

## *CURRICULUM VITAE*

Thomas Stephen Bianchi  
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Chair of Geological Sciences  
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### EDUCATIONAL EXPERIENCE

- 1978 B.A. (Biology, minor in Chemistry) Dept. of Biology, Dowling College  
Oakdale, NY
- 1981 M.A. (Ecology and Evolution - Marine Ecology) Dept. of Ecology and  
Evolution, State University of New York  
at Stony Brook, Stony Brook, NY  
(*Thesis Advisor - Jeffrey S. Levinton*)
- 1987 Ph.D (Marine Sciences - Biogeochemistry) University of Maryland,  
Chesapeake Biological Lab, Solomons, MD  
(*Ph.D Advisor - Donald L. Rice, Co-Advisor – Rodger Dawson*)

### PROFESSIONAL EXPERIENCE

- 1975-1976 **Research Assistant**, Adelphi University, New York.
- 1977-1978 **Research Assistant**, Marine Sciences, State University of New  
York at Stony Brook, New York.
- 1983-1984 **Teaching/Research Assistant**, Dept. of Geology, State University  
of New York, Binghamton, New York.
- 1984-1987 **Research Assistant**, Chesapeake Biological Laboratory (CBL),  
University of Maryland, Solomons, Maryland.
- 1987-1988 **Postdoctoral Research Associate**, CBL, University of Maryland,  
Solomons, Maryland.
- 1988-1990 **Postdoctoral Research Fellow**, Institute of Ecosystem Studies,  
Milbrook, N.Y.
- 1990-1994 **Assistant Professor**, Dept. of Biology, Lamar  
University, Beaumont, Texas.
- 1994-1998 **Assistant Professor**, Dept. of E.E. Biology, Tulane University,

New Orleans, Louisiana.

- 1998-2002      **Associate Professor**, Dept. of E.E. Biology, Tulane University, New Orleans, Louisiana, and Acting Director of the Institute for Earth and Ecosystem Sciences (IEES).
- 2002-2005      **Professor**, Dept. of Earth and Environmental Sciences, Tulane University, New Orleans, Louisiana.
- 2005-2006      **Adjunct Professor**, Marine Sciences Research Center, State University of New York at Stony Brook, New York.
- 2006-2013      **Professor**, *James R. Whatley Endowed Chair in Geosciences* and Professor of Chemical Oceanography, Dept. of Oceanography, Texas A&M University, College Station, Texas.
- 2013-present    **Professor**, *Jon and Beverly Thompson Endowed Chair of Geological Sciences*, Dept. of Geological Sciences, University of Florida, Gainesville, Florida.

#### RESEARCH INTERESTS

Organic Geochemistry  
Biogeochemical dynamics of aquatic food chains.  
Carbon cycling in estuarine and coastal ecosystems.  
Biochemical markers of colloidal and particulate organic carbon.

#### PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science (AAAS)  
Association for the Sciences of Limnology and Oceanography (ASLO)  
Coastal and Estuarine Research Federation (CERF)  
American Geophysical Union (AGU)  
European Association of Organic Geochemists (EAOG)

#### HONORS & AWARDS

- 1986    Predoctoral Research Award, The Society of Sigma Xi  
1986    Lerner-Gray Fund Award for Marine Research, The American Museum of Natural History  
1988-1990 Postdoctoral Research Fellowship, Institute of Ecosystem Studies, Milbrook, N.Y.  
1989    Sterrer Fellowship, Bermuda Biological Research Station.

- 1989 Theodore Roosevelt Fellowship, American Museum of Natural History.
- 1990 Sterrer Fellowship, Bermuda Biological Research Station.
- 1991 TARP Award, to attend the Gordon Conference on Chemical Oceanography, Meriden, New Hampshire.
- 1993 Fulbright Research Scholarship, U.S./Cyprus
- 1994 Visiting Scientist Award, Stockholm University, Sweden
- 1994 Lamar University Excellence in Research Award
- 1988 Mortar Board Excellence in Teaching at Tulane University
- 2000 Fulbright Research Scholarship, U.S./Sweden
- 2007 William Evans Fellowship, Research Scholar, Otago University, New Zealand
- 2012 James Whatley Chair in Geosciences at Texas A&M University
- 2013 *Fellow of the American Association for the Advancement of Science (AAAS)*
- 2016 University of Florida, College of Arts and Sciences University of Florida, 3-year Term-Professorship Research Award
- 2017 Marine Alliance for Science and Technology in Scotland (MASTS) Research Fellow
- 2017 *Fellow of the Geochemical Society and the European Association of Geochemistry*
- 2017 *Fellow of the Association for the Sciences of Limnology and Oceanography*
- 2018 Qilu Friendship Ward, People's Government of Shandong Province, China

#### OCEANOGRAPHIC CRUISE EXPERIENCE

- 1977 Research Assistant, O/R/V ONRUST, New York Bight.
- 1977 Research Assistant, Canary Island Expedition II., Grand Canaria.
- 1983 Research Assistant, O/R/V CALANUS, Bahama Platform.
- 1984 Research Assistant (served as assistant chief scientist), O/R/V CALANUS, Bahama Platform.
- 1985 Research Assistant, O/R/V CORNIDA SAAVEDRA, Spanish Continental Shelf.
- 1985 Research Assistant (served as assistant chief scientist), O/R/V CALANUS, Bahama Platform.
- 1986 Research Assistant, O/R/V CALANUS, Bahama Platform.
- 1986-88 Research Assistant, O/R/V WARFIELD, Chesapeake Bay (12 cruises).
- 1992 CO-PI on project, R/V GYRE, Gulf of Mexico - 7 days - (March, 1992).

- 1992 CO-PI on project, R/V GYRE, Gulf of Mexico - 5 days - (June, 1992).
- 1992 CO-PI on project, R/V GYRE, Gulf of Mexico - 5 days - (Sept., 1992).
- 1993 CO-PI on project, R/V GYRE, Gulf of Mexico - 7 days - (Jan., 1993).
- 1993 CO-PI on project, R/V GYRE, Cape Hatteras - 7 days - (May 1993).
- 1993 CO-PI on project, R/V GYRE, Gulf of Mexico - 7 days - (Nov., 1993).
- 1995 PI on project, R/V FYRBYGARREN, Baltic Sea - 3 days - (Jul., 1995).
- 1996 PI on project, R/V SVANIC, Baltic Sea - 3 days - (Jun., 1996).
- 1998-1999 Co-PI on project, R/V PELICAN, Mississippi River and Gulf of Mexico  
1998-2000 Cruises (3 to 5 six day cruises per year)  
2001 Four 3 day cruises on the R/V AURELIA in the Baltic Sea
- 2002 10 day cruise (March) in the Mississippi Plume on R/V PELICAN
- 2003 Served as chief scientist 10 day cruise (in July) off the Louisiana coast (mouth of Mississippi River to the Mississippi Canyon), supported by NSF-ICC.
- 2007 10 day cruise (July) in Fjordland, New Zealand.
- 2010 7 day cruise (April) in the Mississippi Plume, Louisiana shelf region. (served as chief scientist)
- 2011 7 day cruise (April) in the Mississippi Plume, Louisiana shelf region. (served as chief scientist)

#### PRESENTATIONS AT PROFESSIONAL MEETINGS

##### *Contributed Papers*

- 1990 Gulf Estuarine Research Society (GERS) Meeting, Lamar University, Beaumont, TX (paper presentation).
- 1991 Texas Academy of Sciences, Stephen F. Austin University, Nacogdoches, TX (paper presentation).
- 1991 Ecological Society of America, San Antonio, TX (paper presentation).
- 1991 The Southern Regional Geochemistry Meeting, University of Texas, Marine

- Science Institute, Port Aransas, TX.
- 1992 Southern Regional Geochemistry Meeting, Lamar University, Beaumont, TX (served as organizer and presented paper).
- 1992 Ocean Margins Program, Dept. of Energy, Brookhaven National Laboratory, Upton, N.Y.
- 1992 Southern Regional Geochemistry Meeting, Texas A&M University, Galveston, TX (paper presentation).
- 1993 Gulf Estuarine Research Society (GERS) Meeting, University of Southern Alabama, Mobile, Al (paper presentation).
- 1993 Ocean Margins Program, Dept. of Energy, Brookhaven National Laboratory, Upton, N.Y.
- 1993 Estuarine Research Federation International Meeting, Hilton Head, South Carolina (paper presentation).
- 1994 Gulf Coast Regional Geochemistry Meeting, Dauphin Island Marine Lab, Mobile Al. (paper presentation).
- 1995 Gulf Estuarine Research Society (GERS) Meeting, University of Southwestern Louisiana, Lafayette, LA (paper presentation).
- 1995 Estuarine Research Federation Meeting (ERF), Corpus Christi, TX (paper presentation).
- 1996 Ocean Sciences Meeting, San Diego, CA (paper presentation).
- 1997 American Society of Limnology and Oceanography, Santa Fe, NM (paper and poster presentations).
- 1997 Gordon Conference in Chemical Oceanography, Meriden, NH (Poster presentation).
- 1998 Gulf Coast Regional Geochemistry Meeting, Louisiana Universities Marine Consortium, Cocodrie, La. (paper presentation).
- 1998 American Society of Limnology and Oceanography, St. Louis, MO (paper and poster presentations).
- 1999 Gordon Research Conference in Chemical Oceanography, Meriden, NH (Poster presentation).
- 1999 American Chemical Society – Geochemistry Division, New Orleans, LA (Poster presentation).
- 2006 Gordon Research Conference- Organic Geochemistry, Plymouth, NH (Co-author on poster presentation).
- 2006 American Geophysical Union - San Francisco, CA (Co-author on poster)
- 2007 Gordon Research Conference in Chemical Oceanography, Tilton, NH (Poster presentation).
- 2008 Ocean Sciences Meeting, Orlando, FL (paper presentation and hosted special session, and 2 poster presentations).
- 2008 American Geophysical Union National Meeting, San Francisco, CA (3 Poster presentations).
- 2009 American Geophysical Union Meeting, San Francisco, CA (2 poster presentations)

