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Biographical Sketch: Vanessa Wright

Professional Preparation

Institution	Degree, Year
University of Southern Mississippi	M.S., Biological Oceanography, 2005
DePaul University, Chicago Illinois	B.S., Biological Sciences, 2002

Appointments

2010-present	Oceanography Field and Laboratory Technician, Center for Marine and Environmental Studies, University of the Virgin Islands, St. Thomas, VI
2008-2010	Oceanographer, NASA Goddard Space Flight Center, Calibration and Validation Office, Science Systems and Applications Inc., Greenbelt, MD
2005-2008	Staff Research Associate II, Scripps Institution of Oceanography, Marine Physical Laboratory, University of California San Diego, CA
2003-2005	Research Assistant, NASA, John C. Stennis Space Center, MS
2002-2003	Research Assistant, Department of Marine Science, University of Southern Mississippi, John C. Stennis Space Center, MS

Research Statement

Miss Wright is currently the Oceanography Field and Laboratory Technician at the Center for Marine and Environmental Studies (CMES) in the University of the Virgin Islands. She provides technical support for oceanographic equipment including maintenance and deployment as well as proper methodology and procedures. This includes calibration activities to ensure quality of collected data streams. She provides support for the technical dive team, when available, collecting data for various projects. She is responsible for organizing datasets and producing high quality summary products. Datasets she is currently involved with include temporal variability of temperature using long term data loggers, vertical profiles of oceanographic features at coral monitoring sites, and Acoustic Doppler Current Profiler (ADCP) measurements in the Caribbean Sea and surrounding area.

In her early career, Vanessa received the NASA Graduate Student Researches Program Award to study seasonal changes in carbon transport by the Mississippi River to the Gulf of Mexico and the variability in the relationship between dissolved organic carbon and colored dissolved organic matter in the river-end member. She joined the Ocean Optics Research Lab in 2005 at Scripps Institution of Oceanography (SIO) where she was actively involved in multiple research projects at local and international levels. Vanessa's background in field campaigns and laboratory experiments has given her experience in data collection and method development in multiple types of instrumentation and measurements such as biogeochemical, in situ optical, and bench top optical parameters. Specific research projects include the characterization and calibration of a multi-angle light scattering instrument for the determination of the volume scattering function in oceanic waters and method development for complementary optical parameters for absorption and suspended particulate material.

Most recently, Vanessa worked at the NASA Goddard Space Flight Center, Calibration and Validation Office (CVO). Her main focus was establishing uncertainties in the in situ inherent optical properties (IOPs) measurements and calibrations, especially between new instruments and more widely used instrumentation. The results from different campaigns, including an intercomparison research expedition in the Gulf of Maine, will be used to determine standard IOP protocols with uncertainty budgets and performance metrics.

Recent Publications

Reynolds, R. A., D. Stramski, **V.M. Wright**, S.B. Wozniak. 2010. Measurements and Characterization of Particle Distributions in Coastal Waters. *J. Geophysical Research, Vol. 115, C08024, doi:10.1029/2009JC005930*.

Uitz, J., D. Stramski, A. Baudoux, R.A. Reynolds, **V.M. Wright**, J. Dubranna, F. Azam. 2010. Variations in the optical properties of a particle suspension associated with viral infection of marine bacteria. *Limnology and Oceanography, 55(6)*.

Wozniak, S.B., D. Stramski, M. Stramska, R.A. Reynolds, **V.M. Wright**, E.Y. Miksic, M. Cichocka, A.M. Cieplak. 2010. Optical Variability of Seawater in Relation to Particle Concentration, Composition, and Size Distribution in the Nearshore Marine Environment at Imperial Beach, California. *J. Geophysical Research. Vol. 115, C08027, doi:10.1029/2009JC005554*.

Reynolds, R.A., D. Stramski, **V.M. Wright**, S.B. Wozniak. 2008. Particle Size Distributions of Coastal Waters Measured with an in situ Laser Diffractometer. *Ocean Optics XIX*.

Uitz, J., A.C. Baudoux, **V.M. Wright**, F. Malfatti, J. Dubranna, D. Stramski, F. Azam. 2008 Dynamics of Colloidal Particles Associated with Viral Infection of Marine Bacteria. *Ocean Optics XIX*.

