

PAUL T. GAYES

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WORK EXPERIENCE

2016- Executive Director, Burroughs and Chapin Center for Marine and Wetland Studies, Coastal Carolina University
2012-2016 Director, Center for Marine and Wetland Studies /School of Coastal and Marine System Science
8/89-7/12 Director, Burroughs and Chapin Center for Marine and Wetland Studies, Coastal Carolina University
8/01-Present Palmetto Professor of Marine Science and Geology, Coastal Carolina University
8/97-8/01 Professor, Marine Science and Geology, Coastal Carolina University
8/93-8/97 Assoc. Professor of Marine Science and Geology, Coastal Carolina University
9/95-5-2010 Adjunct Research Professor-Center for Marine Geology-Dalhousie University
8/87-7/93 Assistant Prof. of Marine Science and Geology, USC-Coastal Carolina College

EDUCATIONAL BACKGROUND

Ph.D., 1987 Coastal Oceanography, Marine Sciences Research Center, State University of New York at Stony Brook.
M.S., 1983, Geoscience-Geology, The Pennsylvania State University
B.S., 1981 Earth and Space Sciences-Geology, State University of New York at Stony Brook.

RESEARCH INTERESTS

Coastal geologic framework influence on coastal behavior, morphology and processes; Spatial and temporal variability in sea level and climate change and associated response; applications of geophysical techniques in resource mapping and characterization, environmental and resource potential of marine renewable energy development; coastal observing systems supporting advanced ocean atmospheric modeling; drivers and response of rapid change in the coastal zone

BOARDS AND FEDERAL/STATE ADVISORY PANELS SERVED

SC DHEC-Office of Coastal Resource Management Beach Front Management Stakeholders Advisory Committee (2021-)
SC Office of Resiliency-Flood Modeling Working Group (2021-)
NOAA-SECOORA-The Nature Conservation Wind Energy Toolkit Steering Committee (2021-)
Appointed by Governor McMaster to the SC Flood Water Commission serving as Co-Chair of the Living Shorelines Sub-Committee (2018-2020)
Southeast Wind Coalition; Academic Wind Research Steering Committee; (2017-)
Program Advisory Board-South Carolina Sea Grant Consortium (2005-present) South Carolina Sea Grant Consortium PAB Finance Committee (2007-2021)
NOAA Grays Reef National Marine Sanctuary Research Advisory Board (2006-2012)
South Carolina Regulatory Task Force on Clean Energy (Technical Advisory Committee) 2009-present
Appointed by Governor Sanford to the South Carolina Governor's Advisory Committee on Climate, Energy and Commerce (CECAC). (2007-2009)
South Carolina Ocean Planning Committee (Dept. of Environmental Health and Control-Office of Ocean and Coastal Resource Management). (2007-2011)
South Carolina Shoreline Change Advisory Committee (DHEC-OCRM) (2007-2010).
Member of 17 person "panel of experts" invited by the US Geological Survey and National Oceanic and

Atmospheric Administration for The U.S. Climate Change Science Program. Wash., DC Feb '08.
Member of 28-person panel invited by USGS, NOAA and US Army Corps of Engineers to generate a “State of Science for Assessing and Mapping Coastal Hazards” report. Final report; Trembanis, A. ed. Aug 2007
Member of the South Carolina STATEMAP Advisory Board (2001-2005)
Faculty Resource Board MARSci-An Online Undergraduate Journal for the Marine Sciences (2001-2005) South Carolina Task Force for Inner Continental Shelf Sand Resources and Critical Habitats
Mineral Management Service-INTERMAR 1994-2004)
Editorial Board: South Carolina Geology (2002-2006)
International Geologic Correlation Programme (UNESCO)-Project 367, Member -American Working Group
International Project Secretary (1993-1997)
International Geologic Correlation Programme (UNESCO) Project 274, Member -American Working Group (1988-1992).

PEER REVIEWED PUBLICATIONS

In Prep

Invited Chapter

Gayes, P.T. Pietrafesa, Nichols, R., L.J. Bao, S., and Hallstrom, J, Integrated Coastal Observing Modeling across the coastal ocean-water shed transition; Bridging across gradients and historical gaps. in Prep to: *Frontiers in Environmental Science: Anticipating and adapting to the Impacts of Climate Change on Low Elevation Coastal Zone*. Wright, L.D., Allen, T., Alain, H., Syvitski, J. and Caruson, K. (eds)

In Review

Wermter, J., Noble, S., Qian, J-H., Viner, B., Werth, D., *Shen, D.*, **Gayes, P.T.**, Pietrafesa, L. and Bao, S., Influence of soil moisture on Sea Breeze in South Carolina Submitted to American Meteorology Society-Monthly Weather Review (MWR-D-22-0316)

Published

Pietrafesa, L.J., S. Bao, **P.T. Gayes**, *D.D. Carpenter*, 2022, v.36, n. 8, p. 10-96-1103. . On the Variability and Trends of the Florida Current in the Straits of Florida. *Journal of Coastal Research*, DOI: 10.2112/JCOASTRES-D-22A-00006

Bao S., L.J. Pietrafesa, **P. T. Gayes**, S. Noble, B. Viner, J-H. Qian, D. Werth, *G. Mitchell, S. Burdette*, 2022. Mapping the Spatial Footprint of Sea Breeze Winds in the Southeastern United States. *Earth and Space Science* open Access, <https://doi.org/10.1002/essoar.10512056.1>

Pietrafesa, L.J., Bao S., **Gayes P.T.**, and Askari, F., 2022, Possibility of Non-Local and Local Oil Spill Pollutions along the Shorelines of the Carolinas, in Margheny, M. Ed., *Oils Spills*, DOI: 10.5772/intechopen.106679

Pietrafesa, L.J. S. Bao, **P.T. Gayes**, *G. Mitchell, S. Burdette*, Viner, B., S. Noble, J-H Qian, D. Werth, 2022. Anatomy of South Carolina U.S.A. Coastal Sea Breeze 2019-2020: *International Journal of Geosciences*, v 13., N 7, DOI: [10.4236/ijg.2022.137031](https://doi.org/10.4236/ijg.2022.137031)

Shen, D. Bao, S., Piefracesa, L.J. and **Gayes, P.T.**, 2022 Improving Numerical Model Predicted Float Trajectories by Deep Learning *Earth and Space Science* 9(9) DOI: [10.1029/2022EA002362](https://doi.org/10.1029/2022EA002362)

Viner, B. Noble, S., Qian, J.H., Werth, D. **Gayes, P.T.**, Pietrafesa, L.J., and Bao, S., 2021, Frequency and Characteristics of Inland Advecting Sea Breezes in the Southeast United States, *Atmosphere*, 12 (8), 950 <https://doi.org/10.3390/atmos12080950>

L. J. Pietrafesa, **P. T. Gayes**, S. Bao, T. Yan, D. A. Dickey, *D. D. Carpenter, T. G. Carver*: 2021: On the Variability of Charleston South Carolina Winds, Atmospheric Temperatures, Water Levels, Waves and Precipitation, *International Journal of Geoscience*, V 12, N 5, DOI: [10.4236/ijg.2021.125027](https://doi.org/10.4236/ijg.2021.125027)

Pietrafesa, L.J., *H. Zhang*, S. Bao, P.T. **Gayes**, J. Hallstrom, 2019. On Coastal, Inland and Upland Flooding During Extreme Compound Events. *Journal of Marine Science & Engineering*, 7(10), 336; <https://doi.org/10.3390/jmse7100336>

Pietrafesa, L.J., D.A. Dickey, T.M. Henwood, **P.T. Gayes**, S. Bao, T.Y. Yan, 2019. Statistical & Empirical Analyses of Haiti Cholera, Disease Post Mortems. *Journal of Environmental Science*. Vol. 2, 2.

