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## PROFESSIONAL PREPARATION:

MIT, Civil Engineering/Water Resources and Environmental Engineering, S.B. 1987. MIT, Civil Engineering/Water Resources and Environmental Engineering, S.M. 1987. University of California, San Diego, Scripps Institution of Oceanography, Ph.D. 1993,

"Phytoplankton Photophysiology and Optical Modeling of Primary Production: Laboratory Results and Field Studies in the California Current System".

Woods Hole Oceanographic Institution, Biological Oceanography, Postdoctoral Scholar 1993-1996.

## **APPOINTMENTS:**

Associate Scientist, Woods Hole Oceanographic Institution, 1999-present. Assistant Scientist, Woods Hole Oceanographic Institution, 1994-1999. Postdoctoral Scholar, Woods Hole Oceanographic Institution, 1993-1996. Graduate Research Fellow, Scripps Institution of Oceanography, 1988-1993. Graduate Research Assistant, Massachusetts Institute of Technology, 1987-1988. Teaching Assistant, Massachusetts Institute of Technology, 1986-1987.

## **HONORS AND AWARDS:**

WHOI Coastal Ocean Institute/Ocean Life Institute Fellow, 2003. ONR Young Investigator Program Award, 1997. Presidential Early Career Award for Scientists and Engineers, 1996. NASA New Investigator Program Award, 1996. DOE Global Change Distinguished Postdoctoral Fellowship, 1994. Woods Hole Oceanographic Institution Postdoctoral Scholar Award, 1993. ONR Student Oceanography Award, 1993. NASA Graduate Student Researchers Program Award, 1991. NSF Graduate Fellowship, 1988. Woods Hole Oceanographic Institution Summer Student Fellowship, 1986. Sea Grant Fellowship for Undergraduate Research, 1986. National Merit Scholar, 1983.

#### **PUBLICATIONS:**

## **10 Related Publications:**

Sosik, H. M. 2008. Characterizing seawater constituents from optical properties. In M. Babin, C. S. Roesler and J. J. Cullen [eds.], Real-time coastal observing systems for ecosystem dynamics and harmful algal blooms. UNESCO, p. 281-329. (peer reviewed)

Sosik, H.M. and R.J. Olson. 2007. Automated taxonomic classification of phytoplankton sampled with imaging-in-flow cytometry. Limnology and Oceanography: Methods. 5: 204-216.

Olson, R.J. and H.M. Sosik. 2007. A submersible imaging-in-flow instrument to analyze nanoand microplankton: Imaging FlowCytobot. Limnology and Oceanography: Methods. 5:195-203.

Babin, M., J. J. Cullen, C. S. Roesler, P. L. Donaghay, G. J., Doucette, M. Kahru, M. R. Lewis, C. A. Scholin, M. E. Sieracki, and Sosik, H. M.. 2005. New approaches and technologies for observing harmful algal blooms. Oceanography 18: 210-227.

Green, R. E. and H. M. Sosik. 2004. Analysis of apparent optical properties and ocean color algorithms using measurements of seawater constituents in New England continental shelf surface waters. J. Geophys. Res. 109, C03026, doi:10.1029/2003JC001977.

Sosik, H. M, R. J. Olson, M. G. Neubert, and A. R. Solow. 2003. Growth rates of coastal phytoplankton from time-series measurements with a submersible flow cytometer. Limnology and Oceanography. 48: 1756-1765.

Olson, R. J., A. A. Shalapyonok, and H. M. Sosik. 2003. An automated submersible flow cytometer for pico- and nanophytoplankton: FlowCytobot. Deep-Sea Res. I 50: 301-315.

Martin Traykovski, L.V. and H. M. Sosik. 2003. Feature-based classification of optical water types in the northwest Atlantic based on satellite ocean color data. J. Geophys. Res. 108: 3150, doi: 10.1029/2001JC001172.

Sosik, H. M., R. E. Green, W. S. Pegau and C. S. Roesler. 2001. Temporal and vertical variability in optical properties of New England shelf waters during late summer and spring. J. Geophys. Res. 106: 9455-9472.

Sosik, H. M. 1996. Bio-optical modeling of primary production: Consequences of variability in quantum yield and specific absorption. Mar. Ecol. Prog. Ser. 143: 225-238.

## **SYNERGISTIC ACTIVITIES:**

Development of Undergraduate Course on Satellite Remote Sensing in Biological Oceanography at Cornell Univ./Shoals Marine Laboratory; Development of instrumentation for individual cell measurements of photosynthetic properties and for submersible autonomous flow cytometry and cell imaging; Member International Ocean Color Coordinating Group; Member NASA's Ocean Color Research Team; NASA Carbon Cycle and Ecosystems Management Operations Working Group (advance/strategic planning group); Associate Editor for Limnology and Oceanography; Associate Editor for Limnology and Oceanography: Methods.

## **COLLABORATORS & OTHER AFFILIATIONS:**

#### **Collaborators:**

Robert Arnone (NRL), E. Virginia Armbrust (UW), Janet Campbell (UNH), Lisa Campbell (Texas A&M), Hui Feng (UNH), Glen Gawarkiewicz (WHOI), Ruoying He (UNC), Scott Gallager (WHOI), Steve Lentz (WHOI), Steven Lohrenz (Univ. of Mississippi), Sherwin Ladner (NRL), Paul Lyons (NRL), Dennis McGillicuddy (WHOI), William Miller (Dalhousie University), Casey Moore (WETLabs), Michael Moore (WHOI), John Trowbridge (WHOI), Doug Vandemark (UNH), John Wilkin (Rutgers).

## **Graduate and Post Doctoral Advisors:**

Graduate: Sallie W. Chisholm (MIT), Thomas L. Hayward (SIO/UCSD), B. Greg Mitchell (SIO/UCSD); Postdoctoral: Robert J. Olson (WHOI)

# Thesis Advisor and Postgraduate-Scholar Sponsor:

Ph.D Students: Rebecca E. Green, Lorraine Thomas; Postdoctoral Investigators: Michele D. DuRand, Linda V. Martin Traykovski, J. Ru Morrison, Samuel Laney; total graduate students: 3; total post-doctoral investigators: 4.