.hal.2016.07.005.
- 186 2016 **Hu, C., B. Murch, B. B. Barnes, M. Wang, J-P. Marechal, J. Franks, D. Johnson, B. Lapointe, D. S. Goodwin, J. M. Schell, and A. N. S. Siuda** (2016). Sargassum watch warns of incoming seaweed, *Eos*, 97(22):10-15, <http://dx.doi.org/10.1029/2016EO058355>
- 185 2016 **Hu, C., B. Murch, A. A. Corcoran, L. Zheng, B. B. Barnes, R. H. Weisberg, K. Atwood, J. M. Lenes** (2016). Developing a smart semantic web with linked data and models for near real-time monitoring of red tides in the eastern Gulf of Mexico. *IEEE Systems Journal*, 10:1282 - 1290. doi:10.1109/JSYST.2015.2440782.
- 184 2016 **Hu, C., R. Hardy, E. Ruder, A. Geggel, L. Feng, S. Powers, F. Hernandez, G. Graettinger, J. Bodnar, and T. McDonald** (2016). Sargassum coverage in the northeastern Gulf of Mexico during 2010 from Landsat and airborne observations: Implications for the Deepwater Horizon oil spill impact assessment. *Marine Pollution Bulletin*, 107:15-21. DOI information: 10.1016/j.marpolbul.2016.04.045.
- 183 2016 Le, C., J. C. Lehrter, **C. Hu**, and D. R. Obenour (2016), Satellite-based empirical models linking river plume dynamics with hypoxic area and volume, *Geophys. Res. Lett.*, 43, 2693–2699, doi:10.1002/2015GL067521.
- 182 2016 Le, C., J. C. Lehrter, B. A. Schaeffer, **C. Hu**, M. C. Murrell, J. D. Hagy, R. M. Greene, and M. Beck (2016). Bio-optical water quality dynamics observed from MERIS in Pensacola Bay, Florida. *Estuarine, Coastal and Shelf Science*. 173:26-38. doi:10.1016/j.ecss.2016.02.003.
- 181 2016 Li, X., **C. Hu**, S. Bao, and X. Yang (2016). MODIS captures large-scale atmospheric gravity waves over the Atlantic Ocean. *Acta Oceanol. Sin.*, 35:1-2.
- 180 2016 Lu, Y., W. Zhan, and **C. Hu** (2016). Detecting and quantifying oil slick thickness by thermal remote sensing: A ground-base experiment. *Remote Sens. Environ.*, 181: 207-217, doi:10.1016/j.rse.2016.04.007.
- 179 2016 Lu, Y., **S. Sun, M. Zhang**, B. Murch, and **C. Hu** (2016), Refinement of the critical angle calculation for the contrast reversal of oil slicks under sunglint, *J. Geophys. Res. Oceans*, 121, 148–161, doi:10.1002/2015JC011001.
- 178 2016 Lu, Y., **C. Hu, S. Sun, M. Zhang**, Y. Zhoug, J. Shi, and Y. Wen (2016). Overview of optical remote sensing of marine oil spills and hydrocarbon seepage. *Journal of Remote Sensing*, 20(5):1259-1269 [DOI:10.11834/jrs.20166122]
- 177 2016 Lu, Y., L. Li, **C. Hu**, L. Li, **M. Zhang, S. Sun**, and C. Lv (2016), Sunlight induced chlorophyll fluorescence in the near-infrared spectral region in natural waters: Interpretation of the narrow reflectance peak around 761 nm, *J. Geophys. Res. Oceans*, 121, 5017–5029, doi:10.1002/2016JC011797.
- 176 2016 Murawski, S.A., J.W. Fleeger, W.F. Patterson III, **C. Hu**, K. Daly, I. Romero, and G.A. Toro-Farmer. 2016. How did the Deepwater Horizon oil spill affect coastal