- Gayes PT**, Knapp CC, Knapp J, Brantley D, White S, Battista B, Spirek JD, Brown DM, Christian LM, Bradley RJ. 2019. Atlantic Offshore Wind Energy Development: Geophysical Mapping and Identification of Paleolandscapes and Historic Shipwrecks Offshore South Carolina. Conway (SC): US Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2019- 008. 189 p.
- Pietrafesa, L.J., Dickey, D.A., Henwood, T.M., **Gayes, P.T.**, Bao, S. and Yan, T., 2019, Statistical and Empirical Analysis of Haiti Cholera Post Mortems, *Journal of Environmental Science Current Research*, DOI: 10.24966/ESCR-5020?100012.
- Zhai, J., Hallstrom, J.O., Bao, S., **Gayes, P.**, and Pietrafesa, L., 2019, "Mobile Infrastructure for Monitoring, Modeling, and Forecasting of Coastal Weather Events. Phase I: Building the Smart Drifter.;" *Journal of Computer and Communications*, 07 (07) 85-99 DOI: [10.4236/jcc.2019.77009](https://doi.org/10.4236/jcc.2019.77009)
- Pietrafesa, L.J., Dickey, D.A., Henwood, T.M., **Gayes, P.T.**, Bao, S. and Yan, T., 2019, Statistical and Empirical Analysis of Haiti Cholera Post Mortems, *Journal of Environmental Science Current Research*, DOI: 10.24966/ESCR-5020?100012
- Pietrafesa, L.J., *Zhang, H.*, Bao, S., **Gayes, P.T.** and Hallstrom, J., Coastal Flooding and Inundation and Inland Flooding due to Downstream Blocking, 2019, *J. Mar. Sci. Eng.* 2019, 7(10),336; <https://doi.org/10.3390/jmse7100336>
- Pietrafesa, L., Miller, J.M. and **Gayes, P.T.**, 2018, A Comparison of Fish Kills in the Pamlico River and Neuse River in Coastal North Carolina (A Symptom) and Abiotic Factors (The Root Cause). *Ocean and Fisheries*.00/O DOI: 10.19080/OFOAJ.2018.07.555701FOAJ
- Jisan, M.A., Bao, S., Pietrafesa, L.J., Shen, D., **Gayes, P.T.**, Hallstrom, J., 2018. Hurricane Matthew (2016) and its impact under global warming scenarios. *Model. Earth Syst. Environ.* 1–13.
- Pietrafesa, L.J. and **Gayes, P.T.**, 2018, Power Estimates of Coastal Zone Winds and Waves via Box, Whisker and Outlier Distributions at Atlantic Eastern Seaboard and Pacific Ocean Energy Sites, *Oceanography and Fisheries*, V. 7 Issue 3. DOI: 10.19080/OFOAJ.2018.07.555713
- Mansur, A.J.*, Bao, S., Pietrafesa, L., *Shen, D.*, **Gayes, P.T.** and Hallstrom, J., 2018, Hurricane Matthew (2016) and its impact under global warming scenarios, *Modeling Earth Systems and Environment*. <https://doi.org/10.1007/s40808-018-0420-6>.
- Anderson, E., Brantley, D., Knapp, C., Batista, B., **Gayes, P.T.**, and Maschmeyer, C., 2018, Geomorphological Assessment of the North Myrtle Beach (SC) Continental Shelf for Wind Energy Development, *Southeastern Geographer*, V 58 (2) pp. 181-192
- Bao, S., **Gayes, P.T.**, and Pietrafesa, L.J., 2018, The Need and Rationale for a Coastal Flood Risk Index [OCEANS 2018 MTS/IEEE Charleston](https://doi.org/10.1109/OCEANS.2018.8604927)(Conference Proceedings) DOI: [10.1109/OCEANS.2018.8604927](https://doi.org/10.1109/OCEANS.2018.8604927)
- Buster, N., Miselis, J., Okano, S., **Gayes, P.** and Hill, J., 2017, Coastal geophysical data collected in 2016 nearshore Cape Canaveral, Florida; US Geological Survey Digital Data Release, <https://doi.org/10.5066/F7833Q8J>
- Pietrafesa L.J, Shaowu Bao, Huang NE, **Gayes P.T.**, Yan T, and Slattery, M., (2016) Great Lakes Water Levels: Decomposing Time Series for Attribution. [Advances in Data Science and Adaptive Analysis](https://doi.org/10.1142/S2424922X16500091) 08(02):1650009. DOI: [10.1142/S2424922X16500091](https://doi.org/10.1142/S2424922X16500091)
- Pietrafesa, L.J., Slattery, M., Yan, T., Bao, S and **Gayes, P.T.**, 2015, "On Sea Level Variability and Trends in United States Coastal Waters and Relationships with Climate Factors" *Advances in Adaptive Data Analysis*, 7, no. 01n02 (2015): 1550005.
- Pietrafesa, L.J., Peng, M. Bao, S., Yan, T. and **Gayes, P.T.**; 2014 "Storm Induced Water Levels in Norfolk Virginia and Chesapeake Bay: A Model and Observations", *Advances in Meteorology: Special Issue Verification of Hazardous Weather Events in Meteorological Model*, *J Coast Zone Manag* 18:415. doi:10.4172/jczm.1000415
- Yan, T., S. Bao, **P. T. Gayes**, L. J. Pietrafesa and R. L. Nichols, 2015: Breaking wave simulation and verification - A case study of hurricane IRENE landing on Outer Banks, North Carolina. *Int. Journal of Wind and Renewable Energy*, Vol. 4 Issue 1: 16-28, ISSN: 2277-3975
- Schwab, W.C., Baldwin, W., Denny, J, Warner, J., **Gayes, P.T.**, Hapke, C. and List, J., 2014, Modification of the Quaternary Stratigraphic Framework of the Inner Continental Shelf Offshore of Fire Island by Holocene Marine Transgression; An example offshore of Fire Island, New York. 2014, *Marine Geology*, DOI:10.1016/j.margeo.2014.06.011
- Yan, T., L. J. Pietrafesa, D. A. Dickey and **P. T. Gayes**, 2014: Seasonal Prediction of Landfall Hurricanes along East Seaboard of the United States. *Int. Journal of Climatology* DOI: 10.1002/joc.416

- Yan, T., S. Bao, L. J. Pietrafesa and **P. T. Gayes**, 2014: Modal Inter-Comparisons between North Atlantic Accumulated Cyclone Energy and the Atlantic Multi-Decadal Oscillation, and the Pathology of the 2014 Hurricane Season. Special Issue: Weather Forecasting, Nature and Science. DOI:10.4236/ns.2014.68059. Vol.6, No.8
- Schwab, W.C., Baldwin, W.E., Hapke, C.J., Lentz, E.E., **Gayes, P.T.**, Denny, J.F., List, J.H. and Warner, J.C., 2013, Geologic Evidence for Onshore Sediment Transport from the inner continental shelf: Fire Island, New York, *Journal of Coastal Research*. V.29, n 3, p 526-544,
- J.F. Denny, W.C. Schwab, W.E. Baldwin, W.A Barnhardt, **P.T. Gayes**, R.A. Morton, J.C. Warner, N.W. Driscoll, M.S. Harris, E. E. Wright, G. Volgaris, M.P. Katuna, and T.R. Putney, 2013, Holocene Sediment Distribution on the Inner Continental Shelf of Northeastern South Carolina: Implications for the regional sediment budget and long-term shoreline response, *Continental Research* V 56, p. 56-70
- Pietrafesa, L.J., Dickey, D.A., **Gayes, P.T.**, Yan, T., Epps, J.M., Hagan, M., Boa, S., Peng, M., 2013, On Atmospheric-Oceanic-Land Temperature Variability and Trends, 2013, *International Journal of Geoscience*. V.4, n.2, p. 417-443. <http://dx.doi.org/10.4236/ijg.2013.42040>
- A.L. Alkire, **P.T. Gayes**, C. Knapp and D.F. Williams, 2011, Depositional history and the effects of sea level rise on Thousand Acre Marsh, Georgetown, SC, USA, *South Carolina Journal*
- Slattery, M., Bokuniewicz, H. and **Gayes, P.T.**, 2011, Flash Rip Currents on Ocean Shoreline of Long Island, in; Leatherman, S. and Fletemeyer, eds., *Rip Currents: Beach Safety Physical Oceanography and Wave Modeling*, Chapter 2, p 31-45. CRC Press, Boca Raton, FL
- Viso, R., McCoy, C., **Gayes, P.T.**, and Quafisi, D., 2010, Geological Controls on Submarine Groundwater Discharge in Long Bay, SC, *Continental Shelf Research*, V. 30, pp 335-341.
- Crowe, S.E, **Gayes, P.T.**, Viso, R.F., Bergquist, D.C., Jutte, P.C., and Van Dolah, R.F, 2010 Impact of the Charleston Ocean Dredged Material Disposal Site on nearby Hard Bottom Reef Habitats, *Marine Pollution Bulletin* 60 (2010) 679–691
- Hapke, C.J., Lentz, E.E., **Gayes, P.T.**, Williams, S.J., McCoy, C. and Schwab, W.C., 2010, A Review of Sediment Budget Imbalances along Fire Island, New York: Can Nearshore Geologic Framework and Patterns of Shoreline Change Explain the Deficit? *Journal of Coastal Research- Volume 26, Issue 3* pp. 510-522
- Springer, A., Knapp, C., **Gayes, P.T.**, and Gardner, L.R., 2010, Correlation of Ground Penetrating Radar with Subsurface Stratigraphy to Forecast Affects from Rising Sea Level in a Brackish Marsh: Georgetown County, SC, USA, *Southeastern Geology* v.47, no.2, pp. 95-104.
- Park, J-Y., **Gayes, P.T.**, and Wells, J.T., 2009, Monitoring Beach Re-Nourishment along the Sediment Starved Shoreline of the Grand Strand, South Carolina, *Journal of Coastal Research*. v. 25, p 336- 349.
- Hill, J.C., **Gayes, P.T.**, Driscoll, N.W., Johnstone, E.A., and Sedberry, G, 2008, Iceberg scours along the southern U.S. Atlantic margin. *Geology*, v.36, no. 6, p 447-450.
- Miselis, J., **Gayes, P.T.**, McNinch, J., Goff, J., and Rodriguez, A., 2008, Synthesizing Shallow-Water Geophysical Data for Shoreline Evolution Models; *EOS- Transactions American Geophysical Union*, Vol. 89, No. 41
- Hill, J.C., Driscoll, N.W., Brigham-Grette, J., Donnelly, J.P., **Gayes, P.T.**, and Keigwin, L.D., 2007. New evidence for high discharge to the Chukchi shelf since the Last Glacial Maximum, *Quaternary Research*, 68: 271-279.
- Reynolds, B.M., Wren, P.A. and **Gayes, P.T.**, 2007, Decadal Evolution of Shoreface geometry in South Carolina, USA: in Krauss, N., ed, *Coastal Sediments*, Amer. Soc. Of Civil Eng., New Orleans
- Barnhardt, W., Denny, J.F., Baldwin, W.E., Schwab, W.C., Morton, R, **Gayes, P.T.** and Driscoll, N, 2007, Geologic Framework of the Long Bay inner shelf: Implications for coastal evolution in South Carolina, in Krauss, N., ed, *Coastal Sediments*, Amer. Soc. Of Civil Eng., New Orleans
- Baldwin, W.E., Morton, R.A., Putney, T.R., Katuna, M.P., Harris, M.S., **Gayes, P.T.**, Driscoll, N.W., Denny, J.F., and Schwab, W.C., 2005, Migration of the Pee Dee River System Inferred from Ancestral Paleochannels Underlying the South Carolina Grand Strand and Long Bay Inner Shelf, *Geological Society of America Bulletin*, vol. 118, no. 5-6, pp. 533-549.

