

## Curriculum Vitae

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Hu, C. (2017). The beauty of subtraction: new concepts in algorithm development. 11/1/2017 – 11/3/2017, 17<sup>th</sup> Chinese Ocean Color Remote Sensing Symposium, Xiamen, China.

January 27, 2016, NOAA Coastal Watch workshop, NOAA/AOML, Miami, Florida  
Presentation: Near real-time data products at USF by C. Hu

3/21/2016 – 3/22/2016, Sargasso Sea Commission workshop, Key West, Florida,  
Presentation: “Remote sensing of Sargassum blooms” by C. Hu

9/13/2016 – 9/14/2016, Conferencia Internacional Maritima Oceanografica (CIMO) 2016,  
Santo Dominica Republic  
Presentation: “Sargassum Watch from Space” by C. Hu

10/5/2016, Invited seminar at University of Maryland Baltimore County  
Presentation: “From green tides, oil spills, to global ocean biology: How two coastal events led to a new remote sensing algorithm concept for the global ocean” by C. Hu

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

- 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 2/25/2020)*

**Total Awards: ~ \$93.0M (since 2001); \$88.7M (since 2009 when C. Hu became teaching faculty).**

**C. Hu’s portion: \$15.6M (since 2001); \$13.9M (since 2009 when C. Hu became teaching faculty).**

**Number of projects since 2009: 56; 29 of which with C. Hu being project PI**

**(details available upon request)**

#### 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
OCE6934, Optical Oceanography	Fall 2019
OCE6934, Marine Resource Remote Sensing	Spring 2020
Many Directed Research, Independent Study, MS Thesis, and PhD Dissertation courses from Spring 2009 to Fall 2019	

\*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







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.

Ellen Hudson-Heck (**in progress at USF/CMS**, major advisor: Robert Byrne of USF), Fall 2016 – present.

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 – Fall 2018. 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.

Dr. Shaojie Sun, USF/CMS, December 2018 – August 2019. Focused on oil spills and other pollutions.

**10. Synergistic Activities**

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

2008 – 2014,

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, International Ocean Color Coordination Group

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