- 2010 American Society of Limnology and Oceanography Ocean Sciences Meeting, Portland, OR (5 Poster presentations).
- 2010 American Geophysical Union Meeting, San Francisco, CA (Poster presentation)
- 2010 Gordon Research Conference – Organic Geochemistry, Holderness, NH (Poster presentation).
- 2011 American Geophysical Union Meeting– San Francisco, CA (2 Poster presentations)
- 2012 American Society of Limnology and Oceanography (Lake Biwa), Otsu, Japan (oral presentation).
- 2012 Gordon Research Conference – Organic Geochemistry, Holderness, NH (2 Poster presentations).
- 2012 Soil Organic Matter (SOM5) Workshop, Monte Verità, Ascona, Lago Maggiore, Switzerland (1 poster)
- 2013 ECSA - Estuaries and Coastal Areas in Times of Intense Change, Shanghai, China (oral presentation).
- 2014 Gordon Research Conference – Organic Geochemistry, Holderness, NH (poster presentation).
- 2015 Goldschmidt Geochemistry Conference, Prague, Czech Republic (oral presentation).
- 2018 Ocean Sciences, Portland, OR (poster presentation and session chair).
- 2018 Gordon Research Conference – Organic Geochemistry, Holderness, NH (poster presentation).

*Invited Papers*

- 2000 American Society of Limnology and Oceanography, Albuquerque, NM (Invited paper presentation).
- 2001 Advances in Maine Organic Geochemistry Meeting- dedication to John Hedges, Friday Harbor Lab (University of Washington), Seattle, WA (Invited participant).
- 2004 Asia Oceania Geosciences Society (AOGS) Meeting, Singapore (Invited paper).
- 2008 American Society of Limnology and Oceanography, Orlando, FL (Invited paper presentation).
- 2009 Workshop and Conference on Biogeochemical Impacts of Climate and Land-Use Changes on Marine Ecosystems, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (Invited speaker).
- 2010 American Geophysical Union Conference, Meeting of the Americas, Iguazu Falls, Brazil, (Invited speaker).
- 2010 Ocean Carbon Biogeochemistry Workshop, San Francisco, CA (Invited speaker).
- 2011 International Conference on World's Large Rivers, Vienna, Austria (Invited speaker).
- 2011 Land Ocean Interactions in the Coastal Zone (LOICZ) Meeting, Yantai, China (Invited speaker).
- 2011 World Delta Summit, Jakarta, Indonesia (Invited speaker).

- 2013 American Society of Limnology and Oceanography, New Orleans. LA (Invited paper presentation).
- 2014 American Geophysical Union Conference, Ocean Sciences Meeting. Honolulu, HI. (Invited speaker and session organizer).
- 2014 American Geophysical Union Conference, San Francisco, CA. (Invited speaker and session organizer).
- 2015 American Geophysical Union Conference, San Francisco, CA. (Invited speaker and session organizer).
- 2015 Goldschmidt Geochemistry Conference, Prague, Czech Republic (Invited speaker and session organizer).
- 2016 American Geophysical Union Conference, Ocean Sciences Meeting. New Orleans, LA. (Invited speaker and session organizer).
- 2016 Goldschmidt Geochemistry Conference, Yokohama, Japan (Invited speaker and session organizer).

#### PLENARY AND KEYNOTE SEMINARS

- 2003 Marcus Wallenberg Foundation Symposium on Organic Geochemistry, The Royal Swedish Academy of Sciences, Stockholm, Sweden (Invited Plenary speaker).
- 2005 University of South Florida, St. Petersburg, FL, Eminent Scholar Lecture Series in Marine Sciences.
- 2008 Ocean Carbon and Biogeochemistry Workshop, NSF, Tampa, FL (Invited Plenary speaker).
- 2008 10<sup>th</sup> International Estuarine Biogeochemistry Symposium, Xiamen, China (Invited Plenary speaker).
- 2010 Deltas in Times of Climate Change. This conference was hosted by two Dutch Research Programs and was also supported by C40 (a group of the world's largest cities committed to tackling climate change), Rotterdam, Netherlands (Invited Keynote speaker).
- 2011 11<sup>th</sup> International Estuarine Biogeochemistry Symposium, Beaufort, North Carolina, NC (Invited Keynote speaker).
- 2015 Goldschmidt Geochemistry Conference, Prague, Czech Republic (Keynote speaker).
- 2016 4th Bio-Organic Geochemistry Conference, Tongji University, Shanghai, China (Invited Keynote speaker).
- 2016 Sea Floor Observation Symposium, Qingdao, China (Invited Keynote speaker).
- 2017 Goldschmidt Geochemistry Conference, Paris, France (Keynote speaker).
- 2017 American Geophysical Union Conference, Ocean Sciences Meeting. New Orleans, LA. (Invited keynote speaker and session organizer).
- 2017 18<sup>th</sup> Annual Soil and Water Sciences Research Forum, University of Florida, Gainesville, FL. (Keynote speaker).
- 2018 12<sup>th</sup> annual wetland Biogeochemistry Meeting, Coral Gables, FL (Plenary

speaker).  
2018 Goldschmidt Geochemistry Conference, Boston, USA (Keynote speaker).

### INVITED SEMINARS

Vassar College, Poughkeepsie, NY (1989)  
Bermuda Biological Research Station, Bermuda (1989)  
Fordham University, Bronx, NY (1989)  
Bermuda Biological Research Station, Bermuda (1990)  
University of Alabama, Tuscaloosa, AL (1990)  
University of Texas, Port Aransas, TX (1990)  
Texas A&M University, Galveston, TX (1991)  
Louisiana State University, Baton Rouge, LA (1991)  
Southwestern Louisiana State University, LA (1991)  
Texas Tech University, Lubbock, TX (1992)  
Dauphin Island Sea Lab, Dauphin Island, AL (1992)  
Louisiana Universities Marine Consortium (LUMCON), LA (1992)  
Texas A&M University, College Station, TX (1992)  
Florida State University, Tallahassee, FL (1992)  
University of Houston, Houston, TX (1993)  
Texas A&M University, Galveston, TX (1993)  
University of Stockholm, Stockholm, Sweden (1994)  
Louisiana Universities Marine Consortium, LA (1994)  
University of New Orleans, New Orleans, LA (1995)  
University of Alabama, Tuscaloosa, AL (1995)  
Southeastern Louisiana University, Hammond, LA (1995)  
Loyola University, New Orleans, LA (1996)  
University of Southern Mississippi, Stennis Space Center, MS (1997)  
Harvard University, Boston, MA (1999)  
Louisiana State University, Baton Rouge, LA (2000)  
Florida State University, FL (2000)  
Virginia Institute of Marine Science, College of William and Mary, VA (2000)  
Stockholm University, Stockholm, Sweden (2000)  
University of Southern Mississippi, Stennis Space Center, MS (2001)  
University of Delaware, Lewes, DE (2002)  
Georgia Institute of Technology, GA (2002)  
University of Alabama, Dauphin Island Sea Lab, AL (2002)  
National Environmental Research Institute, Ministry of Environment and Energy,  
Roskilde, Denmark (2003)  
LUMCON, Cocodrie, LA (2003)  
Texas A&M University, College Station, TX (2003)  
Oxford University, UK (2004)  
Burapha University, Chonburi, Thailand (2004)