- Gayes, P.T.**, Schwab, W.C. and Eiser, W.C., 2005, An Integrated Approach to Assessing Natural and Constructed Beach Systems: The South Carolina Coast (USA); 2005, in Bruun, P. (ed), Port and Coastal Engineering; Developments in Science and Technology; Journal of Coastal Research, Special Issue No. 46.p. 513-525.
- Harris, M.S., **Gayes, P.T.**, Kindinger, J.L., Flocks, J.G., Krantz, D.E. and Donovan, P., 2005 Quaternary Geomorphology and Modern Coastal Development in Response to an Inherent Geologic Framework: An Example from Folly Beach, South Carolina: Journal of Coastal Research, v. 21, No 1., p. 49-65.
- G. M. Kent, J. M. Babcock, N. W. Driscoll, A. J. Harding, J. A. Dingler, G. G. Seitz, J. V. Gardner, L. A. Mayer, C. R. Goldman, A. C. Heyvaert, R. C. Richards, R. Karlin, C. W. Morgan, **P. T. Gayes** and L. A. Owen, 2005, A 60ka Record of Extension Across the Western Boundary of the Basin and Range Province: Estimate of Slip-Rates from Offset Shoreline Terraces and a Catastrophic Slide Beneath Lake Tahoe: Geology, v, n.5, p.
- Ojeda, G. Y., **Gayes, P.T.**, Van Dolah, R.F. and Schwab, W.C., 2004, Spatially Quantitative Seafloor Habitat Mapping: Example From the Northern South Carolina Inner Continental Shelf: *Estuarine Coastal and Shelf Science*, v. 59, p. 399-416.
- Scott, D.B., Collins, E.C., **Gayes, P.T.** and Wright, E, 2003, Records of pre-historic hurricanes on the South Carolina coast based on micropaleontological and sedimentological evidence with comparison to other Atlantic coast records: *Geological Society of America Bulletin*, vol.115, no.9, pp.1027-1039, Sep 2003
- Gayes, P.T.**, Schwab, W.C., Driscoll, N.W., Morton, R.A., Baldwin, W.E., Denny, J.J., Wright, E.E., Harris, M.S., Katuna, M.P. and Putney, T.R., 2003, Sediment Dispersal pathways and conceptual sediment budget for a sediment starved embayment: Long Bay: in Davis, R. Sallenger, A. and Howd, P., *Coastal Sediments*, American Society of Civil Engineers, St. Petersburg, FL
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- Gayes, P.T.**, Baldwin, W.E., Van Dolah, R.F., Jutte, P.C., Eiser, W.C. and Hansen, M. 2001, Systematic Coastal Monitoring: The South Carolina Coast (USA): in Kraus, N.C and Larson, L., eds, *Coastal Dynamics '01*, American Society of Civil Engineers, Lund, Sweden,
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- Collins, E.S., Scott, D.B., **Gayes, P.T.** and Medioli, F.S., 1995, Foraminifera in Winyah Bay and North Inlet, South Carolina: Relationship to Local Pollution Sources: *Journal of Foraminiferal Research*, v. 25, no. 3, p 212-223.
- Scott, D.B., **Gayes, P.T.** and Collins, E.S., 1995, Mid-Holocene Precedent for a future rise in sea-level along the Atlantic coast of North America: *Journal of Coastal Research*: v. 11, n. 3, p. 615-622.
- Gayes, P.T.**, Scott, D.B., Collins, E. and Nelson, D.D., 1993, A mid-Holocene sea level irregularity in South Carolina; in Wehmiller, J. and Fletcher, C., *Quaternary Coasts of the United States: Marine and Lacustrine Systems*: SEPM Special Publication #48.
- Gayes, P.T.**, Nelson, D.D. and Ward, T., 1992, Ancestral Channels of the Pee Dee River on the inner continental shelf of South Carolina: *South Carolina Geology*, v. 34, p. 53-57.
- Gayes, P.T.** and Bokuniewicz, 1991, Estuarine Paleoshorelines in Long Island Sound, in Gayes, P.T., Lewis, R.S. and Bokuniewicz, H.J., eds., Quaternary Geology of Long Island Sound and Adjacent Coastal Areas, *Journal of Coastal Research*-SI No. 11., p. 39-55.
- Gayes, P.T.**, Bokuniewicz, H.J. and Lewis, R., eds., 1991, Quaternary Geology of Long Island Sound and

Adjacent Coastal Areas: *Journal of Coastal Research*, SI No. 11, 227 p.

Gayes, P.T., 1991, Post-Hurricane Hugo Side Scan Sonar Survey; Impacts to Nearshore Morphology; in Pilkey, O. and Finkle, C., The Impacts of Hurricane Hugo-September 10-22, 1989, in Pilkey, O.H. and Finckle, C., eds., *Journal of Coastal Research*: SI 8, p. 95-113.

Gayes, P.T., Bokuniewicz, H.J. and Newman, W.S., 1987, Late Wisconsinan and Holocene fluctuations in sea level rise; *Northeastern Environmental Science*, v.6, n. 2, p. 69-75

TECHNICAL REPORTS TO FEDERAL/STATE AGENCIES

BOEM

Gayes PT, Knapp CC, Knapp J, Brantley D, White S, Battista B, Spirek JD, Brown DM, Christian LM, Bradley RJ. 2019. Atlantic Offshore Wind Energy Development: Geophysical Mapping and Identification of Paleolandscapes and Historic Shipwrecks Offshore South Carolina. Conway (SC): US Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2019- 008. 189 p.

US Geological Survey Circular

W. Schwab, P. Gayes, R. Morton, N. Driscoll, W. Baldwin, W. Barnhardt , J. Denny, M.S. Harris, G. Voulgaris, J. Warner, and E. Wright, In Barnhardt. W., 2009, Coastal Change Along the Shore of Northeastern South Carolina: The South Carolina Coastal Erosion Study; U.S. Geological Survey Circular 1339.

US Geological Survey Open File Reports

W. Schwab, P. Gayes, R. Morton, N. Driscoll, W. Baldwin, W. Barnhardt , J. Denny, M.S. Harris, G. Voulgaris, J. Warner, and E. Wright, In Barnhardt. W., 2008, Coastal Change Along the Shore of Northeastern South Carolina: The South Carolina Coastal Erosion Study; U.S. Geological Survey Open-File Report 2008-1206

Denny, J.F., Baldwin, W.E., Schwab, W.C., Gayes, P.T., Morton, R and Driscoll, N.W., 2007, Modern Sediment Distribution on the inner shelf of South Carolina's Long Bay from Little River Inlet to Winyah Bay, Open File Report- US Geological Survey 2005-1345

Baldwin, Wayne E; Morton, Robert A; Denny, James F; Dadisman, Shawn V; Schwab, William C; Gayes, Paul T; Driscoll, Neal W, 2004 Maps showing the stratigraphic framework of South Carolina's Long Bay from Little River to Winyah Bay; Open-File Report - U. S. Geological Survey, Report: OF 2004-1013, 2004

Swift, B.A., Paskevitch, V.F., Denny, J.F., Cross, V.A., Schwab, W.C. and Gayes, P.T., 1997, Side-scan sonar image of the inner shelf off Folly Beach, SC.: US Geological Survey Open File Report 97- 298, 10p.

US Geological Survey Administrative Report

Schwab, W.C, Gayes, P.T and Denny, J. F., 2002, Preliminary Interpretation of the USGS Geophysical Survey off Folly Beach SC: Sampling Strategy for Sand Resources Investigation: Report prepared for the US Army Corps of Engineers-Charleston District, 16. p

U.S. Dept. of Interior-Minerals Management Service-INTERMAR

Wright, E., Gayes, P.T., Donovan-Ealy, P., Baldwin, W.E., and Harris, M.S., 2000, Assessment of Beach Nourishment Resources on the Inner Shelf Seaward of Pawleys Island, South Carolina: Final Report of the South Carolina Task Force on Offshore Sand Resources and Critical Habitats, Submitted to the US Dept of Interior-Minerals Management Service-INTERMAR program. 94p

Gayes, P.T., Donovan-Ealy, P., Harris, M.S. and Baldwin, W, 1998, Assessment of Beach Renourishment Resources on the Inner Shelf off Folly Beach and Edisto Island, South Carolina: Final Report of the South Carolina Task Force on Offshore Sand Resources and Critical Habitats, Submitted to the US Dept. of Interior-Minerals Management Service-INTERMAR program. 44p.

Van Dolah, R.F., Digre, B.J., Gayes, P.T., Donovan-Ealy, P. and Dowd, M.W., 1998, An Evaluation of Physical Recovery Rates in Sand Borrow Sites Used for Beach Renourishment Projects in South Carolina: Final Report of the South Carolina Task Force on Offshore Resources: State of South Carolina and Minerals Management Service. 76p + appendices

Wright, E., Gayes, P.T., Donovan-Ealy, P., and *Baldwin, W.*, 1999 Assessment of Beach Nourishment Resources on the Inner Shelf off Hilton Head Island, SC: Final Report of the South Carolina Task Force on Offshore Resources: State of South Carolina and Minerals Management Service. 76p appendices

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- Gayes, P.T. and Nelson, D.D., (1994-1995; \$194,020) Project BERM-Beach Erosion Research and Monitoring: US Geological Survey/SC DHEC-OCRM
- Gayes, P.T. (1994-1995; \$50,000) SC Task Force on Inner Shelf Sand Resources and Critical Habitats: Assessment of South Carolina's Sand Resources and Critical Habitats. Edisto Island and Previous Borrow Areas on the inner shelf: U.S. Minerals Management Service-INTERMAR/SC DNR
- Gayes, P.T., (1994-1995; \$17,370) Paleodrainage and inner shelf geologic framework, South Carolina Continental Shelf: MMS Continental Margins Program
- Gayes, P.T., (1994-1995; \$15,000) Center for Marine and Wetland Studies Operations Horry County Higher Education Commission
- Gayes, P.T. and Nelson, D.D. (1993-1994; \$152,000) Project BERM, Beach Erosion Research and Monitoring: U.S. Geological Survey-SC Coastal Council
- Gayes, P.T., (1993-1996; \$114,529) Folly Beach, South Carolina Beach Renourishment Project Evaluation US Army Corps of Engineers
- Young, R. and Gayes, P.T. (1993-1994; \$26,000) Marine Science for Junior Scholars Program SC Dept. of Education
- Gayes, P.T., (1993-1994; \$18,500) Center for Marine and Wetland Studies Operations, Horry County Higher Education Commission
- Gayes, P.T., (1992-1993; \$49,978) INTERMAR TASK FORCE Assessment of South Carolina's Sand Resources and Critical Habitats. US Minerals Management Service U.S. Minerals Management Service-INTERMAR/SC Department of Natural Resources
- Gayes, P.T. and Nelson, D.D. (1992-1993; \$ 20,678) Regional stratigraphic and geologic framework along the inner continental shelf of South Carolina: U.S. Minerals Management Service
- Gayes, P.T. and Nelson, D.D., (1992-1993; \$130,000) Project BERM, Beach Erosion Research and Monitoring: U.S. Geological Survey-SC Coastal Council
- Nelson, D.D. and Gayes, P.T. (1992-1993; \$ 14,750) Temporal and Spatial variability of the Grand Strand beach system: U.S. Geological Survey-SC Coastal Council
- Gayes, P.T., (1992-1993; \$ 1,100) Seismic Reflections Studies: mid-shelf region of Delaware University of Delaware
- Ferguson, A. and P.T. Gayes. (1992-1993; \$ 14,000) Marine Science for Junior Scholars Program SC Dept. of Education
- Gayes, P.T., (1992-1993; \$25,000) Center for Marine and Wetland Studies Operations Horry County Higher Education Commission