- and continental shelf ecosystems of the Gulf of Mexico? *Oceanography* 29(3):160–173, <http://dx.doi.org/10.5670/oceanog.2016.80>.
- 175 2016 O'Connor, B. S., F. E. Muller-Karger, R. W. Nero, **C. Hu**, and E. B. Peebles (2016). The role of Mississippi River discharge in offshore phytoplankton blooming in the northeastern Gulf of Mexico during August 2010. *Remote Sens. Environ.*, 173:133-144. <http://dx.doi.org/10.1016/j.rse.2015.11.004>
- 174 2016 Qi, L., **C. Hu**, Q. Xing, and S. Shang (2016). Long-term trend of *Ulva prolifera* blooms in the western Yellow Sea. *Harmful Algae*, 58:35-44. <http://dx.doi.org/10.1016/j.hal.2016.07.004>
- 173 2016 Qiu, Z., D. Sun, **C. Hu**, S. Wang, L. Zheng, Y. Huan, and T. Peng (2016). Variability of Particle Size Distributions in the Bohai Sea and the Yellow Sea. *Remote Sens.* 2016, 8(11), 949; doi:10.3390/rs8110949
- 172 2016 Sun, D., Z. Qiu, **C. Hu**, S. Wang, L. Wang, L. Zheng, T. Peng, and Y. He (2016), A hybrid method to estimate suspended particle sizes from satellite measurements over Bohai Sea and Yellow Sea, *J. Geophys. Res. Oceans*, 121, 6742–6761, doi:10.1002/2016JC011949.
- 171 2016 Sun, S., and **C. Hu** (2016), Sun glint requirement for the remote detection of surface oil films, *Geophys. Res. Lett.*, 43, 309–316, doi:10.1002/2015GL066884.
- 170 2016 Sun, S., **Hu, C.**, Feng, L., Swayze, G.A., Holmes, J., Graettinger, G., MacDonald, I., Garcia, O., and I. Leifer (2016). Oil slick morphology derived from AVIRIS measurements of the Deepwater Horizon oil spill: Implications for spatial resolution requirements of remote sensors. *Mar. Pollut. Bull.*, 103: 276-285, doi:10.1016/j.marpolbul.2015.12.003
- 169 2016 Wang, M., and **C. Hu** (2016). Mapping and quantifying Sargassum distribution and coverage in the Central West Atlantic using MODIS observations. *Remote Sens. Environ.*, 183:356-367. <http://dx.doi.org/10.1016/j.rse.2016.04.019>
- 168 2016 Weisberg, R. H., L. Zheng, Y. Liu, S. Murawski, **C. Hu**, D. Hollander, and J. Paul (2016). Did Deepwater Horizon Hydrocarbons Transit to the West Florida Continental Shelf? *Deep-sea Research II*, 129:259-272, DOI: 10.1016/j.dsr2.2014.02.002.
- 167 2016 Weisberg, R. H., L. Zheng, Y. Liu, A. A. Corcoran, C. Lembke, **C. Hu**, J. M. Lenos, and J. J. Walsh (2016). *Karenia brevis* blooms on the West Florida Shelf: A comparative study of the robust 2012 bloom and the nearly null 2013 event. *Cont. Shelf. Res.*, 120:106-121. doi:10.1016/j.csr.2016.03.011.
- 166 2016 Xing, Q., and **C. Hu** (2016). Mapping macroalgal blooms in the Yellow Sea and East China Sea using HJ-1 and Landsat data: Application of a virtual baseline reflectance height technique. *Remote Sens. Environ.*, 178:113-126. <http://dx.doi.org/10.1016/j.rse.2016.02.065>
- 165 2016 Zhang, M., D. English, **C. Hu**, P. Carlson, F. E. Muller-Karger, G. Toro-Farmer, and S. R. Herwitz (2016). Short-term changes of remote sensing reflectance in a shallow-water environment: observations from repeated airborne hyperspectral

- measurements, *International Journal of Remote Sensing*, 37:7, 1620-1638, DOI:10.1080/01431161.2016.1159746
- 164 2015 Walsh, J. J., J. M. Lenes, B. Darrow, A. Parks, R. H. Weisberg, L. Zheng, **C. Hu**, **B. Barnes**, K. L. Daly, G. Brooks, W. Jeffrey, R. Snyder, and D. Hollander (2015). A simulation analysis of the plankton fate of the Deepwater Horizon oil spills in 2010-2011. *Cont. Shelf. Res.*, 107:50-68. <http://dx.doi.org/10.1016/j.csr.2015.07.002>
- 163 2015 Sun, S., **C. Hu**, and J. W. Tunnell Jr. (2015). Surface oil footprint and trajectory of the Ixtoc-I oil spill determined from Landsat/MSS and CZCS observations. *Marine Pollution Bulletin*, 101:632-641. doi:10.1016/j.marpolbul.2015.10.036.
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- 23 2011 Liu, Y., R.H. Weisberg, **C. Hu,** and L. Zheng, 2011: Combining numerical ocean circulation models with satellite observations in a trajectory forecast system: a rapid response to the Deepwater Horizon oil spill, *Proc. SPIE 8030, 80300K*. doi:10.1117/12.887983