Binghamton University, Binghamton, NY (2005)  
Texas A&M University, College Station, TX (2005)  
Rice University, Houston, TX (2007)  
Old Dominion University, Norfolk, VA (2007)  
Louisiana State University, Baton Rouge, LA (2007)  
Texas A&M University, Galveston, TX (2007)  
Otago University, Dunedin, New Zealand (2007)  
Rutgers University, New Brunswick, NJ (2007)  
University of North Carolina, Chapel Hill, NC (2008)  
UNC, Marine Sciences Institute, Beaufort, NC (2008)  
Yale University, New Haven, CT (2008)  
Virginia Commonwealth University, Richmond, VA (2008)  
Netherlands Institute Sea Research, Texel, Netherlands (2009)  
East China Normal University, Shanghai, China (Invited talks as visiting scholar)  
(2009)  
Ohio State University, Columbus, OH (2010)  
Stockholm University, Stockholm, Sweden (2011)  
University of Delaware, Newark, DE (2011)  
Woods Hole Oceanographic Institution, MA (2011)  
Ocean University of China, Qingdao, China (2011)  
University of Zurich, Zurich, Switzerland (2011)  
Swiss Federal Institute of Technology Zurich (Eidgenössische Technische  
Hochschule Zürich [ETH]), Zurich, Switzerland (2011)  
Ocean University of China, Qingdao, China (2012)  
University of Florida, Gainesville, FL (2012)  
Texas A&M University, Corpus Christi, TX (2012)  
University of Montreal, Montreal, Canada (2012)  
University of Quebec, Montreal, Canada (2012)  
University of Alabama, Tuscaloosa (2012)  
University of Glasgow, Glasgow Scotland (2012)  
Florida State University, Tallahassee, FL (2013)  
Florida Atlantic University, Boca Raton, FL (2013)  
Yale University, New Haven, CT (2013)  
Florida International University, Miami, FL (2014)  
Florida Institute of Technology, Melbourne, FL (2014)  
McGill University, Montreal, Canada (2014)  
Wayne State University, MI (2014)  
University of South Florida, St. Petersburg, FL (2014)  
Northwestern University, Evanston, IL (2014)  
Ocean University of China, Qingdao, China (2014)  
Peking University, Beijing, China (2014)  
University of Miami, Miami, FL (2014)  
Florida Gulf Coast University, Naples, FL - Distinguished Lecture Series (2015)

University of Southern California, Los Angeles, CA (2015)  
University of California, Irvine, CA (2015)  
Tulane University, New Orleans, LA (2015)  
University of Minnesota, Duluth, MN (2015)  
University of North Carolina, Institute of Marine Sciences, Beaufort, NC (2015)  
Whitney Marine Laboratory (University of Florida), Flagler Beach, FL (2015)  
University of North Carolina, Wilmington, NC (2016)  
Pacific Northwest National Laboratory, Richmond, WA (2016)  
Second Institute of Oceanography, Hangzhou, China (2016)  
North Carolina State University, Raleigh, NC (2017)  
University of Wisconsin, Madison, WI (2017)  
University of Glasgow, Glasgow, Scotland (2017)  
Scottish Association of Marine Science, Scotland (2017)  
University of St. Andrews, St. Andrews, Scotland (2017)  
Indiana University, Bloomington, IN (2017)  
Pacific Northwest National Laboratory, Marine Laboratory, Sequim, WA (2018)

#### GRANTS RECEIVED

- T.S. Bianchi (PI) and S. Findlay (Co-PI). Sources, transformations and food quality of organic matter in Hudson River food webs. Hudson River Foundation. From 7/1/89-6/30/90. TSB received \$39,686.
- T.S. Bianchi (PI) and S. Findlay (Co-PI). Organic matter sources in Hudson River Sediments: Use of specific plant pigments to trace planktonic, terrestrial and littoral macrophytic inputs. Hudson River Foundation. From 8/1/88-7/30/89. TSB received \$28,000.
- T.S. Bianchi (PI) and S. Findlay (Co-PI). Sources, transformations and food quality of organic matter in Hudson River food webs. Hudson River Foundation. From 7/1/89-6/30/90. TSB received \$39,686.
- T.S. Bianchi (PI) and M. Baskaran (Co-PI). Plant pigments and radionuclides as tracers of organic carbon flux in the Sabine-Neches Estuary. Advanced Research Program, Texas Higher Education Board. From 3/1/92-2/29/93. \$114,975.
- P.H. Santschi (PI), M. Baskaran (Co-PI), B. Honeyman (Co-PI), T.S. Bianchi (Co-PI) and S. Trumbore (Co-PI). The production of colloids in the benthic boundary layer and their interaction with other particles. Department of Energy. \$1,168,261, From 1/1/92-12/31/94. TSB received \$96,760.

- T.S. Bianchi (PI), W. Carley (Co-PI), and P. Buonora (Co-PI). Acquisition of a high performance liquid chromatography instrument. National Science Foundation (IID). \$30,900.
- R. Wetzel (PI), T. S. Bianchi (PI), and P. Buonora (Co-PI). Dissolved organic carbon from wetlands: rates of decomposition, fluxes, and loss processes in recipient aquatic ecosystems. Department of Energy, Southeast Regional Center for Global Climate Change. TSB received \$119,345.
- T.S. Bianchi (PI). The use of plant pigments and lignin-phenols as tracers of particulate organic carbon in the eastern Mediterranean. Fulbright Scholar Program 1992-1993.
- T.S. Bianchi (PI), R. Elmgren, S. Blomqvist, and J. Risberg. Reconstruction of a long-term historical record of cyanobacterial blooms in the Baltic Sea using fossil pigments as paleoindicators. International Programs, National Science Foundation. July 1995-96, TSB received \$13,000.
- T.S. Bianchi (PI), P. Hatcher (Co-PI), K. Freeman (Co-PI), and M. Baskaran (Co-PI). Paleocological changes in the carbon isotope ratios of organic macromolecules in lacustrine sediments, Mud Lake, Florida: A response to elevations in atmospheric CO<sub>2</sub> levels. Department of Energy, National Institute of Global Environmental Change (NIGEC). 1995-1996, TSB received \$127,177.
- T.S. Bianchi (Co-PI), J. Means (Co-PI), K. Carman (Co-PI), and P. Klerks (Co-PI). Bioavailability and population level effects of exposure of aquatic foodwebs to produced water and other mixed wastes. Department of Energy, (EPSCOR). 1995-1996, TSB received \$31,017.
- T.S. Bianchi (Co-PI) and K. Carman (Co-PI). Direct and indirect effects of diesel fuel on microphytobenthos and meiofauna in saltmarsh sediments. Office of Naval Research (ONR). 1996-1997, TSB received \$60,171.
- T.S. Bianchi (Co-PI), J. Means (Co-PI), K. Carman (Co-PI), and P. Klerks (Co-PI). Natural and active chemical remediation of toxic metals, organics, and radionuclides in the aquatic environment. Department of Energy, Tulane/Xavier Hazardous Wastes in the Mississippi River Basin, 1996-1997, TSB received \$20,000.
- T.S. Bianchi (Co-PI), J. Means (Co-PI), K. Carman (Co-PI), and P. Klerks (Co-PI). Bioavailability and population level effects of exposure of aquatic foodwebs to produced water and other mixed wastes. Department of Energy, (EPSCOR). 1996-1997, TSB received \$35,017.

- T.S. Bianchi (PI). Process dynamics of Pb transport and plant uptake in BayouTrepagnier, LA. Department of Energy, Tulane/Xavier Hazardous Wastes in the Mississippi River Basin, 1997-1998, (TSB received \$35,000).
- T.S. Bianchi (Co-PI), J. Means (Co-PI), and P. Klerks (Co-PI). The effects of high molecular weight DOC on the fate and transport of PAHs. Department of Energy, (EPSCOR). 1997-1999, TSB received \$115,814.
- T.S. Bianchi (PI). Effects of ultraviolet radiation on the composition of colloidal organic matter in Bayou Trepagnier, LA. NASA. A Fellowship and spending money for a graduate student. 1998-1999, \$21,000 for a graduate student.
- T.S. Bianchi (Co-PI), Brent McKee (Co-PI), and Sid Mitra (Co-PI). Evaluating the effects of seasonal sediment storage, diagenesis, and remobilization on the fate of sediment contaminants in the Lower Mississippi River. Dept. of Defense, 1999-2000, TSB received \$196,673.
- T.S. Bianchi (Co-PI), J. Whitbeck (PI), and H. Bart (Co-PI). Recruitment of superior students to the field of ecosystem ecology. Louisiana Education Quality Support Fund (LEQSF), 1997-2000, TSB received \$60,000.
- T.S. Bianchi (Co-PI), B. McKee (PI), M. Dagg (Co-PI), G. Booth (Co-PI), R. Miller (Co-PI), R. Powell (Co-PI). River–Ocean Interactions (Phase I.): The processing and fates of nutrients and organic carbon from the Mississippi River. Office of Naval Research, 1999-2001, TSB received \$181,971.
- T.S. Bianchi (PI). Chlorophyll diagenesis in a river-dominated coastline: The effects of hypoxia events. Petroleum Research Fund, 1999-2001, TSB received \$59,906.
- T.S. Bianchi (Co-PI), B. McKee (PI), M. Allison (Co-PI), M. Dagg (Co-PI). Center for river-ocean studies: planning for an NSF science and technology center proposal. La-BOR. 2002. (\$48,740, directed by McKee).
- T.S. Bianchi (PI), G. Boyd, L. Dyer, J. Gullede. Acquisition of a GC-MS and thermochemolysis prep-system in Earth and Ecosystem Sciences. La-BOR. 2002-2003, (\$101,661).
- T.S. Bianchi (Co-PI) and A. Shiller (PI). Collaborative research: redox controls on and seasonal variability of dissolved iron and manganese in rivers. National Science Foundation, Hydrology Program. 2000-2004, TSB received \$164,686.
- T.S. Bianchi (Co-PI), B. McKee (Co-PI), M. Dagg (PI), and R. Miller (Co-PI). Controls on the optical properties of coastal waters in the northern Gulf of Mexico. 2001-2004, NASA-Carbon Cycle Science. TSB received \$184,000.