- Gayes, P.T., (1992-1993; \$2,000) Environmental Programs-Student Water Quality Monitoring Projects Oceanview Foundation
- Gayes, P.T. and Scott, D.B., (1991-1992; \$ 28,184) Holocene Paleo-environmental and Sea Level Reconstructions; North Inlet, South Carolina: National Science Foundation
- Gayes, P.T. and Nelson, D.D., (1991-1992; \$ 20,085) Exploration of South Carolina's Inner Shelf for Economic Heavy Minerals and Beach Renourishment Resources. US Mineral Management Service
- Gayes, P. T., (1991-1992; \$ 1,000) High resolution Seismic Survey Indian River Lagoon Florida Florida Institute of Technology
- Gayes, P.T., (1991-1992; \$ 25,000) Operations Budget Center for Marine and Wetland Studies Horry County Higher Education Commission Gayes, P.T., (1991-1992; \$ 2,000) Wetlands Programs Oceanview Foundation
- O'Brien, A.A. and Gayes, P.T., (1991-1992; \$18,000) Marine Science for Junior Scholars Program SC Dept. of Education
- Gayes, P.T. and Nelson, D.D., (1990-1991; \$18,480) SC Mineral Management Survey and Shelf Stratigraphy: U.S. Dept. of Interior-Mineral Management Service.
- Gayes, P.T., (1990-1991; \$ 3,000) Post-Hugo Side Scan Sonar Survey of the Grand Strand Region S.C. Coastal Council.
- Gayes, P.T., (1990-1991; \$ 6,300) Sonar Study of the Myrtle Beach Nearshore Area; implications to potentially hazardous debris; City of Myrtle Beach.
- Gayes, P.T., (1990-1991; \$ 20,000) Center for Marine and Wetland Studies Operations Horry County Higher Education Commission
- Gayes, P.T., (1990-1991; \$ 1,500) Side Scan Sonar Survey Isle of Palms to Folly Beach South Carolina Coastal Council
- Gayes, P.T., (1990-1991; \$ 1,280) Post-Hurricane Hugo Side Scan Sonar Survey Murrells Inlet-Garden City Garden City POA and Georgetown County.
- Gayes, P.T., (1990-1991; \$3,000) Public forum series in Marine Environmental Issues: Oceanview Foundation/MB Hotel/Motel Association
- Nelson, A.A. and P.T. Gayes, (1990-1991; \$ 14,000) Marine Science for Junior Scholars Program. SC Department of Education
- Gayes, P.T. and Nelson, D.D., (1989-1991; \$128,386) Late Quaternary evolution of the inner continental shelf and coastal zone of South Carolina: South Carolina Commission of Higher Education-Cutting Edge Initiative
- Nelson, D.D. and Gayes, P.T., (1989-1990; \$ 18,480) SC Mineral Management Survey and Shelf Stratigraphy: U.S. Dept. of Interior-Mineral Management Service.
- Gayes, P.T., (1989-1990; \$ 5,000) Junior Scholarship Program in Marine Science S.C. Dept. of Education
- Gayes, P.T. (1989-1990; \$ 4,300) Junior Scholars Program in Marine Science Horry County Commission of Higher Education
- Gayes, P.T., (1989-1990; \$ 14,000) Graphic recorder instrumentation for sub-bottom profiler City of Myrtle Beach
- Gayes, P.T., (1989-1990; \$9,900) Acquisition of Sub-bottom profiler and facilitation of the Coastal Ocean Initiative. South Carolina Sea Grant
- Gayes, P.T., (1988-1989; \$ 3,000) Stable carbon isotopes of the organic material from USGS cores in Long Island Sound: Possible indicators of late Pleistocene Marine Influence: University of South Carolina, Faculty Research and Productive Scholarship Grants

PROFESSIONAL PAPERS DELIVERED

International Conferences

- Zhai, J., Hallstrom, J.O., Bao, S., **Gayes, P.**, and Pietrafesa, L., "Mobile Infrastructure for Monitoring, Modeling, and Forecasting of Coastal Weather Events. Phase I: Building the Smart Drifter, The 6th Conference on Sensors and Networks, Guilin, China, (2019).
- Gayes, P.T., van der Plassche, O. and Springer, A. 2009, *Late Holocene Relative Sea Level Change Along Northern South Carolina; New Data from Murrells Inlet and Winyah Bay*, International Geological Correlation Programme Annual Meeting, Myrtle Beach, SC.
- Slattery, M., Bokuniewicz, H.J. and Gayes, P.T., 2010, Incipient rip-current statistics in an open coast, 1st International Rip Current Symposium, Miami, FL Feb 2010
- Gayes, P.T., Schwab, W.C., Driscoll, N.W., Morton, R.A., Baldwin, W.E., Denny, J.J., Wright, E.E., Harris, M.S., Katuna, M.P. and Putney, T.R, 2003, Sediment Dispersal pathways and conceptual sediment budget for a sediment starved embayment: Long Bay: *Coastal Sediments*, Amer. Soc. of Civil Engineers, St. Petersburg, FL
- Bernstein, D.F., Freeman, C., Forte, M.F., Gayes, P.T., Park, J and Mitsova, H., 2003, Survey Design Analysis for three-dimensional mapping of beach and nearshore morphology: *Coastal Sediments*, Amer. Soc. of Civil Eng., St. Petersburg, FL
- Gayes, P.T., Baldwin, W.E., Van Dolah, R. F., Jutte, P., Eiser, W.C., and Hansen, M., June 2001, Systematic Coastal Monitoring: The South Carolina Coast (USA): International Symposium on Coastal Engineering and Science of Coastal Sediment Processes: American Society of Civil Engineers: Lund, Sweden.
- Thieler, E.R., Schwab, W.C., Gayes, P.T., Pilkey, O.H., Cleary, W.J. and Scanlon, K.M., 1999, Paleoshorelines of the US Atlantic and Gulf Continental Shelf: Evidence for still stands and rapid rises during deglaciation: The Non-Steady State of the Inner Shelf and Shoreline: Coastal Change on the Time Scales of Decades to Millennia: Annual Meeting of the International Geological Correlation Program; Honolulu, HI.
- Gayes, P.T., Harris, M.S., Kindinger, J. and Schwab. B., 1996, Coastal Morphology and Shoreface Evolution International Symposium on Late Quaternary Records of Rapid Change: Application to present and future conditions, International Geologic Correlation Program, Project 367, Sydney, Australia.
- Collins, E.S., Scott, D.B. and Gayes, P.T., 1996, Hurricane Prediction in South Carolina: can we get a reliable record? International Symposium on Late Quaternary Records of Rapid Change: Application to present and future conditions, International Geologic Correlation Program, Project 367, Sydney, Australia.
- Gayes, P.T., 1995, Examples of rapid coastal change in South Carolina, USA. International Symposium on Quaternary records of Rapid Coastal Change: International Geological Correlation Program Project-367, Fort William, Scotland
- Gayes, P.T., 1994, Submarine Evidence of Sea Level since 20 ka from the eastern United States: European Research Conference on Continental Shelf Evidence of Sea Levels over the Last 20 ka., St. Martin, Germany (*Invited by European Research Foundation*)
- Gayes, P.T., 1993, A Mid-Holocene sea level fluctuation as a possible glimpse at global sea level in the future: Hilton Head Island International Coastal Symposium: Hilton Head Island, SC
- Gayes, P.T., 1993, Differential Nearshore Response to Large Storms: Interplay of Inner Shelf Stratigraphy, Coastal Development and Storm Processes: Hilton Head Island International Coastal Symposium: Hilton Head Island, South Carolina
- Scott, D.B., Gayes, P.T., Collins, E., Gielstra, N. and Nelson, D., 1993, Holocene sea level change along the east coast of North America: A possible glimpse at future change: International Geologic Correlation Programme Project 274 Final Meeting. Oostduinkerke, Belgium
- Collins, E.S., Scott, D.B. and Gayes, P.T., 1992, Late Holocene paleoenvironmental and sea-level reconstructions along the South Carolina coast: Fourth International Conference on Paleoceanography: Short- and Long-Term Global Change: Records and Modelling: Kiel, Germany.

- Gayes, P.T., Scott, D.B., Collins, E., Nelson, D.D., Nelson, A, Ward, T., and Radcliffe, D., 1991, A Holocene relative sea-level irregularity in South Carolina, U.S.A., SEPM/IGCP International Symposium on Quaternary Shorelines; Tallahassee, Fla.
- Gayes, P.T., Nelson, D.D., Scott, D.B. and Collins, E., 1990, A new look at late Holocene sea level along the South Carolina coast, U.S.A., International symposium on Quaternary shorelines: evolution, processes and future changes: Annual Meeting of IGCP Project 274, La Plata, Argentina
- Gayes, P.T., Oldale, R.N., Bokuniewicz, H.J. and Lewis, R., 1989, Post- glacial sea level rise and coastal evolution of southern New England, USA, Proceedings of the International Symposium on Coastal Evolution, Management and Exploration, (International Geological Correlation Program Project 274), Ipoh, Malaysia.
- Gayes, P.T., 1988, Estuarine Paleoshorelines; sites of enhanced preservation of the local relative submergence histories and associated coastal response; Proceedings of the International Symposium on Theoretical and Applied Aspects of Coastal and Shelf Evolution, Past and Future; International Geological Correlation Program Project 274, Amsterdam, Netherlands
- Gayes, P.T. and Bokuniewicz, H.J., 1987, Paleoshorelines and Sea Level Fluctuation, Penrose Conference on Late Quaternary Sea Level Rise, Ferry Reach, Bermuda.

