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| **Curriculum Vitae****Charles L. Gallegos**ADDRESS

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EDUCATION

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| --- | --- |
| 1973 | B.A. Zoology, Duke University , Durham , NC ( *Cum Laude* ) |
| 1979 | Ph.D. Environmental Sciences, University of Virginia , Charlottesville , VA |

PROFESSIONAL ORGANIZATIONS AND AWARDS

|  |  |
| --- | --- |
| Organizational Membership: | American Geophysical UnionAmerican Society of Limnology and OceanographyEstuarine Research FederationAtlantic Estuarine Research SocietyOptical Society of America |
| Awards: | 1994-1995. | Distinguished Visiting Scientist, National Institute of Water and Atmospheric Research, Hamilton New Zealand . |
|   | 1979-1980. | Visiting Fellowship in Government Laboratories, National Research Council , Canada , |
|   | 1978. | Dean's Reserve Fellowship for promising Graduate Students in final stages of dissertation work, University of Virginia . |
|   | 1976-1977. | University Fellowship for outstanding new graduate students, University of Virginia . |
|   | 1969-1973. | Ford Motor Company Fund 4 year college scholarship.  |

 SERVICES TO THE SCIENTIFIC COMMUNITY

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| Chesapeake Bay Management Community |
|   | Submerged Aquatic Vegetation Technical Synthesis-2 Authors? Group Chesapeake Bay Water Clarity Criteria Workgroup |
| Proposal Review Panels |
|   | Ecology and Oceanography of Harmful Algal Blooms, NOAAAgency for International DevelopmentScience Advisory Board, Maryland Power Plant Research Program |
| Proposal Mail Reviewing |
|   | NSF, Biological OceanographyNSF, Polar ProgramsDepartment of Agriculture, Competitive Grants ProgramNOAA, Sea Grant, Coastal Ocean Program (ECOHAB)NASA |
| Journal Manuscript Reviewing |
|   | *Limnology and OceanographyEstuariesJournal of Plankton ResearchWater Resources Bulletin* | *Marine Ecology Progress SeriesJournal of Marine ResearchMarine BiologyEstuarine, Coastal and Shelf Science* |
| Workshops Attended |
|   | Workshop on Remote Sensing in Chesapeake Bay, January 7-8, 2002. Annapolis, MD.Phytoplankton Resource Limitation Workshop, 22-23 May 2001, Cambridge, MD.EMAP Symposium 2001: Coastal Monitoring through Partnerships, 24-27 April 2001Virginia's Tributary Strategy Program Synthesis Workshop, 16-17 March 1998Submerged Aquatic Vegetation, Technical Synthesis II Authors' group, U.S.Environmental Protection Agency, various dates, 1996-1998.Coastal Ocean Benthic Optics Program; Arlington, VA, January 1996Suspended Solids Modeling Workshop; Annapolis, MD, August 1993Photosynthetically Active Radiation Workshop, Melbourne, FL, January 1993Coastal Ocean Program, Principal Investigators' Meeting; Gloucester Pt., VA, Oct. 1992Submerged Aquatic Vegetation Initiative; Melbourne, FL, July 1992EPA Gulf Coast Planning meeting for EMAP and Coastal Wetlands Research Initiative; Sarasota, FL, January 1992 |

SERVICES TO SMITHSONIAN INSTITUTION

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| Institution-wide Committees |
|   | Smithsonian representative to the Interagency Workgroup on Hypoxia and AnoxiaNatural History Library LiaisonS. I. Libraries Users' Advisory Committee (SILUAC, 1992-1993) |
| Supervisory Duties |
|   | Multiple Student Interns3 Post Docs4 Technicians |
| SERC Committees |
|   | Information Technology CommitteeScience Committee |