- T.S. Bianchi (PI), B. McKee (Co-PI), E. Canuel (Co-PI), S. Wakeham (Co-PI), and M. Allison (Co-PI). Collaborative Research: How temporal changes in river discharge and storms affect the source and age distribution of sedimentary organic carbon across a river-dominated margin. NSF- Integrated Carbon Cycle Program. TSB received \$84,000.
- T.S. Bianchi (PI), B.A. McKee (Co-PI), M.A. Allison (Co-PI), E. Canuel (Co-PI), and S. Wakeham (Co-PI). Collaborative Research: How temporal changes in river discharge and storms affect the source and age of distribution of sedimentary organic carbon across a river-dominated margin. NSF-ICC. 10/01/02-03/31/05. (\$97,834 for Bianchi).
- T.S. Bianchi (Co-PI), J. Sickman (PI), J. Chambers (Co-PI), F. Marcantonio (Co-PI), W. Simmons (Co-PI), J. Turner (Co-PI). An isotope ratio mass spectrometer for Biogeoscience Research and Teaching at the University of New Orleans and Tulane University. NSF-MRI. 09/01/04-08/31/05. (\$185,612).
- T.S. Bianchi (Co-PI) and F. Marcantonio (PI). Millennial variations in Arabic sediment proxies: the connection to North Atlantic Climate. NSF-ESH. 06/01/04-05/31/06. (\$85,000 for Bianchi).
- T.S. Bianchi (Co-PI), E. Canuel (PI), and S. Wakeham (Co-PI). Collaborative research: Anthropogenic impacts on carbon cycling in the Sacramento-San Joaquin delta: changes in sources, nature, and age of organic carbon. NSF-DEB. 6/1/05 – 12/31/07 (\$50,102 for Bianchi).
- T.S. Bianchi (PI) and S. Soper (Co-PI). A Nanoscale Microfluidic Sampler: Applications in Environmental/Agricultural Sampling of *E. coli*. Texas Sea Grant. 11/1/2008-10/31/2009 (\$20,000).
- T.S. Bianchi (PI), S.F. DiMarco (Co-PI), P. Chang (Co-PI), Z.S.H. Yang (Co-PI) Osterman (Co-PI). Historical Reconstruction of Hypoxia in Sediments of the Chanjiang (Yangtze) and Mississippi River Estuaries: A Comparative Study of Two Global River-Dominated Margins (RiOMar). Internal funds from TAMU. 11/1/2008-10/31/2009 (\$20,000).
- P. Chang (PI), T.S. Bianchi (Co-PI), and S. DiMarco (Co-PI). Comparative studies of the Yangtze and Mississippi River basins: junior research participation in collaborative research planning initiative. OISE-NSF International Plan and Workshops. 10/1/2008-9/31/2009 (\$29,995).
- J. Mullet (PI) and T.S. Bianchi (Co-PI). Sorghum as a biofuel: Lignin analyses. Chevron. 11/1/2008-10/31/2009 (\$15,000).
- M. Allison (PI) and T.S. Bianchi (Co-PI). Implications of black mangrove colony expansion in the Gulf of Mexico (GOM) coastal wetlands on sea-level induced land loss and

- estuarine productivity DOE National Inst. for Climatic Change Res. (NICCR). 4/1/2009-3/31/2010 (\$247,969).
- C. Osborn (PI), P. Coble (Co-PI), E. J D'Sa (Co-PI), R. Chen (Co-PI), and T.S. Bianchi (Co-PI). Geospatial Synthesis of Chromophoric Dissolved Organic Matter Distribution in the Gulf of Mexico for Water Clarity Decision Making. NASA-ROSES. 9/1/2009-2/28/2011. (\$400,000).
- J. Kessler (PI), T.S. Bianchi (Co-PI), S. Yvon-Lewis (Co-PI), H. Mills (Co-PI). The effect of methane laden oil on climate and dissolved oxygen: using the Deepwater Horizon oil spill as an analog for clathrate decomposition and seeping methane. RAPID-Chemical Oceanography-NSF. 6/1/2010-5/31/2011. (\$166,745).
- T.S. Bianchi (PI), Robert Cook (Co-PI), and Michael Perdue (Co-PI). The Effects of Oil Contamination from the Deep Horizon Disaster on the Composition of Dissolved Organic Matter in Louisiana Coastal Marshes. RAPID-Chemistry-NSF, 7/1/2010-6/31/2011. (\$117,000).
- M.A. Allison (PI) and T.S. Bianchi. (Co-PI) EAGER: Collaborative Research: Developing a high-resolution late Holocene sediment record in the Colville River Delta. Arctic Sciences NSF. 9/1/2009-12/1/2011. \$233,456.
- S. DiMarco (PI), T.S. Bianchi (Co-PI), P. Chapman (Co-PI), M. Dagg (Co-PI), D. Forrest (Co-PI), N. Guinasso (Co-PI), R. Hetland (Co-PI), K. Fennel (Co-PI), C. Harris (Co-PI), A. Quigg (Co-PI), N. Walker (Co-PI), K. Xu (Co-PI). Mechanisms Controlling Hypoxia: Integrated Causal Modeling. NOAA-NGOMEX (\$4,787,314 ) 7/1/2009-6/30/2014.
- Thomas S. Bianchi (PI), Daniel Thornton (Co-PI), Shari Yvon-Lewis. Collaborative Research: The Role of Priming in Microbial Utilization of Terrestrially-Derived Dissolved Organic Carbon: A Proof of Concept. NSF, Low Temperature Geochemistry and Geobiology \$100,000; 09/01/12-08/30/14.
- P. Chapman (PI), S. Sokolofsky, J. Ledwell (Co-PI), T.S. Bianchi (Co-PI), E. North (Co-PI), J. Kessler (Co-PI), S. Yvonne-Lewis (Co-PI), E. Variano (Co-PI), S. Masutani (Co-PI), I. Szunyogh (Co-PI), E. Adams (Co-PI), O. Fringer (Co-PI), T. Wade (Co-PI), R. He (Co-PI), B. Hodges (Co-PI), N. Guinasso (Co-PI), R. Hetland (Co-PI), S. DiMarco (Co-PI), P. Chang (Co-PI) and A. Goldstein (Co-PI). Gulf Integrated Spill Research \$14,403,000, British Petroleum, 11/1/2011-10/30/2014.
- Mead A. Allison (PI) and Thomas S. Bianchi (Co-PI). Collaborative Research: Developing a high-resolution late Holocene sediment record of rapid Arctic climate change from the Beaufort Sea coastal zone. Arctic Sciences NSF. \$400,000; 7/1/2011-6/31/2014.

Thomas S. Bianchi (PI) and Peter Raymond (Co-PI). Collaborative Research: Flooding the Colorado River Delta: Impacts of Flow Restoration on River-Carbon Composition and Fluxes. NSF Hydrology. \$77,328: 3/28/2014-2/28/2015.

Matthew Cohen (PI), Thomas S. Bianchi (Co-PI), Jonathan Martin (Co-PI), and Daniel L McLaughlin (Co-PI). Collaborative Research: The Ecological Drill Hypothesis: Biotic Control on Carbonate Dissolution in a Low Relief Patterned Landscape. NSF, DEB Ecosystem Studies. \$725,434: 5/01/2014-4/30/2016.

Christopher Osburn (PI), Thomas S. Bianchi (Co-PI), and Eurico D'Sa (Co-PI). Linking carbon exchange between coastal wetland and shelf environments: a case study in Barataria Bay, northern Gulf of Mexico. NASA Research Announcement NNH13ZDA001N-CARBON. \$226,076: 5/01/14-04/30/16.

Raymond Najir, R (PI), Thomas S. Bianchi (Co-PI) et al. The carbon budget of tidal wetlands and estuaries of the contiguous United States: a synthesis approach. NASA Research Announcement NNH13ZDA001N-CARBON. \$1,214,388.00: 5/01/14-04/30/16.

Christopher Osburn, C (PI), Thomas S. Bianchi (Co-PI) and others. Collaborative Research: Planktonic sources of chromophoric dissolved organic matter in seawater. NSF Chemical Oceanography. \$281,576, 03/01/15 - 02/28/18.

Thomas S. Bianchi (PI), Xiaowen Zhang, Jack A. Hutchings, Ana R. Arellano, Edward A. G. Schuur, and Yina Liu. Justifying a Proposed Alteration of Chemical Composition of Soil-leached Dissolved Organic Matter in Sub-Arctic Soils. Proposal 49484 in the High-Performance Mass Spectrometry Facility - Rapid Access: Environmental Molecular Sciences Laboratory, Pacific Northwest National Laboratory. 06/1/16-5/31/17.