National
Conferences

- Gayes, P.T., 2019 The South Carolina Floodwater Commission: The Living Shorelines Task Force: A call to action in a changing world”, American Shore and Beach Preservation Association Annual Meeting Myrtle Beach Oct 2019
- Barineau, P and Gayes, P.T. 2019 Beach morphology and issues along SC’s Grand Strand: Myrtle Beach to Waties Island. American Shore and Beach Preservation Association Annual Meeting Conference Field Excursion: October 2019
- Boyce, C and Gayes, P.T., The Spatiotemporal Evolution of the Mid to Lower Shoreface, Grand Strand region, SC, American Shore and Beach Preservation Association Annual Meeting Myrtle Beach Oct 2019
- Gayes, P.T., Pietrafesa, L.J., Bai, S., Hallstrom, J.O., Stirling, D. and Li, X., 2018, On the Observational Network Needed to Support Modeling Architecture Necessary for Coastal and Inland Flooding, American Geophysical Union Annual Meeting, Washington DC
- Bao, S., Pietrafesa, L.J., Gayes, P.T., Hallstrom, J., and Stirling, D., 2018, Modeling Architecture Necessary for Prognostications of Coastal and Inland Flooding, 2018, American Geophysical Union Annual Meeting, Washington DC
- Post, C., Cope, M., Mihailova, E.A., Hallstrom, J., Gayes, P.T., and Gerad, P., 2018, Monitoring spatial and temporal variation of dissolved oxygen, turbidity and water temperature in the Savannah River using a sensor network, American Geophysical Union Annual Meeting, Washington DC
- Shaowu Bao, T. Yan, L. Pietrafesa, P. Gayes, R. Nichols, E. Hackett, and R. Gurka; 2014 High Resolution Modeling of Near-Shore Wave Breaking During Strong Storms American Meteorological Society 94th Annual Meeting, Atlanta, February 2014
- Pietrafesa, L., Bao, S., Li, X., Yan, T. Gayes, On in-situ derived climatology, remote views and numerical model output of winds and waves in U.S. coastal waters, 2014, American Geophysical Union Ocean Sciences Annual meeting, Honolulu, HI.
- Nichols, R., Gayes, P.T., Pietrafesa, L., Driscoll, F. and Dolan, D. 2014, Improving the design basis for offshore wind turbines in shallow water susceptible to tropical storms; American Geophysical Union Ocean Sciences Annual meeting, Honolulu, HI.
- Nichols, R., Gayes, P., Yan, T., Dolan, D., Prowell, I., Horvat, R., Driscoll R., and Musial, W., 2013, Reliability based design of fixed foundation wind turbines, AWEA Offshore Windpower 2013, Providence, Rhode Island.
- Pietrafesa, L.J., Gayes, P.T., and Slattery, M., On Sea Level Variability and Trends, 2012, (Invited) Geological Society of America Annual National Meeting, Charlotte, NC
- Gayes, P.T., Pietrafesa, L.J., Slattery, M., and Yan, T., 2012 (Invited), Relative Role of regional dynamic forcings on southeastern on Southeastern US tide gauge projections of relative sea level rise; the progression between weather aggregating into climate; On Sea Level Variability and Trends, Geological Society of America Annual National Meeting, Charlotte, NC
- Gayes, P.T., 2011 (Invited), Blurring the lines between research and education-Undergraduate engagement in coastal marine research programs at Coastal Carolina University, 20th Biennial Conference of the Coastal and Estuarine Research Federation, Daytona Beach, FL.
- Pietrafesa, L., Gayes, P.T., Peng, M. and Ma, A, 2011, (Invited) Renewable Energy in a Coastal Domain: Observations, and Modeling; 91st American Meteorological Society Annual Meeting, Seattle, WA
- Cash, Ronald W., * Naar, D., Donahue, B., Viso, R., Gayes, P. (2010) Pulley Ridge: What Newly Mapped Areas Reveal About Sea-Level Change, Geological Society of America Abstracts with Programs, Vol. 42, No. 1, p. 120.
- C. McCoy, P. Gayes, J. Marshall, J. Hill, M. Howe, B. Johnson, S. Okano, S. Klotsko. 2010. Analysis of the 2007-2009 Grand Strand Nourishment Project, Horry County, South Carolina, USA. *ASBPA 2010 National Coastal Conference*, Charleston, SC.
- R. Viso, C. McCoy, P. Gayes, J. Marshall, S. Okano, B. Johnson, and D. Young. 2010. Regional Sediment Management: Nearshore Mapping of Charleston Harbor and Georgetown Harbor Inlets, South Carolina, USA. *ASBPA 2010 National Coastal Conference*, Charleston, SC.

- Gayes, P.T., C.A. McCoy, and L.J. Pietrafesa. 2010. Increasing influence of societal response variables in coastal evolution projections. Abstract EP31D-01. 2010 Fall Meeting, American Geophysical Union (AGU), San Francisco, CA.
- Nichols, R.L., Kress, Elizabeth, Boessneck, Eric, Gayes, Paul, Pietrafesa, Len, Xu, Kehui, Rigas, Nick, and Hartwig, Erika, 2010, South Carolina Wind Power Assessment and Development Project, American Wind Energy Association, Atlantic City New Jersey.
- Klotsko, S., Hill, J.C., Gayes, P.T., Viso, R., Alexander, C. and McFall, G., 2010, The Influence of geologic framework on habitat and sediment distribution in Grays Reef National Marine Sanctuary; EOS, Trans. American Geophysical Union, 91 (26) Ocean Science Meeting, Portland Or.
- Hill, J.C., Gayes, P.T. and Viso, R. Structural Controls on sediment distribution along the inner shelf of South Carolina, EOS, Trans. American Geophysical Union, 91 (26) Ocean Science Meeting, Portland Or.
- Pietrafesa, L.J., Bao, S, Peng, M. and Gayes, P.T., 2010, Weather Events Related to Air-Sea Coupled Interactions and the Need for an Expanded, Enhanced Essential Marine Buoy Network as a Core Element of the National Network of Networks, EOS, Trans. American Geophysical Union, 91 (26) Ocean Science Meeting, Portland Or.
- Nichols, R. , Kress, E., Bosseneck, E., Fuss, K., Gayes, P.T., Kelly, J., and Pietrafesa, L., 2009 South Carolina Wind Power Assessment and Development, American Wind Energy Association; Boston, MA
- Hapke, C J , Gayes, P.T., McCoy, C A, Hehre, R, List, J, Lentz, E. and Schwab, W., 2008. Nearshore Geologic Framework Controls on Shoreline Behavior, Fire Island, New York, American Geophysical Union, San Francisco
- Hill, J C, Gayes, P.T., McCoy, C. and Viso, R, 2008, Imaging the changing shoreface along South Carolina's Grand Strand, American Geophysical Union, San Francisco
- Nichols, R., Rigas, N., Gayes, P.T., and Kress, E. 2008, South Carolina Wind Energy Potential Programs: States Advancing Offshore Wind: A Conversation Convened by the US Offshore Wind Collaborative; American Wind Energy Association) Wilmington, Delaware
- J C Hill, P.T. Gayes, N W Driscoll, E A Johnstone, G Sedberry; 2007 Iceberg scours offshore of South Carolina; American Geophysical Union, San Francisco, CA.
- O'Brien-Gayes, A., Szekeley, J., Fuss, K. and Gayes, P.T., 2007 Building and Operating Remotely Operated Vehicles in the First Year Experience Course; American Geophysical Union, San Francisco, CA.
- Viso, R. McCoy, C., Quafisi, D. and Gayes, P.T. 2007, Electrical Resistivity and Seismic Characterization of Submarine Groundwater Discharge in Long Bay, SC; American Geophysical Union, San Francisco, CA.
- Reynolds, B.M., Wren, P.A. and Gayes, P.T., 2007, Decadal Evolution of Shoreface geometry in South Carolina, USA: Coastal Sediments, Amer. Soc. Of Civil Eng., New Orleans
- Barnhardt, W., Denny, J.F., Baldwin, W.E., Schwab, W.C., Morton, R, Gayes, P.T. and Driscoll, N, in press, Geologic Framework of the Long Bay inner shelf: Implications for coastal evolution in South Carolina, Coastal Sediments, Amer. Soc. Of Civil Eng., New Orleans
- Barnhardt, W. Baldwin, W.E., Denny, J.F., Schwab, W.C., Gayes, P.T., Driscoll, N., Warner, J and Voulgaris, G, 2006, Integrating high-resolution mapping of the seafloor with sediment-transport measurements to understand coastal erosion in northern South Carolina, America Geophysical Union Annual Meeting, San Francisco
- Harris, M.S., Wright, E., Gayes, P.T., and Bush, D., 2004, Implementation of a Marine Data Model for a Regional Geologic Framework Study: Geoinformatics for Researchers, managers, Students and the Public: Geologic Society of America Annual Meeting, Denver, Nov. 2004
- Wright, E., Harris, M.S., Kramer, B., Kruse, S, Katuna, M. and Gayes, P.T., 2004, Geomorphology and Stratigraphy of a Northeastern South Carolina Barrier Complex., Geologic Society of America Annual Meeting, Denver, Nov. 2004
- Gayes, P.T., Schwab, W.C., Driscoll, N.W., Morton, R.A., Baldwin, W.E., Denny, J.F., Ojeda, G.Y. and Park, J.Y., 2002 Transgressive Shoreface Architecture Within a Sediment Starved Arcuate Strand: Long Bay, South Carolina, Annual Meeting of the American Geophysical Union, SF. Ca.

- Dingler, J.A., Kent, G.M., Babcock, J.A., Driscoll, N.W., Harding, A.J., Gayes, P.T., Karlin, B, Morgan, C.W, Heyvaert, A. and Richards, B.C., 202, Characterization of recent Lake Tahoe fault activity: Combining Sub-Meter Resolution Seismic Imagery with AMS C-14 Dated Submerged Paleo- Surfaces. Annual Meeting of the American Geophysical Union, SF. Ca.
- Walsh, J.P, Driscoll, N.W., Schwab, W.C., Gayes, P.T. and Baldwin, W.E., 2002, Distribution and Architecture of Channels Preserved on Continental Shelves: A Comparison of the Carolinas and the U.S. East Coast: Annual Meeting of the American Geophysical Union, SF. Ca.
- Bernstein, D.J., Park, J., Forte, M.F., Gayes, P.T., Baldwin, W.E., 2002, Relationship of Offshore Sediment Distribution to Short-Term Shoreline Change Using High Resolution Shoreface Mapping Techniques: Annual Meeting of the American Geophysical Union, SF. Ca.
- Ojeda, G.Y., Gayes, P.T., Van Dolah, R.F., and Schwab, W.C., 2002, Habitat Distribution on the Inner Continental Shelf of Northern South Carolina Based on Sidescan Sonar and Submarine Video Data: Annual Meeting of the American Geophysical Union, SF. Ca.
- Baldwin, W.E., Morton, R.A., Schwab, W.C., Gayes, P.T. and Driscoll, N.W., 2002, Geologic Framework and Surficial Sediment Mapping Within South Carolina's Long Bay, From Little River to Winyah Bay: Annual Meeting of the American Geophysical Union, SF. Ca.
- Harris, M.S., Wright, E.E., Dufrene, T.A., Gayes, P.T., Katuna, M.P., Putney, T.R., Bush, D.M. and Schwab, W.C., 2002 Comparison of Historical and Recent Shoreline Change Rates to Shoreface and Lower Coastal Plain Geomorphology: Geologic Framework Influences on Shoreline Evolution in South Carolina: Annual Meeting of the American Geophysical Union, SF. Ca.
- Gayes, P.T., Baldwin, W.E., Eiser, W.C., Van Dolah, R.F., Jutte, P.C. and Hansen, M., 2001, Long Term Beach Monitoring at Folly Beach and other recently nourished beaches along the South Carolina Coast: 14th National Conference on Beach Preservation Technology: Orlando, FL
- Scott, D.B., Collins, E.C., Gayes, P.T. and Wright, E., 1999 Hurricane Records on the South Carolina Coast: Patterns of periodicity over the last 5000 years: Geological Society of America Annual Meeting: Denver, Colorado.
- P.T. Gayes, W.C. Schwab, M.S. Harris, P. Donovan-Ealy, 1997, The Central South Carolina Shoreface: an Active Zone of Linkage. American Geophysical Union Annual Meeting San Francisco, Ca
- M.S. Harris, P.T. Gayes, J.L. Kindinger, J. Flocks, M.P. Katuna; J.F., D.E. Krantz, 1997, Short- and Long- term Geomorphic Evolution of the Central South Carolina Coastal Zone: Coastal Response to a Complex Geologic Framework, American Geophysical Union Annual Meeting San Francisco, Ca
- Michael P. Katuna, Terence W. Clear, David L. Holsclaw; M. Scott Harris, Paul T. Gayes, Jack L. Kindinger, 1997, Tertiary Stratigraphy of the Central South Carolina Coast: American Geophysical Union Annual Meeting San Francisco, Ca
- J.L. Kindinger, M.S. Harris, P.T. Gayes, J.G. Flocks, W.C. Schwab, M.P. Katuna, 1997, Quaternary Stratigraphy and Depositional History of the Central South Carolina Coast and Inner shelf: Implications to Coastal Change. American Geophysical Union Annual Meeting San Francisco, Ca
- E.E. Wright, P.T. Gayes, and M.S. Harris, 1997, Framework Geology and Geomorphology Seaward of the Santee River Delta, American Geophysical Union Annual Meeting San Francisco, Ca
- Harris, M.S., Krantz, D.E., Wehmiller, J.F., Gayes, P.T., Kindinger, J.L, Flocks, J., 1996. High resolution stratigraphy and paleogeography of the upper Cenozoic system beneath the coastal plain and continental shelf, Charleston, South Carolina. In: Geological Society of America, 28th annual meeting. Abstracts with Programs - Geological Society of America. 28; 7, Pages 118. Geological Society of America (GSA). Boulder, CO, United States.
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- Harris, M.S., Gayes, P.T., Krantz, D.E., 1995. Antecedent geologic controls on the modern barrier island configuration and geomorphology in the Charleston, South Carolina coastal zone. In: Linked Earth systems; congress program and abstracts; Vol. 1. Pages 65. Hine-Albert-C (prefacer); Halley-Robert-B (prefacer) Society of Economic Paleontologists and Mineralogists. Tulsa, OK, United States. 1st SEPM

