

BIOGRAPHICAL SKETCH

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NAME Bill Pirkle	POSITION TITLE Program Director, Principal Investigator		
Email billp@usca.edu			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
Emory University	BS	06/67	Geology
University of North Carolina, Chapel Hill	MS	12/70	Geology
University of North Carolina, Chapel Hill	PhD	06/72	Geology

A. Personal Statement

Dr. Pirkle received his BS from Emory University and his MS and PhD from the University of North Carolina at Chapel Hill. All three degrees are in the earth sciences. Dr. Pirkle has held a number of professorial and administrative appointments at USCA including Chair of the Division of Natural Sciences and Dean of the College of Sciences. He has published regularly in the professional literature primarily on the origin of heavy mineral sand deposits, but also on contaminant transport in the subsurface. Journals in which he has published include *Economic Geology*, *Journal of Geology*, *Eos*, *Water Resources Research*, and *Mining Engineering*. He has authored several technical reports for the Department of Energy that deal with site characterization and subsurface contaminant transport.

He has been the Principal Investigator on over \$2M in contracts for the Department of Energy's programs at the Savannah River Site designed to encourage students at USCA and South Carolina State University to pursue graduate studies and careers in the STEM disciplines by providing on-site research opportunities, including programs designed to support USCA faculty members at the start of their careers by providing joint research appointments. Dr. Pirkle was instrumental in establishing the Ruth Patrick Science Education Center at USC Aiken, serving as Project Director for a \$500K National Science Foundation grant to establish the Center. The Center now serves more than 80,000 patrons per year.

B. Positions and Honors

Geological Society of America
 American Institute of Mining, Metallurgical and Petroleum Engineers
 Certified Professional Geologist, States of Georgia and South Carolina
 Sigma Xi (President, Central Savannah River Chapter, 1993-94)
 South Carolina Academy of Science (President, 1994-95; 2002-05)
 Central Savannah River Geological Society (Vice President, 1996-00; President, 2000-01)

Work Experience:

1993-present Director, Sponsored Research Office, USCA
 1986-93 Dean, College of Sciences, USCA
 1984-86 Chair, Division of Natural Sciences, USCA
 1982-present Professor of Geology, USCA
 1975-82 Associate Professor of Geology, USCA
 1973-85 Project Geologist, SC Geological Survey
 1972-75 Assistant Professor of Geology, USCA
 1972 Instructor of Geology, UNC, Chapel Hill

1971 Faculty Member, Evening College, UNC, Chapel Hill
1969 Geologist, Dixie Lime & Stone Co., Ocala, FL

C. Selected Peer-reviewed Publications

Traces and ichnology of recent and ancient sea turtle nests, St. Catherines Island, Georgia, and Cretaceous Fox Hills Sandstone, Elbert County, Colorado, in Bishop, G. A., Rollins, H. B., and Thomas, D. H., eds., *Geoarchaeology of St. Catherines Island and the Georgia Bight*, Anthropological Papers of the American Museum of Natural History. In press. (With 3 other authors).

Traces of recent and ancient sea turtle nesting, *Geol. Soc. America, Abstracts with Programs*, v. 41, no. 1, p. 7. 2009. (With 2 other authors).

Heavy-mineral sands of the Atlantic and Gulf coastal plains, USA in Mange, Maria A. and Wright, David T., editors, *Heavy Minerals in Use, Developments in Sedimentology*, v. 58: Elsevier, Amsterdam, p. 1145-1232. 2007. (With 2 other authors).

Introduction to heavy–mineral sand deposits of the Florida and Georgia Atlantic coastal plain, in Rich, Fredrick J., editor, *Guide to Fieldtrips – 56th Annual Meeting, Southeastern Section, Geological Society of America, Savannah, GA, Department of Geology and Geography Contribution Series #1: Georgia Southern University, Statesboro, GA*, p. 129-135. 2007. (With 1 other author).

The geology, stratigraphy, and paleontology of Reids, Bells, and Roses Bluffs in northeastern Florida, in Rich, Fredrick J., editor, *Guide to Fieldtrips – 56th Annual Meeting, Southeastern Section, Geological Society of America, Savannah, GA, Department of Geology and Geography Contribution Series #1: Georgia Southern University, Statesboro, GA*, p. 137-151. 2007. (With 5 other authors).

Heavy-mineral deposits of Bailey, North Carolina, *Geol. Soc. America, Abstracts with Programs*, v. 39, no. 2, p. 77. 2007. (With 3 other authors).

Chromite from deposits in Southeastern Oregon as a foundry sand, in Reid, Jeffrey C., editor, *Proceedings of the 42nd Forum on the Geology of Industrial Minerals: Information Circular 34, North Carolina Geological Survey*, p. 395-411. 2006. (With 4 other authors).

Heavy mineral mining in the Atlantic coastal plain of Florida and Georgia and the chemical and physical characteristics of the deposits in Akser, M., and Elder, J., eds., *2005 Heavy Minerals Conference Proceedings, Society for Mining, Metallurgy, and Exploration, Littleton, CO.*, p. 7-18. 2005. (With 3 other authors).

Organic dye effects on dense nonaqueous phase liquids (DNAPL) entry pressure in water saturated porous media, *Water Resources Research*, 39 (8), 1207, doi:10.1029/2001WR001000, p. SBH5-1 – SBH5-13. 2003. (With 2 other authors).

DNAPL penetration of saturated porous media under conditions of time-dependent surface chemistry in Wyatt, D. E., and Harris, M. D., eds., *Carolina Geological Society 2000 Field Trip Guidebook, Savannah River Site*, p. K-1 – K-16. 2000. (With 2 other authors).