# CURRICULUM VITAE

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## SUMMARY OF PROFFESIONAL EXPERIENCE

Dr. Del Castillo is a member of the Senior Professional Staff with the Space Department of the Johns Hopkins University Applied Physics Laboratory, and the William S. Parsons Professor at the Johns Hopkins University Department of Earth and Planetary Sciences. Dr. Del Castillo started his career at the University of Puerto Rico studying the effects of oil pollution in tropical marine environments. Later, at the University of South Florida, his interest in organic carbon biogeochemistry and the carbon cycle lead him to the use of remote sensing to study biogeochemical and physical processes in the oceans through a combination of remote sensing, and field and laboratory experiments. While working at NASA as a researcher, Dr. Del Castillo also served as Project Manager at Stennis Space Center, MS, and as a Program Scientist at NASA HQ. Dr. Del Castillo served in several inter-agency working groups, chaired NASA and NSF workshops, and is now a member of NASA's Carbon Cycle and Ecosystem Management and Operations working Group. Dr. Del Castillo has several well-cited publications (over 70 citations), co-edited a book on the application of remote sensing techniques, and is a frequent reviewer for technical journals. Dr. Del Castillo received the William Sackett Prize for Innovation and Excellence in Research from the University of South Florida (1999), the NASA Presidential Early Career Award for Scientists and Engineers (2004), and the Emerald Honors Trailblazer Award (2007), and other awards.

## EDUCATION:

1998 Ph.D. Oceanography, Department of Marine Science, University of South Florida (Optical Characteristics of the Colored Dissolved Organic Matter in the Eastern Caribbean, West Florida Shelf, and the Arabian Sea: Relationship Between Chemical Characteristics and Optical Response. Dr. P.G. Coble, advisor)

1991 M.S. Marine Chemistry, Department of Marine Science, University of Puerto Rico, Mayagüez Campus (Accumulation and Depuration Rates of Hydrocarbons in the Mangrove Oyster *Crassostrea rizophorae*. Dr J.E. Corredor, advisor)

1987 B.S. Biology, Department of Biology, University of Puerto Rico, Mayagüez Campus

## TEN SELECTED PUBLICATIONS:

- **Del Castillo, C. E.** and R. L. Miller. 2008 Determination of dissolved organic carbon fluxes in the Mississippi River Plume using remote sensing of ocean color. Remote Sensing of the Environment. doi: 10.1016/J.rse.2007.06.015

- D Sa, E. J., R. L. Miller, and **C.E. Del Castillo.** 2006. An Assessment of Short-term Physical Influences on the Bio-optical Properties and Ocean Color Algorithms in Coastal Waters Influenced by the Mississippi River. Applied Optics, 45(28), 7410-7428

- **Del Castillo, C. E.** Remote Sensing of Colored Dissolved Organic Matter in Coastal Environments. In ***Remote Sensing of Aquatic Coastal Environments***. Miller R. M., **Del Castillo C.E.,** and B. McKee, Editors. Kluwer Academic Publishes. 2004

- Miller, R. L., M. Beltz, **C. E. Del Castillo**, and R. Trzaska. 2002. Determining CDOM Absorption Spectra in Diverse Coastal Environments using a Multiple Pathlenght, Liquid Core Wave-guide System. Continental Shelf Research. 22(9), 1301-1310

- **Del Castillo, C. E.**, P. G. Coble, R. N. Conmy, F. E. Muller-Karger, L. Vanderbloemen, and G. Vargo. 2001. Simultaneous *In-situ* Measurements of Dissolved Organic Matter and Chlorophyll Fluorescence in Seawater: Documenting the Intrusion of the Mississippi River Plume in the West Florida Shelf. Limnology and Oceanography. 46(7), 1836-1843

- **Del Castillo, C. E.**, F. Gilbes, P. G. Coble, and F. E. Miller-Karger. 2000. On the Dispersal of Riverine Colored Dissolved Organic Matter (CDOM) over the West Florida Shelf. Limnology and Oceanography 45(6), 1425-1432

- **Del Castillo, C. E.**, and P. G. Coble. 2000. Seasonal Variability of the Colored Dissolved Organic Matter During the 1994-95 NE and SW Monsoons in the Arabian Sea. Deep-Sea Research II 47, 1563-1579

- **Del Castillo, C. E.**, P. G. Coble, J. Lopez, J. Morell, and J. E. Corredor. 1999. Analysis of the Optical Properties of the Orinoco River Plume by Absorption and Fluorescence Spectroscopy. Marine Chemistry 66, 35-51

- Coble, P. G., **C. E. Del Castillo**, and B. Avril. 1998. Distribution of DOM in the Arabian Sea During the SW Monsoon. Deep-Sea Research II 45, 2195-2223

- **Del Castillo C. E.,** J. E. Corredor and J. M. Morell. 1995. Accumulation and Depuration of Hydrocarbons in the Mangrove Oyster Crassostrea rhizophorae. Actes de la 2$^{me}$ Conference Internationale sur la Purification des Coquillages, Rennes 6-8 avril 1992, IFREMER, 93-96.

**CURRENT PROJECTS**

- On the Distribution of Colored Dissolved Organic Matter in the Southern Ocean and the Potential for Photoproduction of $CO_2$ and CO – NASA

- Carbon Transport by the Mississippi River – NASA

- On the Use of Ocean Color to Estimate Carbon Transport by the Orinoco and Amazon Rivers – NASA

- Rapid Prototyping of VIIRS Ocean Color Data for Coastal Management Applications in the Gulf of Mexico - NASA