*Current Grants:*

Thomas. Bianchi (PI), Nicholas Ward, Andrew Ogram, and Ana Arellano, The role of priming effects on the conversion of blue carbon to CO<sub>2</sub> in the coastal zone. Proposal 49505 in the High- Performance Mass Spectrometry Facility, Environmental Molecular Sciences Laboratory, Pacific Northwest National Laboratory. 04/26/16 – present.

Matthew Schmidt (PI), Thomas S. Bianchi (Co-PI), and Jennifer Hertzberg (Co-PI). Collaborative Research: Reconstructing Mean State and ENSO Variability in the Eastern Equatorial Pacific under Glacial Forcing: A Combined Geochemical and Organic Proxy Approach. NSF P2C2, Marine Geology and Geophysics, (For TSB \$266,985), 6/01/16-05/31/2018.

Christine Angelini (PI), Thomas S. Bianchi (Co-PI), Mark Brenner (Co-PI), and William Kenney

(Co-PI). Rising Seas, Herbivore Outbreaks, and the Uncertain Future of Blue Carbon. UF Office of Research, \$88,000, 5/01/18-4/30/19.

*Pending:*

Thomas S. Bianchi (PI) and Michael Shields (Co-PI). Investigating high temperature diagenesis with chemical biomarkers in two mineralogically distinct hot springs of Yellowstone National Park, USA, Petroleum Research Fund, \$110,000, 9/1/17-8/31/21.

PROFESSIONAL ACTIVITIES

*Reviewer for:*

Journal of Marine Research  
Limnology and Oceanography  
Science  
Estuarine Coastal Shelf Science  
Continental Shelf Research  
Ambio  
Nature  
Marine Chemistry  
Organic Geochemistry  
National Sea Grant Program  
Hudson River Foundation  
NOAA  
National Science Foundation

*Panelist for:*

NOAA/EPA, Coastal Intensive Sampling Network (CISNET) - June, 1998  
National Science Foundation, Chemical Oceanography - November, 1998  
National Science Foundation, Chemical Oceanography - May, 1999  
National Science Foundation, Chemical Oceanography - November, 1999  
National Oceanographic and Atmospheric Administration (NOAA) and Environmental protection Agency (EPA): Causes of Hypoxia in the northern Gulf of Mexico. April, 2006, New Orleans, LA  
EPA- Science Advisory Board, Hypoxia Advisory Panel - September 2006 - June 2007  
National Science Foundation, Arctic Natural Sciences, Polar Programs – April, 2007  
EPA – Hydrologic modeling and water resources – April, 2008  
National Science Foundation, Chemical Oceanography - November, 2015  
Pacific Northwest National Laboratory, Richmond, WA, June, 2018 – Advisory Panel



*Workshops and Special Sessions:*

- SCOR Workshop dedicated to the inter-calibration plant pigment methodology - Invited participant - Plymouth Marine Laboratory - August, 1988
- Workshop dedicated to the comparison of divergent ecosystems - Invited participant - Institute of Ecosystem Studies, Millbrook, NY - June, 1989
- Environmental Protection Agency Workshop on Harmful Algal Blooms - Invited speaker and participant, Tulane University. - August, 1998
- National Science Foundation (CoOP) workshop on Buoyancy-Driven transport processes. Invited participant - Salt Lake City, UT- October, 1998
- Workshop dedicated to River-Dominated Ocean margins (RioMar) - Co-Organized (with Brent McKee) and chaired sessions - Tulane University, New Orleans, LA, November, 1998
- Environmental Protection Agency Workshop on The use of chemical markers in historical environmental assessments, Invited speaker and participant, Narragansett, RI. - April, 1999
- National Science Foundation workshop on Biocomplexity “Benthic Processes “November 2002, Washington D.C., Invited participant.
- Workshop dedicated to River-Dominated Ocean margins (RioMar) - Co-Organized (with Brent McKee) and chaired sessions - Tulane University, New Orleans, LA, August, 2004
- National Science Foundation Ocean Carbon and Biogeochemistry Workshop, NSF, Tampa, FL, 2008.
- Climate Change and River-Dominated Coastal Margins Workshop, NSF, Qingdao, China, 2008 (Organizer and participant)
- National Science Foundation Ocean Carbon and Biogeochemistry Workshop, NSF, San Francisco, CA, 2010.
- Ocean Carbon and Biogeochemistry Summer Workshop, Woods Hole, MA, (Organized special session on Large-River/Coastal Carbon Cycling), 2012.
- CEI/National Science Foundation Site Visit, Cape Eleuthera Institute, Eleuthera, Bahamas, 2013.
- C-CASCADES Mini-Conference 2: From Land to Ocean - Processes and Budgets (Invited Speaker) - January 24 to January 26, ETH Zürich, Zürich, Switzerland, 2017.
- Scotland’s Blue Carbon Resources, (Invited speaker), Edinburgh, Scotland, 2017.

PROFESSIONAL POSTS

- Associate Editor, *Estuaries and Coasts* - 1998 – 2001
- Advisory Board, *Journal of Marine and Freshwater Research* – 1998 – 2002
- Associate Editor, *Organic Geochemistry* – 2007 – 2012
- Member-at-Large, American society of Limnology and Oceanography – 2009 – 2012
- Member of Science Steering Group, U.S. Ocean Carbon and Biogeochemistry (OCB) – 2011-2013
- Associate Editor, *Marine and Freshwater Research* – 2006 – 2013
- Associate Editor, *Geochimica Cosmochimica Acta* – 2007 – 2016
- Associate Editor, *Marine Chemistry* – 2007 - 2016

Co-Editor-in-Chief, Estuarine and Coastal Shelf Science – 2012 – 2016  
Editor-in-Chief, Marine Chemistry – 2016 - present

PEER-REVIEWED PAPERS and BOOK CHAPTERS

**1981**

1. Levinton, J.S. and **T.S. Bianchi**. 1981. Nutrition and food limitation of deposit-feeders. I. The role of microbial organisms in the growth of mud snails (*Hydrobiidae*). *J. Mar. Res.*, 39: 531-546.
2. **Bianchi, T.S.** and J.S. Levinton. 1981. Nutrition and food limitation of deposit-feeders. II. Differential effects of *Hydrobia totteni* and *Ilyanassa obsoleta* on the microbial community. *J. Mar. Res.*, 39: 547-556.

**1984**

3. **Bianchi, T.S.** and J.S. Levinton. 1984. The importance of microalgae, bacteria and particulate organic matter in the somatic growth of *Hydrobia totteni*. *J. Mar. Res.*, 42: 431-443.
4. Levinton, J.S., **T.S. Bianchi** and S. Stewart. 1984. What is the role of particulate organic matter in benthic invertebrate nutrition? *Bull. Mar. Sci.*, 35: 270-282.

**1986**

5. Rice, D.L., **T.S. Bianchi** and E.H. Roper. 1986. Experimental studies of sediment reworking and growth of *Scoloplos* spp. (Orbiniidae: Polychaeta). *Mar. Ecol. Prog. Ser.*, 30: 9-19.

**1988**

6. **Bianchi, T.S.** 1988. Feeding ecology of the subsurface deposit-feeder *Leitoscoloplos fragilis* Verrill. I. Mechanisms affecting particle availability on an intertidal sandflat. *J. Exp. Mar. Biol. Ecol.*, 115: 79-97.
7. **Bianchi, T.S.** and D.L. Rice. 1988. Feeding ecology of *Leitoscoloplos fragilis*. II. The effects of worm density on benthic diatom production. *Mar. Biol.*, 99: 123-131.
8. **Bianchi, T.S.**, R. Dawson, and P. Sawangwong. 1988. The effects of macrobenthic deposit-feeding on the degradation of chloropigments in sandy sediments. *J. Exp. Mar. Biol. Ecol.*, 122: 243-251.

**1989**

9. **Bianchi, T.S.**, C.G. Jones and M. Shackak. 1989. The positive-feedback of consumer population density on resource supply. *Trends in Ecol. and Evol.*, 4: 234-238.

**1990**

10. **Bianchi, T.S.** and S. Findlay. 1990. Plant pigments as tracers of emergent and submergent macrophytes from the Hudson River. *Can. J. Fish. Aquat. Sci.*, 47: 492-494.
11. Dawson, R., **T.S. Bianchi**, P. Sawangwong and C. Erlinda F. Orano Dawson. 1990. Production, flux and fate of photosynthetic pigments in estuaries. In: *Proceedings of the International Symposium on Biogeochemical Study of the Changjiang Estuary and its Adjacent Coastal Waters of the East China Sea*. Yo Guohui, J. Martin, and Zhou Tiayi (eds.), pp. 824-843. China Ocean Press.

**1991**

12. **Bianchi, T.S.** and S. Findlay. 1991. Decomposition of Hudson Estuary macrophytes: Photosynthetic pigment transformations and decay constants. *Estuaries*, 14: 65-73.
13. **Bianchi, T.S.**, S. Findlay and D. Fontvieille. 1991. Experimental degradation of plant materials in Hudson River sediments. I. Heterotrophic transformations of plant pigments. *Biogeochemistry*, 1: 17-33.
14. **Bianchi, T.S.** 1991. Density-dependent consumer effects on resource quality in carbonate sediments. *Texas J. Sci.*, 43: 283-295.
15. **Bianchi, T.S.** and C.G. Jones. 1991. Density-dependent positive feedbacks between consumers and their resources: A cross-system analysis. In: *Comparative analyses of ecosystems: patterns, mechanisms, and theories*. Cole, J., S. Findlay and G. Lovett (eds.), pp. 331-340. Springer-Verlag Press.