- 22 2011 **Hu, C.**, 2011: Observing MODIS ocean color patterns under severe sun glint. *Proc. SPIE* 8030, 80300M. doi:10.1117/12.803021.
- 21 2010 Lee, Z., R. Arnone, **C. Hu**, P. J. Werdell, and B. Lubac. 2011. Quantification of uncertainties in remotely derived optical properties of coastal and oceanic waters. *Proc. SPIE* 7678, 767802.
- 20 2010 He, M-X., S. He, Q. Yang, Y. Wang, Z. Liu, J. Sha, and **C. Hu** (2010). Overview of Chinese spaceborne ocean observing systems, onboard sensors and data products (1988 - 2025). DRAGONESS Symposium. 12pp.
- 19 2010 Johannessen, J. A., M-X. He, W. Alpers, G. Chen, J-F Piolle, Z. Liu, L. Shao, K-F Dagestad, B. Chapron, L. Wan, **C. Hu**, and L. Guan (2010). Dagon in support to harmonizing European and Chinese marine monitoring for environment and security system (DRAGONESS). DRAGONESS Symposium, 8pp.
- 18 2009 **Hu, C.**, Z. Chen, F. Muller-Karger, M. Luther, and C. Kovach (2009). High Temporal Resolution Assessments of Tampa Bay Water Quality Using Satellites. Proceedings of the 5th Bay Area Scientific Information Symposium. 20-23 October 1999. Tampa, Florida. 13 pp.
- 17 2009 English, D., **C. Hu**, C. Lembke, R. Weisberg, D. Edwards, L. Lorenzoni, G. Gonzalez, and F. Muller-Karger (2009). Observing the 3-dimensional distribution of bio-optical properties of West Florida Shelf waters using gliders and autonomous platforms. 7pp. Oct 26-29, MTS/IEEE Oceans'09 conference, Biloxi, Mississippi. Paper published in conference proceedings (ISBN CD-ROM: 978-0-933957-38-1).
- 16 2009 Cheng, W., L. O. Hall, D. B. Goldgof, I. Soto, and **C. Hu** (2009). Automatic red tide detection from MODIS satellite images. IEEE International Conference on Systems, Man and Cybernetics, 2009. **ISSN:** 1062-922X, p1864-1868. DOI 10.1109/ICSMC.2009.5346189
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- 12 2007 Lee., Z. P., **C. Hu**, et al., MERIS-derived bio-optical properties of the US coastal waters. ENVISAT Symposium proceedings, 23-27 April 2007, Montreux, Switzerland.
- 11 2007 He, M.X., S. He, L. Hu, Y. Wang, Q. Yang, T. Zhang, J. Fischer, Z. P. Lee, and **C. Hu**. MERIS performance in the East China Seas: Evaluation of atmospheric

correction and optical inversion algorithms. ENVISAT Symposium proceedings, 23-27 April 2007, Montreux, Switzerland.