- congress on Sedimentary Geology; Linked Earth systems. St. Pete Beach, FL, United States. Aug. 13-16, 1995.
- Harris-M-Scott; Gayes-Paul-T; Donovan-Ealy-Patricia; Nelson-Douglas-D; York-Linda-L; Gielstra-Neal; Kindinger-Jack; Flocks-Jim; Krantz-David-E, 1995. Geologic framework influences on modern coastal morphology and processes along the South Carolina coast. In: Geological Society of America, 1995 annual meeting. Abstracts with Programs - Geological Society of America. 27; 6, Pages 78. Geological Society of America (GSA). Boulder, CO, United States
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- Schwab-W-C; Twitchell-D-C; Rodriguez-R-W; Thielier-E-R; Allison-M-A; Gayes-P-T, 1995. Linear rippled scour depressions in the nearshore; possible indicators of cross-shelf sediment transport?, in: Geological Society of America, 1995 annual meeting. Abstracts with Programs - Geological Society of America. 27; 6, Pages 77. Geological Society of America (GSA). Boulder, CO, United States.
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- Harris, M.S., Gayes, P.T., Donovan-Ealy, P., Nelson, D.D., York, L.L., Kindinger, J., Flocks, J. and Krantz, D., 1995, Geologic Framework influences on modern coastal morphology and processes along the South Carolina coast: Geological Society of America Annual Meeting, New Orleans, La.,
- Murphy, S., Madsen, J.A., McGeary, S. Krantz, D.E. and Gayes, P.T., 1995, Seismic study of the youngest Delaware River paleovalley: constraints on Quaternary evolution of the Delaware Bay. Geologic Society of America, New Orleans, La.
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- Krantz, D.E., McGeary, S.E., Madsen, J.A., Murphy, S.E. and Gayes, P.T., 1994, The Delaware Shelf Valley: Multiple Late-Quaternary episodes of Incision and Infill: Geological Society of America Annual Meeting Seattle, Washington.
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- Gayes. P.T., 1993, Project BERM: South Carolina Nearshore Monitoring Program: Minerals Management Service Workshop on Offshore Mining Issues: Sarasota, Fla.
- Gayes, P.T. and Nelson, D.D., 1992, Paleodrainage and shallow sub-crop stratigraphy of the South Carolina Inner Shelf: Bulls Bay to Little River, Continental Margins Symposium, University of Texas, Austin, Texas.

- Gayes, P.T., 1992 Paleochannels and shallow stratigraphy of the inner continental shelf: Grand Strand Region, S.C., Dept. of Interior-Minerals Management Service Atlantic Continental Margins Symposium, NC State, Raleigh, NC
- Gayes, P.T., 1993, Project BERM: South Carolina Nearshore Monitoring Program: Minerals Management Service Workshop on Offshore Mining Issues: Sarasota, Fla.
- Gayes, P.T. Scott, D.B., Collins, E., Nelson, D.D., Nelson, A, Ward, T., and Radcliffe, D., 1991, Post-glacial evolution of Murrells Inlet, South Carolina; Geological Society of America Meeting.
- Gayes, P.T., 1990 Post Hurricane Hugo Side Scan Sonar Survey: Nearshore morphologic modifications Little River Inlet to Folly Beach S.C., Geologic Society of America Annual meeting, Dallas, Oct. 1990
- Gayes, P.T. and Bokuniewicz, H.J, 1987, Late Wisconsinan and Early Holocene Relative Sea Level Changes in Western Long Island Sound: Abstracts with Programs, Annual Meeting of the Geologic Society of America, v. 19, n. 7., Phoenix.
- Gayes, P.T., Guber, A.L and Slingerland, R.L., 1983, Effects of Primary Consolidation Settlement on Transgressive Barrier Island Systems; Abstracts with Programs, Geological Society of America Annual Meeting, v. 15, n. 6 p. 580.

Regional Conferences

- Gayes, P.T., Enabling Land-Based Wind Power Production in the Southeast US, Iowa State, CCU-Clemson Workshop. 45 Attendees from SC, NC, Iowa, Minnesota, Washington and UK, North Charleston SC
- Gayes, P.T., *The Times They Are A-Changing - The Role of Innovation, Experimentation and Alternative Coastal Strategies with Changing Pressures and Processes*, South Carolina Beach Advocates Association Annual Meeting February, 2020, Myrtle Beach, SC
- Gayes, P.T. SC Beach Advocates Association Conference Field Excursion: Waties Island, North Myrtle Beach, Feb 20
- ROACH, Amanda, GAYES, Paul, HANEUBUTH, Till J.J., HILL, Jenna C., TAYLOR, Chris and VISO, Richard, Regional framework, paleodraianage and habitat characterization of the mid-South Carolina continental shelf: Winyah bay to cape romaine, Southeast Regional Meeting Geological Society of America, Columbia, SC
- GAYES, Paul, KNAPP, Camelia C., SPIREK, Jim, DEVOE, Rick, KREAVOR, Brian and REEVES, Casey, Atlantic offshore wind energy development: geophysical mapping and identification of paleolandscapes and historic shipwrecks offshore South Carolina, Southeast Regional Meeting Geological Society of America, Columbia, SC
- DOLAN, Aundrea M., Hill, Jenna C., Hanebuth, Till J.J, Miselis, Jennifer, U.S. Gayes, Paul, 2016, EXAMINING TEMPORAL AND SPATIAL VARIABILITY OF BEACH EROSION ALONG THE GRAND STRAND, SC; Southeast Regional Meeting Geological Society of America, Columbia, SC
- Gayes, P.T., Wind Energy Potential and Opportunities for SC; SC Clean Energy Economic Development Forum; Columbia, SC; Feb 23, 2012
- Gayes, P.T, Climate Change Implications to Installations and Facilities in the Southeast Coastal Zone; SE Coastal Focus Area Base Commanders Association, Paris Island, SC June 14, 2012
- Young, D., Okano, S., Gayes, P., Viso, R., Merged Multibeam Bathymetry and LIDAR in the Duplin River. GCE-LTER Annual Meeting, Athens, GA, January 4-5, 2011.
- Miller, S., C. McCoy, R. Viso, P. Gayes, S. Okano. 2010. Geological impacts on sediment transport and beach erosion in Fire Island, NY. *2010 Celebration of Inquiry Conference, Meeting the Challenges of Our Time: Risks, Responsibilities, and Rewards*, Coastal Carolina University, Conway, SC.
- Gayes, P.T., McCoy, C., Hapke, C., Driscoll, N., Schwab, W.C., and Brown, S., 2009, Nearshore Mapping of The Shoreface Region: Linking the Inner Shelf and Beach Systems in South Carolina And New York; Department of Interior/National Oceanic and Atmospheric Administration Workshop on Survey Methods for Shallow Water Habitat Mapping in New England Department of the Interior Holdings & Estuarine Research Reserves; University of New Hampshire, September 30, 2009.
- Hapke, C., Schwab, B., Lentz, E., Hehre, R., Gayes, P., and McCoy, C., 2010, Inner shelf morphologic controls on patterns of shoreline change; Fire Island, New York [abs.]: 7th Biennial Fire Island National Seashore Planning, Science and Research Conference Abstracts of Presentations and Posters, Patchogue, N.Y., April 21-22, 2010