**1993**

16. **Bianchi, T.S.**, S. Findlay and R. Dawson. 1993. Organic matter sources in the water column and sediments of the Hudson River estuary: the use of plant pigments as tracers. *Estuar. Coast. Shelf Sci.*, 36: 359-376.
17. **Bianchi, T.S.**, S. Findlay and J. E. Dibb. 1993. Early diagenesis of plant pigments in Hudson River sediments. *Estuar. Coast. Shelf Sci.*, 36: 517-527.

**1994**

18. **Bianchi, T.S.**, G.M. Davis and D. Strayer. 1994. An apparent hybrid zone between freshwater gastropod species *Elimia livescens* and *Elimia virginica* (Gastropoda: Pleuroceriidae). *Amer. Malacol. Bull.*, 11: 73-78.

**1995**

19. **Bianchi, T.S.**, C. Lambert and D. Biggs. 1995. Distribution of chlorophyll-a and phaeopigments in the northwestern Gulf of Mexico: a comparison between fluorimetric and

high-performance liquid chromatography measurements. *Bull. Mar. Sci.*, 56: 25-32.

20. **Bianchi, T.S.**, C. Lambert, P. Santschi, M. Baskaran and L. Guo. 1995. Plant pigments as biomarkers of high-molecular-weight dissolved organic carbon. *Limnol. Oceanogr.*, 40: 422-428.
21. Santschi, P.H., L. Guo, M. Baskaran, S. Trumbore, J. Southon, **T.S. Bianchi**, B. Honeyman and L. Cifuentes. 1995. Isotopic evidence for the contemporary origin of high-molecular weight organic matter in oceanic environments. *Geochim. Cosmochim. Acta*, 59: 625-631.
22. Ravichandran, M., M. Baskaran, P.H. Santschi and **T.S. Bianchi**. 1995. History of trace metal pollution in Sabine-Neches estuary, Beaumont, Texas. *Environ. Sci. Tech.*, 29: 1495-1503.
23. Roller, R.A. and **T.S. Bianchi**. 1995. HPLC analysis of chloroplast pigments from the marine ascoglossan *Tridachia crispata* (Morch, 1863) (Mollusca: Opisthobranchia). *Amer. Malacol. Bull.*, 11: 139-143.
24. Baskaran M., P. Santschi, L. Guo, **T.S. Bianchi** and C. Lambert. 1995.  $^{234}\text{Th}$ : $^{238}\text{U}$  disequilibria in the Gulf of Mexico: the importance of organic matter and particle concentration. *Cont. Shelf Res.*, 16: 353-380.
25. Ravichandran, M., M. Baskaran, P.H. Santschi and **T.S. Bianchi**. 1995. Geochronology of sediments in the Sabine-Neches estuary, Texas, U.S.A., *Chem. Geol.*, 125: 291-306.
26. Wetzel, R.G., P.G. Hatcher and **T.S. Bianchi**. 1995. Natural photolysis by ultraviolet irradiance of recalcitrant dissolved organic matter to simple substrates for rapid bacterial metabolism. *Limnol. Oceanogr.*, 40: 1369-1380.

#### 1996

27. **Bianchi, T.S.**, A. Demetropoulous, M. Hadjichristoforou, M., Argyrou, M. Baskaran, and C. Lambert. 1996. Plant pigments as biomarkers of organic matter sources in sediments and coastal waters of Cyprus (eastern Mediterranean). *Estuar. Coast. Shelf. Sci.*, 42:103-115.
28. **Bianchi, T.S.**, M.E. Freer and R.G. Wetzel. 1996. Temporal and spatial variability, and the role of dissolved organic carbon (DOC) in methane fluxes from the Sabine River floodplain (southeast Texas, U.S.A). *Archiv. fur Hydrobiol.*, 136: 261-287.

#### 1997

29. **Bianchi, T.S.**, M. Baskaran, M. Ravichandran, and J. DeLord. 1997. Carbon cycling in a shallow turbid estuary of Southeast Texas: The use of plant pigment biomarkers and water quality parameters. *Estuaries*, 20: 404-415.

30. Hadjichristophorou, M., M. Argyrou, A. Demetropoulos, and **T.S. Bianchi**. 1997. A species list of the sublittoral soft-bottom macrobenthos of Cyprus. *Acta Adriatica*, 30(1): 3-32.
31. **Bianchi, T.S.**, L. Kautsky, and M. Argyrou. 1997. Dominant chlorophylls and carotenoids in macroalgae of the Baltic Sea (Baltic Proper): their use as potential biomarkers. *Sarsia*, 82: 55-62.
32. Baskaran, M., M. Ravichandran, and **T.S. Bianchi**. 1997. Cycling of  $^7\text{Be}$  and  $^{210}\text{Pb}$  in a high DOC, shallow, turbid estuary of southeast Texas. *Estuar. Coast. Shelf Sci.*, 45: 165-176.
33. Argyrou, M., **T.S. Bianchi**, and C. Lambert. 1997. Transport and fate of particulate and dissolved organic carbon in the Lake Pontchartrain estuary, Louisiana, U.S.A. *Biogeochemistry*, 38: 207-226.
34. **Bianchi, T.S.** and M. Argyrou. 1997. Temporal and spatial dynamics of particulate organic carbon in the Lake Pontchartrain estuary, southeast Louisiana U.S.A. *Estuar. Coast. Shelf Sci.*, 45: 557-569.
35. **Bianchi, T.S.**, C. Lambert, L. Guo, and P.H. Santschi. 1997. Sources and transport of land-derived particulate and dissolved organic matter in the Gulf of Mexico (Texas Shelf/Slope): the use of lignin-phenols and loliolides as biomarkers. *Org. Geochem.*, 27: 65-78.
36. **Bianchi, T.S.**, C. Rolff, and C. Lambert. 1997. Sources and composition of particulate organic carbon in the Baltic Sea: The use of plant pigments and lignin-phenols as biomarkers. *Mar. Ecol. Prog. Ser.*, 156: 25-31.

#### 1998

37. **Bianchi, T.S.**, J.E. Bauer, E.R.M. Druffel, and C. Lambert. 1998. Pyropheophorbide-*a* as a tracer of suspended particulate organic matter from the Eastern North Pacific continental margin. *Deep Sea Res.* 45: 715-73.
38. Lambert, C., **T.S. Bianchi**, and P.R. Santschi. 1998. Cross-shelf changes in phytoplankton community composition in the Gulf of Mexico (Texas Shelf/Slope). *Cont. Shelf Res.* 19: 1-21.

#### 1999

39. **Bianchi, T.S.**, M. Baskaran, and M. Ravichandran. 1999. Is the Sabine-Neches estuary net heterotrophic or autotrophic? A reply to the comment by Finn et al. *Estuaries* 21: 839-841.
40. **Bianchi, T.S.**, M. Argyrou, and H.F. Chippett. 1999. Contribution of vascular-plant carbon to surface sediments across the coastal margin of Cyprus (eastern Mediterranean). *Org. Geochem.* 30: 287-297.

41. Bennett, A., **T.S. Bianchi**, J.C. Means, and K. Carman. 1999. Effects of PAH contamination and grazing on the abundance and composition of microphytobenthos in salt marsh sediments (Pass Fourchon, LA): I. A microcosm experiment. *J. Exp. Mar. Biol. Ecol.* 242: 1-20.
  42. Cifuentes, L.A., R.B. Coffin, J. Morin, **T.S. Bianchi**, and P.M. Eldridge. 1999. Particulate organic matter in Gulf of Mexico estuaries - Implications for net heterotrophy, *In: Biogeochemistry of Gulf of Mexico Estuaries* (eds. T. Bianchi, J. Pennock, and R.R. Twilley). John Wiley & Sons, pp. 239-267.
  43. **Bianchi, T.S.**, J.R. Pennock, and R.R. Twilley. 1999. Biogeochemistry of Gulf of Mexico Estuaries: Implications for management. *In: Biogeochemistry of Gulf of Mexico Estuaries* (eds. T. Bianchi, J. Pennock, and R.R. Twilley). John Wiley & Sons, pp. 407-421.
  44. Guo, L., P.H. Santschi, and **T.S. Bianchi**. 1999. Dissolved organic matter in estuaries of the Gulf of Mexico. *In: Biogeochemistry of Gulf of Mexico Estuaries* (eds. T. Bianchi, J. Pennock, and R.R. Twilley). John Wiley & Sons, pp. 269-299.
- 2000**
45. Carman, K.R., **T.S. Bianchi**, F. Kloep. 2000. The influence of grazing and nitrogen on benthic algal blooms in diesel-contaminated saltmarsh sediments. *Env. Sci. and Tech.* 34: 107-111.
  46. **Bianchi, T.S.**, P. Westman, C. Rolff, E. Engelhaupt, T. Andren, and R. Elmgren. 2000. Cyanobacterial blooms in the Baltic Sea: Natural or human-induced? *Limnol . Oceanogr.* 45 (3): 716-726. (*Selected as Featured Article in L&O*).
  47. Bennett, A., **T.S. Bianchi**, and J.C. Means. 2000. Effects of PAH contamination and grazing on the abundance and composition of microphytobenthos in salt marsh sediments (Pass Fourchon, LA): II. A field experiment. *Estuar. Coast. Shelf. Sci.* 50: 425-439.
  48. Wang, W., M.Tarr, **T.S. Bianchi**, and E. Engelhaupt. 2000. Ammonium photoproduction from aquatic humic and colloidal matter. *Aquatic Geochem.* 6: 275-292.
  49. **Bianchi, T.S.**, B. Johansson, and R. Elmgren. 2000. The effects of anoxia and deposit- feeding macrofauna on phytoplankton pigment breakdown in Baltic Sea sediments. *J. Exp. Mar. Biol. Ecol.* 251: 161-183.
  50. Mitra, S., **T.S. Bianchi**, L. Guo, and P. H. Santschi. 2000. Sources and transport of terrestrially-derived organic matter in the Chesapeake Bay and Middle Atlantic Bight. *Geochim. Cosmochim. Acta* 64: 3547-3557.