PUBLICATIONSGallegos, C.L., Jordan T.E., Hines, A.H., Weller, D.E. *Temporal variability of optical properties in a shallow, eutrophic estuary: Seasonal and interannual variability.* Estuarine, Coastal and Shelf Science. 64 (2005) 156-170. [(pdf)](http://www.serc.si.edu/labs/phytoplankton/pdfs/RRInterAnnOP_ECSS05.pdf)Gallegos, Charles L., (2005) *Optical water quality of a blackwater river estuary: the Lower St. Johns River, Florida, USA.* Estuarine, Coastal and Shelf Science. 63 (2005) 57-72. [(pdf)](http://www.serc.si.edu/labs/phytoplankton/pdfs/LSJR_OptWtrQual_ECSS05.pdf)Gallegos, Charles L., Bergstrom, Peter W., (2005) *Effects of a Prorocentrum minimum bloom on light availibility for and potential impacts on submersed aquatic vegetation in the upper Chesapeake Bay .* Harmful Algae 4 (2005). 553-574. [(pdf)](http://www.serc.si.edu/labs/phytoplankton/pdfs/ProroOPs_Gallegos%26BergstromHA05.pdf)2004.       Biber, P.D., H.W. Paerl, C.L. Gallegos, W.J. Kenworthy. 2004. Evaluating Indicators of Seagrass Stress to Light. *In* S.A. Bortone (ed.), Estuarine Indicators. CRC Press, Boca Raton, FL (accepted).2003.       Kemp, W. M., R. A. Batiuk, R. Bartleson, P. Bergstrom, V. Carter, C. L. Gallegos, W. Hunley, L. Karrh, E. W. Koch, J. M. Landwehr, K. A. Moore, L. Murray, M. Naylor, N. B. Rybicki, J. C. Stevenson and D. J. Wilcox. Habitat requirements for submerged aquatic vegetation in Chesapeake Bay: Water quality, light regime, and physical-chemical factors. Estuaries, in press.2002.       Gallegos, C. L. and P. J. Neale. A two-year time series of continuously monitored inherent optical properties in a eutrophic sub-estuary of Chesapeake Bay, pp. 8 pp. In S. A. a. C. Trees [eds.], Ocean Optics XVI. Office of Naval Research.2002.       C. L. Gallegos and P. J. Neale. Partitioning spectral absorption in case 2 waters: Discrimination of dissolved and particulate components. Applied Optics: 4220-4233.2002.       C. L. Gallegos and T. E. Jordan. Impact of the Spring 2000 phytoplankton bloom in Chesapeake Bay on optical properties and light penetration in the Rhode River, Maryland. Estuaries 25: 508-518. [(pdf)](http://www.serc.si.edu/labs/phytoplankton/pdfs/BloomOPs.pdf)2001.       J. R. Dolan and C. L. Gallegos. Estuarine diversity of tintinnids (planktonic ciliates). Journal of Plankton Research 23: 1009-1027.2001.       C. L. Gallegos. Calculating optical water quality targets to restore and protect submersed aquatic vegetation: Overcoming problems in partitioning the diffuse attenuation coefficient for photosynthetically active radiation. Estuaries 24: 381-397.2000.       J. R. Dolan, C. L. Gallegos and A. Moigis. Dilution effects on microzooplankton in dilution grazing experiments. Marine Ecology Progress Series 200: 127-139.2000.       C. L. Gallegos and K. A. Moore. Factors contributing to water-column light attenuation, pp. 16-27. In Batiuk, R. A. et al. [eds.], *Chesapeake Bay submerged aquatic vegetation water quality and habitat-based requirements and restoration targets: A second technical synthesis.* US EPA, Chesapeake Bay Program, Annapolis, MD. 106 p.1997a.       C. L. Gallegos and T. E. Jordan. Seasonal progression of factors limiting phytoplankton pigment biomass in the Rhode River estuary, Maryland (USA). I. Controls on phytoplankton growth. Marine Ecology Progress Series 161: 185-198.1997b.       C. L. Gallegos and T. E. Jordan. Seasonal progression of factors limiting phytoplankton pigment biomass in the Rhode River estuary, Maryland (USA). II. Modeling N versus P limitation. Marine Ecology Progress Series 161: 199-212.1997.       C. L. Gallegos, T. E. Jordan and D. L. Correll. Interannual variability in spring bloom timing and magnitude in the Rhode River, Maryland (USA): observations and modeling. Marine Ecology Progress Series 154: 27-40.1996.       D. W. Coats, E. J. Adam, C. L. Gallegos and S. Hedrick. 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Limnology and Oceanography 28: 698-708.1982.       C. L. Gallegos and T. Platt. Phytoplankton photosynthesis and water motion in surface mixed layers. Deep-Sea Research 29: 65-76.1982.       Platt, T., W. G. Harrison, B. Irwin, E. P. Horne, and C. L. Gallegos. Photosynthesis and photoadaptation of marine phytoplankton in the Arctic. Deep-Sea Research 29: 1159-1170.1981.       