- Hapke, C., J., Gayes, P.T., McCoy, C., and Lentz, 2010, The Influence of the Inner Shelf Morphology on the Morphodynamics of the Beach and Bar System, Fire, Island, New York; Geological Society of America Joint Northeastern/Southeastern Annual Meeting, Baltimore, MD.
- Cash, R.W., Naar, D., Donahue, B., Viso, R., and Gayes, P.T., 2010, Pulley Ridge: What newly mapped areas reveal about sea level change; Geological Society of America Joint Northeastern/Southeastern Annual Meeting, Baltimore, MD.
- Gayes, P.T., McCoy, C., Hapke, C., Driscoll, N., Schwab, W.C. and Brown, S., 2009, Nearshore Mapping of The Shoreface Region: Linking the Inner Shelf and Beach Systems in South Carolina And New York; Department of Interior/National Oceanic and Atmospheric Administration Workshop on Survey Methods for Shallow Water Habitat Mapping in New England Department of the Interior Holdings & Estuarine Research Reserves; University of New Hampshire, September 30, 2009.
- Gayes, P.T., Beach Monitoring and Coastal Erosion Studies; Invited Presentation to South Carolina Shoreline Change Advisory Committee: Research Priorities and Policy Options for the Future Workshop (January 2008)
- Gayes, P.T., Center for Marine and Wetland Studies Sea Floor Mapping Programs and Capabilities: SC- DHEC Ocean Mapping Workshop, Charleston SC, April 24, 2008
- Gayes, P.T. and Schwab, W.C. (USGS-Woods Hole), South Carolina Coastal Erosion Study and Related Sea Floor Mapping Activities; Invited presentation to SC Continental Shelf Resource Advisory Committee (April 2008)
- Gayes, P.T. Hill, J.C., Viso, R. and McCoy, C., 2008, Shoreface Framework and evolution in northern South Carolina: Shallow Coastal Stratigraphy Workshop; Conway S.C. (Invited workshop of researchers focused on shoreface dynamics and evolution; participants from Mass., Virginia, North Carolina, South Carolina, Georgia, Texas, and Ohio.
- Gayes, P.T., Hapke, C. and Schwab, W.C., 2008, Fire Island Shoreface Geomorphology and Hydrodynamics- Relationships of nearshore bar-shoreface detached ridges and interannual erosion rate variability; US Army Corps of Engineers New York Regional Sediment Management Workshop: Stony Brook NY.
- Gayes, P.T., (Group Facilitator), 2007, Business Industry and Coastal Issues-Global Warming, 2nd Enlightenment Conference, Columbia, South Carolina
- Nelson, D.D., Harris, M.S., Wright, E. and Gayes, P.T., 2007, Coastal Plain History as Revealed by High Resolution Topographic Surveys, Horry County, South Carolina, Geological Society of America-Southeast Regional Meeting, Savannah, Georgia
- Quafisi, D., Viso, R., Gayes, P.T., McCoy, C. and Kopfler, E., 2007, Geological Controls on Submarine Ground Water Discharge, Long Bay, South Carolina, South Carolina, Geological Society of America-Southeast Regional Meeting, Savannah, Georgia
- Gayes, P.T., Schwab, W.C., Morton, R., Baldwin, W.E., and Boyle, E., 2001, Interim Report on the Grand Strand Beach Nourishment Projects: Beach Fill, Borrow Site and Nearshore Reef Changes: Annual Southeastern Meeting: Geological Society of America, GSA-Abstracts with Programs Vol. 33, No. 2, March 2001
- Thieler, E.R., Schwab, W.C., Signell, R.P., Gayes, P.T., and Harris, M.S., 2001, The shoreface as a source and sink for beach nourishment: Annual Southeastern Meeting: Geological Society of America, GSA-Abstracts with Programs Vol. 33, No. 2, March 2001
- Harris, M. S., Wright, E.E, Kukick, L., Johnson, G.H., and Gayes, P.T., 2001. Geomorphology of the South Carolina Coastal Plain and Continental Shelf: Stratigraphic heterogeneity and developmental influences throughout the Quaternary: Annual Southeastern Meeting: Geological Society of America, GSA-Abstracts with Programs Vol. 33, No. 2, March 2001
- Harris, M.S., Gayes, P.T., Kindinger, J., Flocks, J., Wehmiller, J. and Krantz, D., 1996, Three-dimensional stratigraphic framework south of Charleston Harbor, South Carolina: Influence on Quaternary Barrier Island Morphodynamics, (Invited) Assateague Shelf and Shore Symposium, Duke Marine Lab. Beaufort, N.C.,
- Harris, M.S., Gayes, P.T., Kindinger, J., Flocks, J. and Schwab, B., 1996, Influence of Cenozoic Geologic Framework on Modern Coastline Morphology, (Invited) Geological Society of America, Southeast regional Meeting, Jackson, MS

- Thornton, M., Ernest, J., Mayo, D. (Gayes, P.T. Faculty Research Sponsor), 1996, Inherited Geologic Controls on Modern Beach and Shoreface Process and Morphology, NCUR-National Conference on Undergraduate Research, Asheville, North Carolina
- Gayes, P.T., Donovan-Ealy, P. and Harris, M.S, 1994, Beach and Nearshore Profile and Side Scan Sonar Evidence for Exchange Across the Shoreface and Possible Process/Geomorphological Interactions: SEACOR Conference, Seabrook SC.
- Gayes, P.T., 1993, Hurricane Hugo Induced Nearshore Changes and Post Storm Recovery on the South Carolina Shoreface and Inner Shelf: Geologic Society of America: Tallahassee, Fla.
- Gayes, P.T., Nelson, D.D., Scott, D.B. and Collins, E., 1993, A mid-Holocene Sea Level Fluctuation in South Carolina: Geologic Society of America: Tallahassee, Fla.
- Wehmiller, J.F., York, L.L., Krantz, D.E., and Gayes, P.T., 1993, Aminostratigraphy of the Wando Formation, Charleston, South Carolina: When is an Aminozone a valid chronostratigraphic unit: Geologic Society of America: Tallahassee, Fla.
- Krantz, D.E., McGeary, S.E., Madsen, J.A and Gayes, P.T., 1993, Paleochannels of the Delaware River on the mid-Atlantic Shelf: Geologic Society of America: Tallahassee, Fla.
- Gayes, P.T. and Nelson, D.D. 1992, Differential Coastal Response to Hugo; Symposium on Man-induced Coastal Evolution, Geological Society of America Southeast Region, Winston-Salem, N.C.
- Hirtzle, J.O. and Gayes, P.T., 1992, Paleochannels and shallow subcrop stratigraphy of the inner shelf: Grand Strand Region, South Carolina: Abstracts with Programs: Annual meeting of the South Carolina Academy of Sciences, Conway SC.
- Rose, T., Gayes, P.T. and Nelson, D.D., 1992, The paleo-Santee River system and shallow subcrop stratigraphy: Bulls Bay, South Carolina. Abstracts with Programs: Annual meeting of the South Carolina Academy of Sciences, Conway SC.
- Kellar, M.A., Gayes, P.T., and Nelson, D.D., 1992, Surficial sediment characteristics of the inner shelf: Bulls Bay, South Carolina. Abstracts with Programs: Annual meeting of the South Carolina Academy of Sciences, Conway SC.
- Gayes, P.T., 1989, Post-Glacial Coastal Evolution of Coastal Morphology in Long Island Sound, in Program with Abstracts, Geological Society of America Annual NE Meeting, v. 21, n. 2.
- Gayes, P.T. and Bokuniewicz, H.J., 1989, Early Holocene Interruption of Estuarine Sedimentation in Long Island Sound; in Program with Abstracts, Geological Society of America Annual NE Meeting, v. 21, n. 2
- Gayes, P.T., Bokuniewicz, H.J. and Newman, W.S., 1987 Holocene Sea Level Fluctuations; implications to coastal management, invited paper to Symposium on Effects of Sea Level Rise on Long Island, Hofstra University, New York.
- Gayes, P.T. and Bokuniewicz, 1986, Submerged shorelines in Long Island Sound; Programs with Abstracts, Geologic Society of America NE Annual Meeting, v. 18, n. 1, p. 18

TECHNICAL SESSION CHAIR & INVITED SYMPOSIUM
ORGANIZER

- Gayes, P.T. (Conference Organizer and Chair), 2009, The Sixth Annual International Geological Program- Project 495 Quaternary Land-Ocean Interactions-Drivers and Coastal Responses: Myrtle Beach SC, Oct. 24-31, 2009
- Miselis, J. and Gayes, P.T., Dec 2008, Connecting the Seafloor and the Shoreline: Steps Toward Successfully Integrating Observation and Modeling, American Geophysical Union, San Francisco (Poster and Oral Sessions).
- Miselis, J. , Gayes, P.T. and Mc Ninch, July 2008, Shallow Coastal Stratigraphy Workshop; Conway, South Carolina, 9–10 July 2008
- Gayes, P.T. and Bohne, R., 2003, (Chairs), Coast to Shelf Processes, Southeast Coastal Ocean and Shelf Research Symposium, Charleston SC
- Schwab, W.C., Gayes, P.T., 2002, (Organizers/Chairs) Coastal Geology of the Carolinas: Linking the Shelf and Shore II: American Geophysical Union, San Francisco.
- Gayes, P.T., Schwab, W.C. and DeVoe, R., 2002, Geological Society of America Annual SE Regional Meetings- South Carolina Coastal Erosion Study-Interim Reports, Lexington, KY

- Wanless, H. and Gayes, P.T., 1993 (Organizers and Chairs) Symposium on the Geological Implication of Large Storms: Hurricanes Hugo and Andrew: Geologic Society of America: Tallahassee, Fla.
- Gardner, R. and Gayes, P.T., 1993, (Chairs) Technical Session on Sea Level Rise and Consequences: Hilton Head Island International Coastal Symposium: Hilton Head Island, South Carolina
- Gayes, P.T. and Sexton, W., 1993, (Chairs) Technical Session on Erosion, Storm Tides and Coastal Protection, Hilton Head Island International Coastal Symposium: Hilton Head Island, South Carolina
- Gayes, P.T. and Coch. N.K., 1990, (organizers and chairs) Geological Society of America, National Meeting, Thematic Session Advocate and Chair, Geologic Effects of Hurricane Hugo; South Carolina and the Caribbean.
- Gayes, P.T. and Bokuniewicz, H.J., 1989, (Invited session organizer and chair), Geological Society of America NE Annual meeting, Post-Glacial Evolution and Sea Level in Southern New England; Walter S. Newman Memorial Symposium.
- Gayes, P.T., 1988 Technical session chairman: International Symposium on theoretical and applied aspects of coastal and shelf evolution, Amsterdam, Netherlands

Technical Reviews Provided For:

Funding Agencies

National Academies of Science-Gulf of Mexico Research Program
National Science Foundation
American Chemical Society
Hawaii Sea Grant
City University of New York Research Foundation
National Oceanic and Atmospheric Administration (National Institute for Climatic Change Research)
National Oceanic and Atmospheric Administration (Regional Integration of Ocean Observing Systems)
National Oceanic and Atmospheric Administration (NEERS)
National Oceanic and Atmospheric Administration (Natural Underwater Research Center)
National Oceanic and Atmospheric Administration-Coastal Services Center
National Oceanic and Atmospheric Administration-Coastal Restoration and Enhancement through Science
and Technology Program
Delaware Sea Grant Consortium South
Carolina Sea Grant Consortium
South Carolina Energy Resources Council
North Carolina Sea Grant
National Underwater Research Center
Regional Marine Research Program for the Gulf of Maine
Sea Grant-Woods Hole

Journals

Marine Geology
Geology
Geomarine Letters
Geologic Society of America Bulletin
Journal of Sedimentary Petrology
Society of Economic Paleontologist and Mineralogists Special Pubs.
Journal of Coastal Research Journal of Sedimentary Geology
New Zealand Journal of Geology and Geophysics
Estuaries
Bioscience
Caribbean Journal of Science Quaternary Science Reviews
Estuaries and Coasts
Shore and Beach

External Reviewer for Promotion and Tenure Applications at Other Universities

City University of New York
Virginia Institute of Marine Science
Texas A&M – Galveston
College of Charleston

External Academic Program Reviewer

Schiller Marine Research Center, Bowdoin College, Brunswick, Maine. 2019
Univ. of San Diego's Marine and Environmental Science undergraduate and graduate programs. 2013.