51. Mitra, S., P. Klerks, **T.S. Bianchi**, J. Means, and K. Carman. 2000. Effects of estuarine organic matter biogeochemistry on the accumulation of PAHs by two epibenthic species. *Estuaries* 23: 864-876.

**2001**

52. Chen, N., **T.S. Bianchi**, and B. A. McKee. 2001. Historical trends of hypoxia on the Louisiana Shelf: the application of pigments as biomarkers. *Org. Geochem.* 32 (4): 451-621.
53. Filley, T.R., K.H. Freeman, **T.S. Bianchi**, M. Baskaran, L.A. Colarusso, and P.G. Hatcher. 2001. An isotopic biogeochemical assessment of shifts in organic matter input to Holocene sediments from Mud Lake, Florida. *Org. Geochem.* 32 (9) 1153-1167.
54. Engelhaupt, E.D and **T.S. Bianchi**. 2001. Temporal variability in the sources and composition of high-molecular-weight dissolved organic carbon in a tidal stream in southern Louisiana (Bayou Trepagnier). *Limnol. Oceanogr.* 46: 917-926.
55. Tarr, M., W. Wang, **T.S. Bianchi**, and E. Engelhaupt. 2001. Mechanisms of ammonia and amino acid photoproduction from aquatic humic and colloidal matter. *Water Res.* 35: 3688-3696.
56. **Bianchi, T.S.** and E.A. Canuel. 2001. Organic Geochemical Tracers in Estuaries. *Org. Geochem.* 32 (4): 451-621.

**2002**

57. **Bianchi, T.S.**, S. Mitra, and B. McKee. 2002. Sources of terrestrially-derived carbon in the Lower Mississippi River and Louisiana shelf: Implications for differential sedimentation and transport at the coastal margin. *Mar. Chem.* 77: 211-223.
58. Mitra, S., **T.S. Bianchi**, B. McKee, and M. Sutula. 2002. Black carbon from the Mississippi River: quantities, sources, and potential implications for the global carbon cycle. *Env. Sci. Tech.* 36: 2296-2302
59. **Bianchi, T.S.**, C. Rolff, B. Widbom, R. Elmgren. 2002. Phytoplankton pigments in Baltic Sea seston and sediments: Seasonal variability, fluxes, and transformations. *Estuar. Coastal Shelf Sci.* 55: 369-383.
60. **Bianchi, T.S.**, E. Engelhaupt, B. McKee, S. Miles, R. Elmgren, S. Hajdu, C. Savage, and M. Baskaran. 2002. Do sediments from coastal sites accurately reflect time trends in water column phytoplankton? A test from Himmerfjorden Bay (Baltic Sea proper). *Limnol. Oceanogr.* 47: 1537-1544.

**2003**

61. Engelhaupt, E.D., **T.S. Bianchi**, R.G. Wetzel, and M. Tarr. 2003. The effects of UV radiation on the composition and bioavailability of dissolved organic matter in Bayou Trepagnier (southern

Louisiana). *Biogeochemistry* 62: 39-58.

62. Chen, N., **T. S. Bianchi**, and J. M. Bland. 2003. Novel decomposition products of chlorophyll-*a* in continental shelf (Louisiana shelf) sediments: Formation and transformation of carotenol chlorin esters. *Geochim. Cosmochim. Acta* 67: 2027-2042.
63. Chen, N., **T. S. Bianchi**, and J. M. Bland, 2003. Implications for the role of pre-versus post-depositional transformation of chlorophyll-*a* in the Lower Mississippi River and Louisiana shelf. *Mar. Chem.* 81: 37-55.
64. Westman, P., J. Borgendahl, **T.S. Bianchi**, and N. Chen. 2003. Probable causes for cyanobacterial blooms in the Baltic Sea: role of anoxia and phosphorus retention. *Estuaries* 26: 680-689.
65. Mitra, S. and **T.S. Bianchi**. 2003. A preliminary assessment of polycyclic aromatic hydrocarbon distributions in the lower Mississippi River and Gulf of Mexico. *Mar. Chem.* 82: 273-288.
66. Galler, J.J., **T.S. Bianchi**, M.A. Allison, R. Campanella, and L. Wysocki. 2003. Biogeochemical implications of levee confinement on the lowermost Mississippi River. *EOS* 84: 469-484.
67. Abrajano, T., **T.S. Bianchi**, E.A. Canuel, and S. Macko (eds.) 2003. Sources and fate of biogenic anthropogenic materials in freshwater and estuarine systems. *Org. Geochem.* 34 (2): 163-253.
- 2004**
68. **Bianchi, T.S.**, T. Filley, K. Dria, and P. Hatcher. 2004. Temporal variability in sources of dissolved organic carbon in the lower Mississippi River. *Geochim. Cosmochim. Acta* 68: 959-967.
69. McKee, B.A., R.C. Aller, M.A. Allison, T.S. **Bianchi**, and G.C. Kineke. 2004. Transport and transformation of dissolved and particulate materials on continental margins influenced by major rivers: Benthic boundary layer and seabed processes. *Cont. Shelf Res.* 24: 899-926.
70. Sutula, M., **T.S. Bianchi**, and B.A. McKee. 2004. Effect of seasonal sediment storage in the lower Mississippi River on the flux of reactive particulate phosphorus to the Gulf of Mexico. *Limnol. Oceanog.* 49, 2223-2235.
- 2005**
71. Chen, N., **T.S. Bianchi, T.S.**, B. A. McKee and J. M. Bland. 2005. Early diagenesis of chlorophyll-*a* in the lower Mississippi River and Louisiana shelf: Implications for carbon cycling in a river-dominated margin. *Mar. Chem.* 93: 159-177.
72. Pourmand, A., F. Marcantonio., **T.S. Bianchi.**, E.A. Canuel., E.J. Waterson, and H. Schultz. 2005. Radionuclide and biomarker proxies of past ocean circulation and productivity in the Arabian Sea. *Geophys. Res. Lett.* 32: L10610, doi: 10.1029/2005GL022612



73. Reuss, N., Conley, D., and **T.S. Bianchi**. 2005. Sediment pigments as a proxy for long-term changes in plankton community structure. *Mar. Chem.* 95: 283-302.

74. Dagg, M.J., **T.S. Bianchi**, G. Breed, H. Liu, B.A. McKee, W. Cai, R. Powell, and S. Duan. 2005. Biogeochemical characteristics of the lower Mississippi River (USA) during June 2003. *Estuaries* 28: 664-674.

## 2006

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monsoonal changes in the Jazmurian playa, southeastern Iran. To: *Palaeogeography, Palaeoclimatology, Palaeoecology*.

Macreadie, P.I., A. Anton, J.A. Raven, N. Beaumont, R.M. Connolly, D.A. Friess, J.J. Kelleway, H. Kennedy, T. Kuwae, P.S. Lavery, C.E. Lovelock, D.A. Smale, E.T. Apostolaki, T.B. Atwood, J. Baldock, **T.S. Bianchi**, G.L. Chmura, B.D. Eyre, J.W. Fourqurean, J.M. Hall-Spencer, M. Huxham, I.E. Hendriks, D. Krause-Jensen, D. Laffoley, T. Luisetti, N. Marbà, P. Masque, K.J. McGlathery, P.J. Megonigal, D. Murdiyarso, B.D. Russell, R. Santos, O. Serrano, B.R. Silliman, K. Watanabe, and C.M. Duarte. The Future of Blue Carbon Science. To: *Nature Sustainability*.

Osburn, C.L., J.D. Kinsey, **T.S. Bianchi**, M.R. Shields, K. Ziervogel, G. Corradino, and A. Schetzer. Formation of planktonic chromophoric dissolved organic matter in the ocean. To: *Marine Chemistry*.