- 10 2007 **Hu, C.**, Y. Wang, Q. Yang, S. He, L. Hu, and M. X. He. Comparison of ocean color data products from MERIS, MODIS, and SeaWiFS: Preliminary results for the East China Seas. ENVISAT Symposium proceedings, 23-27 April 2007, Montreux, Switzerland.
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- 7 2003 **Hu, C.**, and F. E. Muller-Karger (2003). MODIS monitors Florida's ocean dispersal of the Piney Point phosphate treated wastewater. *The Earth Observer* (NASA), 15(6):21-23.
- 6 2003 **Hu, C.**, Z.P. Lee, F. E. Muller-Karger, and K. L. Carder (2003). Application of an optimization algorithm to satellite ocean color imagery: A case study in Southwest Florida coastal waters. SPIE proceedings 4892. (*Ocean Remote Sensing and Applications*, edited by R. J. Frouin, Y. Yuan, and H. Kawamura. SPIE, Bellingham, WA, 2003), p 70-79.
- 5 2003 **Hu, C.** (2003). A simple instrument for measurement of remote sensing reflectance in coastal environment. SPIE Proceedings 4897 (*Multispectral and Hyperspectral Remote Sensing Instruments and Applications*, edited by Allen M. Larar, Qingxi Tong, and Makoto Suzuki. SPIE, Bellingham, WA, 2003), p. 219-226.
- 4 2002 **Hu, C.**, I-I Lin, and S. Shang (2002). Ocean color climatology using multiple sensors. Proceedings of the Fifth cross-strait symposium, 14-16 May 2002, Taipei, Taiwan. pp259-261.
- 3 2000 Gasch, J., T. Arvidson, S. N. Goward, S. Andrefouet, **C. Hu**, and F. E. Muller-Karger (2000). Assessment of Landsat 7/ETM+ coverage of coral reefs worldwide. DIG INT GEOSCI REMOTE SENS SYMP(IGARSS), 6:2687-2689.
- 2 2000 **Hu, C.**, K. L. Carder, and F. E. Muller-Karger (2000). Preliminary algorithm to derive chlorophyll pigment concentration and DOM absorption in turbid coastal waters from SeaWiFS imagery. Proceedings of the 4th Pacific Ocean Remote Sensing Conference, Qingdao, China, 28–31 July. P78-82.
- 1 1997 **Hu, C.**, and K. J. Voss (1997). Solar-stimulated inelastic light scattering in clear seawater. *Proc. SPIE* 2963, Ocean Optics XIII, 266 (February 6, 1997); doi:10.1117/12.266453, p266-271.

#### 7. *Invited Talks (updated 12/31/2015)*

Sept 28, 2015, Invited seminar at Texas A&M University Dept of Oceanography & Dept of Atmosphere. “From green tides, oil spills, to global ocean biology: How two coastal events led to a new remote sensing algorithm concept.”

April 27, 2015, Invited talk to celebrate Dr. Howard Gordon’s retirement at University of Miami, Physics Department: “The beauty of subtraction.”

June 4, 2014, Invited talk at Wuhan University, Wuhan, China: “Satellite based virtual buoy system” by C. Hu.

June 10, 2014, Invited seminar at Nanjing Institute of Geography and Limnology, Nanjing, China: “Satellite remote sensing of coastal environment” by C. Hu

September 25, 2013. Invited seminar at University of Massachusetts at Boston: “Remote sensing of coastal water quality and blooms – from research to management decision support”

February 16, 2012. Invited presentation for Sarasota Power & Sail Squadron, Sarasota, Florida: “Monitoring the coastal ocean using optical remote sensing.”

March 8, 2011. Invited seminar at TAMU Galveston: “Satellite remote sensing of coastal environments: New applications using old concepts”

May 16-17, 2011, SECOORA annual meeting, Jacksonville, Florida, Invited talk: “SECOORA satellite remote sensing component”

Dec 13 – 17, 2010, AGU Fall Meeting, San Francisco, California, USA. Invited talk by Weisberg, R.H., Y. Liu, L. Zheng, C. Hu, and C. Lembke: “Rapid Response to Deepwater Horizon Oil Spill from University of South Florida: Numerical Models, Remote Sensing, and In-situ Observations”

Oct 28 – 29, 2010, Hongkong, China, Second International Conference on Global Change and the Environment in Asia and Pacific (GCEAP, 28-29 Oct 2010). Plenary talk: "A remote sensing view of aquatic hazards in East China and the US Gulf Coast"

Oct 14 – 17, 2010, CSDMS Meeting, San Antonio, Texas, USA, Invited keynote talk by Weisberg, R.H., Y. Liu, L. Zheng, and C. Hu: “The Oil Trajectory: How it behaved in the Gulf of Mexico and why, and where might residual oil be heading?”

Sept 27 – Oct 1, 2010, Ocean Optics XX conference, Anchorage, Alaska. Invited talk: “One index, many applications”

May 12 – 13, 2010, Southeast Coastal Ocean Observing Regional Association (SECOORA) 2010 Annual Board & Member Meeting, Savannah, Georgia, USA, Invited keynote talk by Liu, Y., R.H. Weisberg, L. Zheng, and C. Hu: “Tracking Gulf of Mexico Oil Spill with Numerical Models and Satellite Imagery”.