GRADUATE DISSERTATION AND THESIS COMMITTEES

A =Advisor C=Committee

- Laura Arencibia, Ph.D student, Coastal Carolina, 2021- (A)*
Derek Thorn, M.S. student, Coastal Carolina, 2021- (A)
Lillian Howe, Ph. D. Student, Coastal Carolina, 2020- (C)
Dongliang Shen, Ph.D. Student, Coastal Carolina, 2020- (C)
Hongyuan Zhang, Ph.D. Student, Coastal Carolina, 2020- (C)
Christina Boyce, M.S. student, Coastal Carolina 2017-2020 (A)
Klavdiya Vasylenko, M.S. student Coastal Carolina, 2019- (A)
Trevor Carver M.S. student Coastal Carolina, 2017-2020 (A)
Dylan Carpenter, M.S. student Coastal Carolina, 2017-2019 (A)
Dongliang Zhang, Ph.D. student Coastal Carolina, 2017- (C)
Josh Long, Ph.D. student, Coastal Carolina, 2016- (C)
Akim Mahmud, M.S. student, Coastal Carolina, 2016-2017 (A)
Ashley Long, Ph.D. student, Coastal Carolina, 2016- (C)
Leigha Peterson, Ph.D. student, Coastal Carolina, 2015-2019 (A)
Amanda Roach, M.S. Student Coastal Carolina 2014-2017 (A)
Aundrea Dolan, M.S. Student Coastal Carolina 2014-2016 (A)
Karsen Shottleuner, M.S. Coastal Carolina 2014-2016 (A)
Andrew Frink, M.S. Coastal Carolina 2013-2015 (A)
Nathan Letini, M.S. Coastal Carolina 2011-2014 (C)
Danille Tarpley, M.S. Student, Coastal Carolina (A)
Jennifer Fierro, M.S. Student, 2010 Coastal Carolina University (A)
Michael Slattery, Ph.D. 2010, Flash Rip Currents on Ocean Shoreline of Long Island School of Ocean and Atmospheric Sciences; Stony Brook University (C)
Abby Springer, Ph.D. 2010, University of South Carolina, Thousand Acre marsh: A modern analog of coastal environmental response to rising sea level (C, supported by grant to PT Gayes)
Megan Savard, M.S. Student, Coastal Carolina University (2007-2008) (C)
Jennifer Miselis, Ph.D. 2008. Volumetric Exchange of Modern Sand between the Lower Beach and the Nearshore and the Processes Controlling that Exchange: Virginia Institute of Marine Science (C)
Janiel Rivera, Ph.D. 2006, Late Holocene Sedimentation on the Continental Shelf of the Laptev Sea, Russian Arctic: Department of Geological Sciences, USC-Columbia (C)
Brian Batten, Ph.D., 1998-2003, Spatial Analysis of Beach Morphology and Erosional Patterns along the South Shore of Long Island New York: Marine Sciences Research Center, State University of New York at Stony Brook (former CCU senior thesis advisee) (C)
Resputo, J.D., 1999-2002, Ph.D., Sediment Supply and Distribution to the Columbian Coastal Zone USC-Columbia (C)
Baldwin, Wayne, 1999-2002, MS., Univ. of South Carolina-Columbia, Department of Geological Sciences, Coastal Evolution of the inner shelf and coastal zone of Northern South Carolina. (former CCU senior thesis advisee) (C)
Harris, Michael Scott, 1995-2000, Geologic Framework of the Charleston, South Carolina, Area: Influences on Coastal Geomorphology and Evolution. Ph.D. Dissertation, University of Delaware, Department of Geology. (C; supported on grant to PT Gayes)
McCarthy, A, 1999, M.S., University of Newcastle, Newcastle, Australia. External reader.
Collins, Eric, S., 1993- 1996, Marsh-estuarine benthic foraminiferal distributions and Holocene sea-level reconstructions along the South Carolina Coastline: Ph.D. Dissertation, Dalhousie University, Centre for Marine Geology (C)

MAJOR OCEANIC RESEARCH CRUISES

(* Denotes Chief Scientist)

Does not list more numerous projects operating from small nearshore vessels

- 2015 15 Days geophysical imaging, water and sediment sampling on the outer continental shelf off northern Portugal. M110 GALIMOS project R/V Meteor (Germany; Till Tanebuth Chief Scientists)
- 2015 17 days geophysical imaging and testing of NOAA Thematic Habitat Mapper, Deployment of CCU Met-Ocean Instrument Buoys ((Chris Taylor-NOAA: Chief Scientists)
- 2012 30 Days geophysical framework and coastal morphology of the shoreface and inner shelf in the vicinity of the Fire Island National Sea Shore, Fire Island, New York, US Geologic Survey (R/V Scarlett Isabella)
- 2007 5 Days geophysical framework-Grays Reef National Marine Sanctuary-GA (NOAA Ship Foster)
- 2007 10 Days geophysical characterization Shelf break NOAA Ocean Exploration project NOAA Foster
- 2006 10 days geophysical characterization Shelf break NOAA Ocean Exploration project NOAA Foster
- 2006 10 Days geophysical framework-Grays Reef National Marine Sanctuary-GA (NOAA Ship Foster)
- 2005 * 10 days vibrocore sand resource study off Galveston Island, Texas; Lift Ship Laredo
- 2005 * 12 days ground water studies SC Shelf, NOAA Ship Nancy Foster
- 2005 5 days off San Diego, Vibracoring/Geophysical surveys R/V New Horizon-Scripps Institution of Oceanography
- 2005 * 10 days Geophysical Studies-Inner Shelf-South Carolina-NOAA Ship Foster 2004 *11 days inner-mid shelf off Grand Strand Area, NOAA Ship Foster
- 2004 *4 days inner shelf off Myrtle Beach (COOP), NOAA Ship Foster 2003
- 2004 *8 days Inner shelf off Charleston and Myrtle Beach, NOAA Ship Foster
- 2002 21 days Chuchi Sea/ Arctic, Paleo sea level and climate study, US Coast Guard Icebreaker Healy
- 2002 * 20 days Inner Shelf northern South Carolina,. Habitat mapping/Coastal Erosion Study, NOAA Ship Ferrel
- 2002 7 days Lake Tahoe, Neotectonic Study , UCSD-Scripps/UC Davis
- 2002 * 20 days Inner Shelf northern South Carolina, Shoreface Geologic Framework, CCU Coastal II
- 2001 10 days Inner Shelf Charleston, ODMDS Study US EPA Ocean Survey Vessel Anderson
- 2001 * 20 days NOAA Ship Ferrel: Coastal Erosion Study: Myrtle Beach/ Charleston ODMDS
- 2001 * 20 days Inner Shelf northern South Carolina, Shoreface Geologic Framework, CCU Coastal II
- 2000 * 14 days Inner shelf geologic evolution of the inner shelf off Long Island, New York NOAA Ship Ferrel
- 1999 * 15 Days Pawleys Island Vibracoring studies, NOAA Ship Ferrel
- 1999 * 7 Days Mobile Bay Alabama, Navigation Channel Sediment Contaminant Inventory, EA Associates
- 1998 * 17 Days Pawleys Island Geophysical Studies, NOAA Ship Ferrel
- 1998 * 7 days Vibracoring/containment study Charleston Harbor; EA Associates
- 1997 * 15 days scheduled off Myrtle Beach-Renourishment Studies, NOAA Ship Ferrel
- 1996 * 15 Days off Hilton Head and Myrtle Beach-Sand Resource studies, NOAA Ship Ferrel 1995
- 1996 * 20 days, South Carolina shelf- Myrtle Beach-Charleston, surficial sed. Study, NOAA Ship Ferrel
- 1994 * 14 days South Carolina shelf vibracoring and seismic studies, NOAA Ship Ferrel
- 1994 5 Days Geophysical Survey Cape Fear Area North Carolina, National Underwater Research Center R/V Elusive
- 1994 * 10 days Geophysics/Coring inner shelf off Folly Beach, SC, National Underwater Research

- Center R/V Elusive
- 1993 * 12 Days, South Carolina Shelf- Seismic reflection and surficial sediment study, NOAA Ship Ferrel
- 1993 * 10 Days, Delaware Shelf-South Carolina Inner Shelf, Seismic Reflection Study, NOAA Ship Ferrel
- 1992 4 Days Seismic Reflection Studies: Inner Shelf Delaware, Univ. of Delaware R/V Cape Henlopen
- 1992 * 10 days inner shelf Winyah Bay to Savannah, Seismic reflection study, NOAA Ship Ferrel 1992
- * 4 Days-Mid-shelf Cape Fear to Hilton Head-Seismic reflection study, NOAA Ship Ferrel 1991
- * 5 Days-Bulls Bay Inner Shelf-Seismic reflection study, NOAA Ship Ferrel
- 1989 5 Days-Charleston Harbor-Seismic reflection study, NOAA Ship Ferrel
- 1988 3 days-Upper slope Savannah-Charleston (1500-2000') Geryon Habitat Study w/ South Carolina DNR Harbor Branch Foundation-Seward Johnson/Johnson Sea Link Submersible
- 1991 2 Days Seismic reflection study Indian River, Florida; Florida Tech Vessel
- * 458 Sea days

Course Taught at Coastal Carolina University

- MSCI 111 Introduction to Marine Science
- MSCI 112-Origin and Evolution of the Marine Environment (Historical Geology).
- MSCI 304 Geological Oceanography
- MSCI 445/545 Coastal Processes and Coastal Processes Seminar
- MSCI 485/585 Applied Coastal Geophysics
- MSCI 495/595 Marine Environmental Issues
- MSCI 499 Directed Undergraduate Research
- CMWS 601 Coastal Marine and Wetland Processes
- CMWS 697 Graduate Seminar in Coastal Marine and Wetland Studies
- CMSS 608/609 Coastal and Marine Systems Science Applications and Seminar