C. L. Gallegos and T. Platt. Photosynthesis measurements on natural populations of phytoplankton: Numerical analysis, pp. 103-112. *In* Platt, T. [ed.], *Physiological Bases of Phytoplankton Ecology.* Can. Bull. Fish. Aquat. Sci. 210.1980. C. L. Gallegos, G. M. Hornberger and M. G. Kelly. Photosynthesis-light relationships of a mixed culture of phytoplankton in fluctuating light. Limnology and Oceanography 25: 1082-1092.1980.       T. Platt, C. L. Gallegos and W. G. Harrison. Photoinhibition of photosynthesis in natural assemblages of marine phytoplankton. Journal of Marine Research 38: 687-701.1980.       T. 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Evaluation of an optically based indicator of water clarity: Links to watershed land use. Abstracts of the 17th Biennial Conference of the Estuarine Research Federation, Seattle, WA. September 14-18, 2003, p. 48.2003.       Biber, P. D., H. W. Paerl, W. J. Kenworthy, M. S. Fonseca, and C. L. Gallegos. Linking water quality to SAV health: Indicators of estuarine condition. Abstracts of the 17th Biennial Conference of the Estuarine Research Federation, Seattle, WA. September 14-18, 2003, p. 13.2003.       Barnes, R., and C. L. Gallegos. Influence of particle size on specific-absorption and scattering coefficients of non-algal particulate matter. Presented at the spring meeting of the Atlantic Estuarine Research Society, Atlantic Beach, NC. March, 2003.2003.       Yee, K. and C. L. Gallegos. A comparison of spatial and temporal patterns in water clarity determined by water quality instrumentation and inherent optical properties. Presented at the spring meeting of the Atlantic Estuarine Research Society, Atlantic Beach, NC. March, 2003.2002.       Gallegos, C. L. Patterns and control of primary production by phytoplankton in a shallow, eutrophic estuary, with emphasis on interannual variability. Presented at Phytoplankton Productivity: An appreciation of 50 years of the study of oceans and lakes. Bangor, Wales, March 18-22, 2002.2001.       Gallegos, C. L. The Chesapeake Bay spring 2000 bloom: Insights from automated monitoring of salinity and optical properties. Abstracts of the 16th Biennial Conference of the Estuarine Research Federation, St. Pete Beach, FL. November 4-8, 2001, p. 49.2001.       Gallegos, C. L. and P. J. Neale. Temporal monitoring and spatial mapping of surface optical properties in estuaries as an aid to interpretation of remote sensing data. EMAP 2001: Coastal Monitoring through Partnerships (invited). Pensacola Beach, Florida, April 24-27, 2001.2000.       Gallegos, C. L. and K. Yee. 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Maryland Sea Grant, $61,261.2001-2005.       Development of an optical indicator of habitat suitability for submersed aquatic vegetation for the Atlantic Slope?sub-proposal of the Atlantic Slope Consortium, 'Development, testing, and application of indicators for integrated assessment of ecological and socioeconomic resources of the Atlantic Slope in the Mid-Atlantic States' (with D. Whigham, A. Hines, T. Jordan, P. Marra, and D. Weller). Environmental Protection Agency, $3,900,000 (total to SERC).1998?2002.       CISNet Rhode River: Estuarine optical properties as an integrative response to natural and anthropogenic stressors (with T. Jordan and P. Neale). Environmental Protection Agency, $510,181.1998-2002.       Development of an optical water quality model for the Lower St. Johns River.St. Johns River Water Management District, Florida, $74,948.1992-1993       Determination of optical water quality requirements for growth of seagrasses in the Indian River near Ft. Pierce, FL, with emphasis on the impact of colored water discharges. South Florida Water Management District.(co-PI with W. J. Kenworthy), $49,224.1991-Pres.       Long term studies of phytoplankton dynamics in the Rhode River, MD.Smithsonian Environmental Sciences Program, ~$73,000 P.A. (Variable)1991-1993       Modeling spectral light available to submerged aquatic vegetation in relation to water quality and epiphytic growth. NOAA, Coastal Ocean Program, Estuarine Habitat Program, $80,000.1991-1993       Title: A major new biochemical fraction in phytoplankton photosynthates: Chitan in the "protein fraction". (co-PI with R. A. Smucker, D. L. Correll, and R. Dawson). National Science Foundation, Chemical Oceanography, $291,472. |