March 5, 2010, Invited seminar at Dalhousie University, Department of Oceanography, Canada, “Satellite remote sensing of coastal environments: Maximizing the power of MODIS”

Feb 4, 2010, Estuarine Nutrient Criteria Workshop, FWCC, St. Petersburg, Florida. Invited talk: “Satellite Chl in Near-shore Waters of the West Florida: Influence of River Discharge”

Dec 18-19, 2009, The 9<sup>th</sup> National Symposium on Ocean Color Remote Sensing of Case-II Waters, Nanchang, China, invited presentation: “Assessment of blue-green algae blooms in two freshwater lakes of China using MODIS”

Dec 8-10, 2009, NASA Applied Sciences Gulf Workshop, New Orleans, Louisiana, Invited presentation: “An overview of NASA ocean color data products”

Sept 22-24, 2009, NASA GEO-CAPE working group meeting, Columbia, Maryland, Invited presentation: "GEO-CAPE requirements on measurement sensitivity, saturation, and solar angles"

May 6-8, 2009, NASA Ocean Color Research Team meeting, Westin New York at Times Square Hotel, New York, invited presentation: "Coastal ocean color from space: where are we and what's next"

#### 8. *Projects and Grants (as of 1/31/2018)*

**Total Awards: ~ \$82.4M (since 2001); \$77.9M (since 2009).**

**C. Hu's portion: \$12.0M (since 2001); \$9.1M (since 2009).**

**Number of projects since 2009: 44; 23 of which with C. Hu being project PI**

#### 9. *Graduate Education and Mentoring*

##### Courses Taught

OCE6934, Ref#90356, Practical IDL Programming	Spring 2003
OCE6934, Ref# 17172, Optical Oceanography	Spring 2010
OCE6934, Ref# 90356, Practical IDL Programming	Fall 2010
OCE6934, Ref# 16698, Environ. Optics & Remote Sens.	Spring 2011
*OCE4930, Ref# 92020, Deepwater Horizon: Whole Story (UG)	Fall 2011
*OCE6934, Ref# 91966, Remote Sensing in Oceanography	Fall 2011
*OCE6934, Ref# 86692, Deepwater Horizon: Whole Story (G)	Fall 2011
OCE6934, Ref# 21613, Marine Resource Remote Sensing	Spring 2012
OCE6934, Ref# 15656, Optical Oceanography	Fall 2013
OCE6934, Practical IDL Programming	Spring 2014
OCE6934, Readings in Optical Oceanography	Fall 2014
OCE6934, Ref# 94911, Marine Resource Remote Sensing	Fall 2015
OCE6934, Optical Oceanography	Fall 2016
OCE6934, Practical IDL Programming	Spring 2017
OCE6934, Readings in Optical Oceanography	Fall 2017
OCE6934, Marine Resource Remote Sensing	Spring 2018
Many Directed Research, Independent Study, MS Thesis, and PhD Dissertation courses from Spring 2009 to Spring 2018	

\*courses taught by others where Hu gave lectures

##### Master's Thesis Advisory Committees

Hu as major or co-major advisor

Junpeng Liu (**graduated at OUC**, co-major advisor: Ming-Xia He of Ocean University of China): Spring 2007 – Fall 2010, thesis title: "A multi-satellite

service system to monitor *Ulva prolifera* blooms and their marine environment off Qingdao, China”. 86pp, in Chinese with English abstract.

Feng Yu (**graduated at OUC**, co-major advisor: Ming-Xia He of Ocean University of China): Spring 2007 – Fall 2010, thesis title: “Satellite remote sensing of *Ulva prolifera* in coastal waters off Qingdao, China”. 73 pp, in Chinese with English abstract.

Daniel Sensi (**graduated at USF/CMS**): Fall 2010 – Fall 2012, thesis title: “Optical Detection and Classification of Phytoplankton Taxa through Spectral Analysis”, 71 pp. Manuscript in preparation.

Ryan Lloyd (**graduated at USF/CMS**): Fall 2010 – Fall 2012, thesis title: “Remote Sensing of Whittings in the Bahamas”, 117 pp. Manuscript in preparation.

Robert Hardy (**graduated at USF/CMS**): Spring 2010 – Fall 2014, thesis title: “Assessments of Surface-Pelagic Drift Communities and Behavior of Early Juvenile Sea Turtles in the Northern Gulf of Mexico”. Published 3 papers as co-author and made 2 presentations. Won the Outstanding Thesis and Dissertation (OTD) Award from USF for the 2014-2015 academic year.

Jacqueline Long (**graduated at USF/CMS**): Fall 2013 – Fall 2016, thesis title: Whittings in SW Florida coastal waters. Published 3 papers as 1<sup>st</sup> author. Recipient of Sackett Award (one student per year) in 2018.