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#### *In Preparation*

Hutchings, J.A., **T.S. Bianchi**, E.A.G. Schuur, D.S. Kaufman, A.L. Kholodov, and D. Vaughn. Millennial-Scale Carbon Accumulation and Molecular Composition in a Permafrost Core from Interior Alaska. For: *Geochimica Cosmochimica Acta*.

Schreiner, K.M., **T.S. Bianchi**, T.I. Eglinton, and M.A. Allison. Woody shrub and permafrost response to anthropocene climate cycles in Arctic Alaska. For: *Nature Climate Change*.

Arellano, A.R., **T.S. Bianchi**, C.L. Osburn, E.J. D'Sa, N.D. Ward, I. Joshi, D. Oviedo, D. Ko, M.R. Shields, G. Kurian, and J. Green. Mechanisms of Blue Carbon Export in Estuaries with Contrasting Carbon Sources. To: *Global Biogeochemical Cycles*.

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#### *Books*

1. **Bianchi, T.S.**, J. Pennock, and R. Twilley (eds.) 1999. *Biogeochemistry of Gulf of Mexico Estuaries*. John Wiley & Sons, 428 pp.
2. **Bianchi, T.S.** 2007. *Biogeochemistry of Estuaries*. Oxford University Press, 720 pp.



3. Dale, V., C. Kling, J.L. Meyer, J. Sanders, H. Stallworth, T. Armitage, D. Wangness, **T.S. Bianchi**, A. Blumberg, W. Boynton, D.J. Conley, W. Crumpton, M. David, D. Gilbert, R.W. Howarth, R. Lawrence, K. Mankin, J. Opaluch, H. Paerl, K. Recknow, A.N. Sharpley, T.W. Simpson, C. Snyder, and D. Wright. 2010. *Hypoxia in the Northern Gulf of Mexico*. Springer Press, 284 pp.
4. **Bianchi, T.S.** and E.A. Canuel. 2011. *Chemical Biomarkers in Aquatic Ecosystems*. Princeton University Press, 396 pp.
5. **Bianchi, T.S.**, Allison, M.A., and W. Cai (eds.). 2014. *Biogeochemical Dynamics at Major River-Coastal Interfaces: Linkages with Global Change*. Cambridge University Press, 658 pp.
6. **Bianchi, T.S.** 2016. *River Deltas and Humans: A Long Relationship Now Threatened by Global Change*. Oxford University Press, 184 pp.
7. **Bianchi, T.S.** 2017. *Biogeochemistry of Estuaries*. China Ocean Press, (translated to Chinese, abridged version).
8. **Bianchi, T.S.**, (ed.). 2018. *Chemical Oceanography of the Gulf of Mexico*. Texas A&M University Press (In press).

#### *Book Reviews*

- Bianchi, T.S.** 2001. Review of “John E. Hobbie [Ed.] 2000. *Estuarine Science: A synthetic approach to research and practice*.” Island Press. ISBN 1-55963-700-5”, *Limnology and Oceanography* 46: 746.
- Bianchi, T.S.** 2007. Review of “David Burdige, 2006. *Geochemistry of Marine Sediments*,” Princeton University Press, *EOS* 88 (47): 507.

#### GRADUATE STUDENTS and CURRENT POSITIONS

##### *Past Students:*

- Corey Lambert**, M.S. Degree, Lamar University – 1994; Current position – Research Technician, Dept. of Geological Sciences, University of Michigan, MI.
- Michael Freer**, M.S. Degree, Lamar University – 1994; Current position – Research Scientist, Texas Resources Management Division, Beaumont, TX.
- Marina Argyrou**, M.S. Degree, Tulane University – 1996; Current position – Director, Ministry of Fisheries and Agriculture, Natural Resources and Environment, Nicosia, Cyprus.
- Amy Bennett**, M.S. Degree, Tulane University – 1997; Current position – Research Scientist,

Dept. Natural Resources, Tallahassee, FL.

**Erika Engelhaupt**, M.S Degree, Tulane University – 1999; Current position – Blogger, National Geographic, Oak Ridge, TN.

**Nianhong Chen**, Ph.D., Tulane University – 2002; Current position – Assistant Professor, Dept. of Chemistry, University of Maryland-Eastern Campus, Princess Anne, MD.

**Shuiwang Duan**, Ph.D., Tulane University – 2005; Current position – Research Associate, Dept. of Geology, University of Maryland, College Park, MD.

**Laura Wysocki**, Ph.D., Tulane University – 2007

**Troy Sampere**, Ph.D., Tulane University – 2008; Current Position – Assistant Professor, McNeese State University, Lake Charles, LA.

**Richard Smith**, Ph.D., Texas A&M University – 2011; Current Position – Global Aquatic Research (GAR) LLC, Sodus, NY.

**Shen Li**, M.S., Texas A&M University – 2011 – Ph.D student Atmospheric Sciences Texas A&M.

**Bryan Grace**, Ph.D., Tulane University – 2012; Current Position – Chemical specialist, CH2M Consulting Company, New Orleans, LA.

**Xinxin Li**, Ph.D., Texas A&M University – 2012; Current Position – Assistant Professor, Department of Oceanography and Engineering, Southern University of Science and Technology, Shen Zhen, Guangdong, China.

**Kathryn M. Schreiner**, Ph.D., Texas A&M University – 2012; Current Position – Assistant Professor, Dept. of Chemistry and Large Lakes Observatory, University of Minnesota and, Duluth, MN.

**Xingqian Cui**, Ph.D., University of Florida – 2016; Current Position – Postdoc with Roger Summons, Dept. of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Boston, MA

**Michael Shields**, Ph.D., University of Florida – 2016; Current Position – Postdoctoral Research Associate, Dept. of Geological Sciences, University of Florida, Gainesville, FL

**Xiaowen Zhang**, Ph.D., University of Florida – 2017; Current Position - Postdoc with Roger Summons, Dept. of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Boston, MA

**Jack Hutchings**, Ph.D., University of Florida – 2018; Current Position – Research Scientist,

*Current Students:*

**Derrick Vaughn**, Ph.D., University of Florida – (started 2015)

#### POSTDOCTORAL RESEARCHERS

**Sid Mitra**, Ph.D., Virginia Inst. of Marine. Sciences, College of William and Mary. – Tulane postdoc 1997 – 2000; Current position – Associate Professor, Department of Geological Sciences, East Carolina University (MS 558), Greenville, NC.

**Martha Sutula**, Ph.D., Louisiana State University – Tulane postdoc 1999 – 2000; Current position - Southern California Coastal Water Research Project, 7171 Fenwick Lane,

Westminster, CA.

**Rebecca Green**, Ph.D., MIT/WHOI – Tulane postdoc 2003 – 2005; Current position – Research Associate, Bureau of Ocean Energy Management - Gulf of Mexico Region, New Orleans, LA.

**Amy Brown**, Ph.D., University of Florida - University of Florida postdoc 2016; Current position – Suwannee River Water Management District, Live Oak, FL.

**Nick Ward**, Ph.D., University of Washington – University of Florida postdoc, 2014-2016; Current Position - Research Scientist, Pacific Northwest National Lab and adjunct faculty in Dept. of Oceanography, University of Washington, Seattle, WA.

**Ana Arellano**, Ph.D., University of South Florida – University of Florida postdoc, 2015-2017; Visiting professor at the University of South Florida.

**Mathieu Le Meur**, Ph.D., University of Lorraine, Nancy, France – University of Florida postdoc, 2016-2017.

**Michael Shields**, Ph.D., University of Florida – University of Florida postdoc, 2017-present.

**Elise Morrison**, Ph.D., University of Florida - University of Florida postdoc, 2017-present.

#### VISITING SCHOLARS

**Dr. Joyanto Routh** - Department of Geology and Geochemistry, Stockholm University, S 10691 Stockholm, Sweden. May 2003 – December 2003.

**Nina Reuss** - Research Associate, University of Copenhagen, Copenhagen, Denmark. September 2004 – January 2005.

**Susanne Schüller** - Department of Marine Science University of Otago, P.O. Box 56, Dunedin New Zealand.. August 2006 – January 2007.

**Catherine Gongol** - Department of Marine Science University of Otago, P.O. Box 56, Dunedin New Zealand. May 2007 – August 2007.

**Muhammad Jalees** - University of Engineering and Technology, Lahore, Pakistan. February 2009 – August 2009.

**Jun Zhao** – Ocean University of China, Qingdao, China. September 2009 – August 2010.

**Li Dong** - Ocean University of China, Qingdao, China. March 2012 – August 2012.

**Wang Jinpeng** - Ocean University of China, Qingdao, China. March 2013 – August 2012.

**Bin Zhou** - Ocean University of China, Qingdao, China. March 2016 – 2017.

**Dr. Jun Zhou** - Associate Professor, Key Lab of Marine Ecosystem and Biogeochemistry Second Institute of Oceanography, Hangzhou, China. August 2017- present.

#### **Courses Taught**

*Graduate:*

Marine Organic Geochemistry

Estuarine Biogeochemistry

Global Biogeochemistry

Sediment Geochemistry

Curriculum Vitae  
Thomas S. Bianchi

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*Undergraduate:*  
Environmental Science  
Introduction to Oceanography  
Marine Science