Montes-Hugo, M.A. R.A. Reynolds, M. Vernet, D. Stramski, **V.M.Wright**. 2007. Particulate Beam Attenuation Coefficient, Bacteria Abundance and Production in Marine Waters. *Proceeding of SPIE*. Vol 6680. Coastal Ocean Remote Sensing, edited by R.J. Frouin, Z.P. Lee, 6680U.

Reynolds, R.A., D. Stramski, **V.M. Wright**, S.B. Wozniak. 2006. Measurement of the Volume Scattering Function using a Multi-instrument Approach. *Ocean Optics XVIII*.

Wright, V.M. 2005. The Seasonal Dynamics of Colored Dissolved Organic Matter in the Mississippi River Plume and Northern Gulf of Mexico. [M.S. thesis]: University of Southern Mississippi. 68p.

Wright, V. M. and C. E. Del Castillo. 2004. Dynamics of Colored Dissolved Organic Matter in the

Mississippi River Plume. *Ocean Optics XVII*.

Lohrenz, S. E., W.J. Cai, and **V. M. Wright**. 2004. Satellite Ocean Color Assessment of pCO2 in a River-Dominated Margin. *Ocean Optics XVII*.
Sparkes, T.C., **V. M. Wright**, D.T. Renwick, K.A. Weil, J.A. Talkington, and M. Milhalyov. 2004. Intra-Specific Host Sharing in the Manipulative Parasite *Acanthocephalus dirus*: Does Conflict Occur Over Host Modification? *Parasitology* 129: 335-340.

Conferences and Presentations

2009 Ocean Color Research Team Meeting, New York, NY. NASA Ocean Biology and Biogeochemistry Program Calibration and Validation Office: Current Achievements and Future Expeditions (author)

2009 The Calibration and Validation Office: Apparent Optical Properties Workshop, Santa Barbara, California. AOP Workshop: Development of a Web-based Community AOP Processor (author)

2008 AGU Chapman Conference on Organic Matter Fluorescence, Birmingham, UK. The Calibration and Validation Office (CVO) at NASA/GSFC: A Comprehensive Program for the Calibration and Validation of Oceanic Biogeochemical Satellite Data (author, poster)

2008 Ocean Optics XIX, Italy. Particle Size Distributions of Coastal Waters Measured with an in situ Laser Diffractometer (co-author)

2008 Ocean Optics XIX, Italy. Dynamics of Colloidal Particles Associated with Viral Infection of Marine Bacteria (co-author)

2007 SPIE, San Diego, California. Particulate Beam Attenuation Coefficient, Bacteria Abundance and Production in Marine Waters (co-author)

2006 Ocean Optics XVIII, Montreal, Canada. Variability in Optical Backscattering Properties of Coastal Waters at Imperial Beach in Southern California (author, poster)

2006 Ocean Optics XVIII, Montreal, Canada. Measurement of the Volume Scattering Function using a Multi-instrument Approach (co-author)

2006 Ocean Sciences Meeting, Honolulu, Hawaii. Using Ocean Color Imagery to Monitor Salinity in the Northern Gulf of Mexico (co-author)

2005 International Ocean Research Conference, Paris, France. Development of a Regional Algorithm for the Determination of Riverine Dissolved Organic Matter in the Mississippi River Plume from In Situ Measurements (author, talk)

2004 Ocean Optics XVII, Fremantle, Western Australia. Dynamics of Colored Dissolved Organic Matter in the Mississippi River Plume (author, talk)

2004 Ocean Optics XVII, Fremantle, Western Australia. Satellite Ocean Color Assessment of pCO2 in a River-Dominated Margin (co-author)
2004 ASLO/TOS Ocean Research Conference, Honolulu, Hawaii. Dynamics of Colored Dissolved Organic Matter in the Mississippi River Plume (author, poster)

2004 ASLO/TOS Ocean Research Conference, Honolulu, Hawaii. Effect of Suspended Particles on Water Optical Properties in the Mississippi River Plume (co-author)

2002 Midwest Ecology and Evolution Conference, Bowling Green, Ohio. Can Parasite-Induced Behavior-Modification Target Specific Final Hosts? An Experimental Approach Using Stream Crustaceans, Fish, and an Acanthocephalan Parasite. (author, poster)