Chih-Wei Huang (**in press at USF/CMS**): Fall 2016 – present

#### Hu as thesis committee member

Ana Odriozola (**graduated at USF/CMS**, major advisor: Frank Muller-Karger of USF), Spring 2003 – Spring 2006, thesis title: “On the Orinoco River plume in the Caribbean”. Published 1 paper as 1<sup>st</sup> author (Odriozola et al., 2007) and another one as coauthor.

Haiying Zhang (**graduated at USF/CMS**, major advisor: Frank Muller-Karger of USF), Spring 2004 – Fall 2006, thesis title “Remote detection of red tides using a fuzzy k-mean classification”. Manuscript published in a conference proceeding.

Bredan O’Connor (**graduated at USF/CMS**, major advisor: Frank Muller-Karger of USF), Fall 2011 – Summer 2013, thesis title: “Assessment of the Mississippi River diversions and characterization of the oil from the Deepwater Horizon oil spill”. Made a presentation at the GoMRI conference in New Orleans, January 2013.

Lewis Stewart (**graduated at USF/CMS, Dec 2017**), major advisor: David Naar of USF).

#### Doctor's Dissertation Advisory Committees

##### Hu as major or co-major advisor

Kun Yu (**graduated at Nanjing Univ., visiting student at USF 2009 - 2011**, co-major advisor: Ying Wang of Naging University, China): Fall 2007 - Spring 2012, dissertation title: “Different lowland plain wetlands formation and a

decadal vegetation coverage”. 160 pp, in Chinese with English abstract. Published 2 papers as 1<sup>st</sup> author (Yu et al., 2011; Yu and Hu, 2013), 1 paper as coauthor, and another one in preparation.

Lian Feng (**graduated at Wuhan Univ., visiting student at USF 2010 - 2012**, co-major advisor: Xiaoling Chen of Wuhan University, China): Fall 2008 - Spring 2013, dissertation title: “Remote sensing of the Poyang Lake and its environment”. Published 7 papers as 1<sup>st</sup> author and 4 papers as coauthor. Won Top-10 Student Researcher Award (2012) and Top-5 Student Innovation Award (2012) at Wuhan University.

Brian Barnes (**graduated at USF/CMS in Dec 2013**), Fall 2009 – Fall 2013, dissertation title: “On the combined Effects of Light and Temperature on Coral Bleaching: A case study of the Florida Reef Tract using satellite and in situ data”. USF/CMS Knight Fellowship winner (Fall 2012); published 5 papers as 1<sup>st</sup> author and 3 papers as co-author from dissertation. Won the Outstanding Thesis and Dissertation (OTD) Award from USF for the 2013-2014 academic year. Made numerous presentations in professional meetings such as Ocean Optics XXI (Scotland, October 2012) and Florida Keys regional planning meetings.

Lin Qi (**Graduated at Nanjing Institute of Geography and Limnology in Nov 2014**). Dissertation title: “Remote sensing of phytoplankton pigment concentrations in Taihu Lake: Algorithm development and applications”. Published 3 first-authored papers and 1 coauthored paper. One paper was highlighted by IOCCG in its November 2014 news bulletin.

Mengqiu Wang (**Graduated at USF/CMS in August 2018**): Fall 2013 – Aug 2018, Dissertation topic: Remote sensing of pelagic Sargassum. Published 6 manuscripts as 1<sup>st</sup> author and 7 papers as co-author. Recipient of numerous fellowships and awards.

Shuangling Chen (**Graduated at USF/CMS in fall 2018**): Fall 2013 – Fall 2018, Dissertation topic: Remote sensing of surface pCO<sub>2</sub> in the Gulf of Mexico. Published 4 manuscripts as 1<sup>st</sup> author and two as coauthor. USGS graduate assistantship recipient 2014 – 2016 and winner of several scholarships.

Shaojie Sun (**Graduated at USF/CMS in fall 2018**): Fall 2013 – Fall 2018, Dissertation topic: oil spill remote sensing. Published 6 papers as 1<sup>st</sup> author and several others as co-author. NASA fellowship recipient since Fall 2016.

Yingjun Zhang (**in progress at USF/CMS**): Fall 2016 – present.

Hu as dissertation committee member

Bisman Nababan (**graduated at USF/CMS**, major advisor: Frank Muller-Karger of USF), Fall 1998 – Spring 2005, dissertation title: “Bio-optical variability of surface waters in the Northeastern Gulf of Mexico”, 167pp. Published two papers as 1<sup>st</sup> author and two others as co-author.

Zhiqiang Chen (**graduated at USF/CMS**, major advisor: Frank Muller-Karger of USF), Fall 2000 – Fall 2006, dissertation title: “Monitoring water quality in Tampa Bay: Coupling *in situ* and remote sensing”. Published 4 papers as 1<sup>st</sup> author, 4 papers as co-author.

- Marina Marrari (**graduated at USF/CMS**, major advisor: Kendra Daly of USF), Fall 2002 – Spring 2008, dissertation title: “Characterization of the Western Antarctic Peninsula Ecosystem: Environmental Controls on the Zooplankton Community”. 174pp. Published 3 papers as 1<sup>st</sup> author.
- Carrie Wall (**graduated at USF/CMS**, major advisor: David Mann of USF), Fall 2008 - Fall 2012, dissertation title: “Shelf-scale Mapping of Fish Distribution Using Active and Passive Acoustics”, 164 pp. Published 3 papers from dissertation as 1<sup>st</sup> author with 2 in preparation, and published 2 papers as coauthor and 2 others in preparation.
- Kara Radabaugh (**graduated at USF/CMS**, major advisor: Ernst Peebles of USF), Fall 2009 – Spring 2013, dissertation title: “Light-Environment Controls and Basal Resource Use of Planktonic and Benthic Primary Production”, 189pp. Published 1 paper as 1<sup>st</sup> author, submitted 2, and had one in preparation.
- Inia Soto (**graduated at USF/CMS**, major advisor: Frank Muller-Karger of USF), Fall 2006 – Fall 2013, dissertation title: “On the Harmful Algal Blooms of the West Florida Shelf and Campeche Bank: Visualization and Quantification using Remote Sensing Methods”. Published 3 papers as 1<sup>st</sup> author, 2 as coauthor
- Sennai Habtes (**graduated at USF/CMS**, major advisor: Frank Muller-Karger of USF), Fall 2006 – Fall 2014, dissertation title: “Variability in the Spatial and Temporal Patterns of Larval Scombrid Abundance in the Gulf of Mexico”
- Brian Zielinski (**graduated at USF/CMS**, major advisor: John Paul of USF), Fall 2008 – Fall 2014, dissertation title: “Using Gene Expression as a Tool to Understand Biogeochemical Cycling in Various Marine Communities”, Published 2 papers as co-author, and several others in preparation.
- Maria Vega-Rodriguez (**graduated in fall 2016 at USF/CMS**, major advisor: Frank Muller-Karger of USF), Fall 2010 – Fall 2016, dissertation title: “Influence of temperature and water quality variability on coral reef diversity in the Florida Keys”. Won ARCS Scholar award in 2012.
- Katie Wirt (**defended in February 2016**, major advisor: Pam Muller of USF), Fall 2011 – spring 2016, dissertation title: “Critical Habitat of *Acropora spp.* On reefs of Florida, Puerto Rico and the U.S. Virgin Islands”. Published 1 paper as 1<sup>st</sup> author.

Mentor of post-doctorate researcher:

- Dr. Jun Zhao, USF/CMS, Fall 2010 – Fall 2012. Focused on algal blooms and light penetration on the West Florida Shelf and Florida Keys, published 3 papers as 1<sup>st</sup> author and 2 papers as coauthor.
- Dr. Chengfeng Le, USF/CMS, Fall 2010 – Spring 2013. Focused on estuarine water quality and blooms to assist management decision support, published 6 papers as 1<sup>st</sup> author and 1 paper as coauthor.
- Dr. Minwei Zhang, USF/CMS, Fall 2013 – . Focused on atmospheric correction of airborne and satellite sensors.

Dr. Brian Barnes, USF/CMS, Spring 2014 – spring 2017. Focused on ocean color algorithm and data products of coastal oceans as well as their applications in addressing Earth science questions.

Dr. Lian Feng, USF/CMS, Spring 2015 – Summer 2017. Focused on algorithm development and global ocean data quality.

Dr. Lin Qi, USF/CMS, January 2015 – July 2015. Focused on coastal algal blooms and water quality

Dr. Mengqiu Wang, USF/CMS, August 2018 – present. Continued PhD work on Sargassum remote sensing and dynamics.

### **10. Research Interests**

Ocean color remote sensing algorithms and novel products

River plumes, land-ocean interactions, ecosystem connectivity, climate variability

Algal blooms and water quality

Coastal ocean observing systems

### **11. Synergistic Activities**

2015 – 2017, co-Editors-in-Chief, *Remote Sensing of Environment*

2008 – 2014, Topical Editor (ocean optics and remote sensing), *Applied Optics*

Member of AGU, AAAS, ASLO, and APS

Visiting professorship at Wuhan University and Ocean University of China

Reviewer of professional journals: *Remote Sensing of Environment*, *Applied Optics*, *International Journal of Remote Sensing*, *Limnology & Oceanography*, *Marine Chemistry*, *Journal of Geophysical Research*, *Geophysical Research Letters*, *Oceanography*, *Progress in Oceanography*, *Journal of Oceanography*, *Chinese Science Bulletin*, *IEEE Geosci. & Remote Sens.*, *Journal of Applied Remote Sensing*, *Journal of Phycology*, *Continental Shelf Research*, etc.

Reviewer and panelist of NASA, NOAA, and NSF proposals

Convener of international conference sessions

Host of two international workshops on HABs research

Host of visiting scholars from India, Trinidad, China, Iraq, Mexico

Developer of Virtual Systems for data processing and information sharing

Service provider (satellite-based data products) to > 60 countries

Member, Products and Service Committee, GCOOS

Member, Data Management Committee, SECOORA

Member, NASA GEO-CAPE mission science definition team

Member, Water Quality and Harmful Algal Blooms Teams, Gulf of Mexico Alliance, 2010 –

Member, Program Committee, Asia-Pacific Remote Sensing Symposium, fall 2012

Member, Program Committee, Second International Conference on Global Change and the Environment in Asia and Pacific (GCEAP, 28-29 Oct 2010)

Member, Advisory Committee of NASA/GSFC Ocean Ecology Lab

Member, USF Honors and Awards Committee, 2011 –  
Member, USF Research Misconduct Committee, 2011 –  
Member, USF/CMS Faculty Evaluation Committee, spring 2011  
Chair, USF/CMS Curriculum Committee, 2011 –  
Member, NSF OOI Program Advisory Committee, 2012 –

**12. Collaborators (with whom C. Hu has joint publications or projects during the past 5 years)**

Kendall Carder, Frank Muller-Karger, Pamela Muller, John Walsh, Robert Weisberg,  
Yonggang Liu, Liangyuan Zheng, Jason Lenes, Mark Luther, Paula Coble, Kendra  
Daly, David Mann, Gabe Vargo, Chad Lembke, Don Chambers, USF/CMS  
Larry Hall, Dmitry Goldgof, Dept. Computer Science and Engineering, USF/Tampa  
Karen Steidinger, David Palandro, Paul Carlson, Jennifer Wolny, FWRI/FWC  
Zhongping Lee, University of Massachusetts at Boston  
Changsheng Chen, University of Massachusetts at Dartmouth  
Brian Lapointe, HBOI/Florida Atlantic University  
Charles McClain, Bryan Franz, Jereme Werdell, Antonio Mannino, NASA/GSFC  
James Hendee, Libby Johns, Nelson Melo, Peter Ortner, Xiaofeng Li, William Pichel,  
NOAA  
Blake Shaeffer, John Lehrter, Richard Zepp, EPA  
Charles Kovach, Florida DEP  
Ira Leifer, UC Santa Barbara  
Ian MacDonald, Florida State Univ.  
Robert Arnone, Naval Research Lab  
Doug Biggs and Tom Linton, Texas A&M U  
Shubha Santhyendranath and Robert Brewin, New Bedford Inst. Oceanography, Canada  
Thomas Rossby, University of Rhode Island  
Nan Walker and Eurico D'Sa, Louisiana State Univ  
Jinyu Sheng, Department of Oceanography, Dalhousie University, Canada  
Shaoling Shang and Huasheng Hong, Xiamen University, China  
Ming-Xia He, Ocean University of China, Qingdao, China  
Ronghua Ma and Hongtao Duan, Institute of Geography and Limnol., Academia Sinica  
Xiaoling Chen, Wuhan University, China  
I-I Lin, National Taiwan University  
Peter Mumby, University of Queensland, Australia  
Johnny Johannessen, Nansen Environmental and Remote Sensing Center, Norway  
Bertrand Chapron, IFREMER, France