CURRICULUM VITA

NAME:	Peter Hans Santschi
MARITAL STATUS:	Married, 2 children
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URL:	https://www.tamug.edu/mars/faculty-bios/PeterHSantschi.html https://www.youtube.com/watch?v=mGnYuxE-tlI https://loer.tamug.edu/people/Santschi/index.html https://scholar.google.com/citations?hl=en&user=ZKGyOTsAAAAJ&view_op=list_works&sortby=pubdate

EDUCATIONAL HISTORY:

- Privatdozent, Isotope Geochemistry, Swiss Federal Institute of Technology (ETH), Zürich, Switzerland, 1984.
- Ph.D. Chemistry (Dr. phil. II, Summa Cum Laude), University of Bern, Switzerland, 1975.
- M.S. Chemistry (Summa Cum Laude), University of Bern, Switzerland, 1971.
- B.S. Gymnasium Bern, Switzerland, Matura 1963.

PROFESSIONAL HISTORY:

- Professor of Oceanography and of Marine Sciences, Texas A&M University, 1988 - present.
- Visiting Professor at University of Rhode Island (1987), University of Geneva, Switzerland (1996-1997, 2003), University of Bern, Switzerland (2002), Swiss Institute of Technology, ETH (2003), and National Taiwan University, Taipei (2003), Hong Kong University of Science and Technology (2004).
- Section Head, Chemical Oceanography, Department of Oceanography, Texas A&M University, College Station, TX, 1990 - 1996.
- Focal Area Coordinator of Center for Shelf and Coastal Oceanography, Texas Institute of Oceanography, 1992-2000.
- Director, Laboratory for Oceanographic and Environmental Research (LOER), 1989-present.
- Senior Chemist, Texas A&M University, Galveston, TX, 1988 - present.
- Head of Isotope Geochemistry and Radiology Section of Swiss Institute for Water Resources and Water Pollution Control, EAWAG, Dübendorf, Switzerland, 1983 - 1988.
- Adjunct Senior Research Scientist, Lamont-Doherty Geological Observatory of Columbia University, 1983 - present.
- Senior Research Scientist, Lamont-Doherty Geological Observatory of Columbia University, July 1, 1981 - July, 1982.

- Research Associate, Lamont-Doherty Geological Observatory of Columbia University, July 1, 1977 - June 30, 1981.
- Teaching and Research Assistant, University of Berne, Switzerland, 1970 - 1975.
- Lecturer in Chemistry, Humboltianum Gymnasium (High School), 1968-1970.

PROFESSIONAL ACTIVITIES:

- Member of the Advisory Committee of the Research Center for Environmental Changes (RCEC), Academia Sinica, Taipei,Taiwan, 2019-present.
- Member of the Selection Panel for the 2020 Kuwait Prize in the field of Fundamental Sciences (sub-specialization: Earth Sciences), the most prestigious price for Scientists from Arab Countries.
- Member, review panel of Germany on proposals for Clusters of Excellence on "Geo 11", evaluating coordinated research proposals for 200 Mio € available funding, 2018.
- Associate Editor, Marine Chemistry, 2000-present.
- Member of the International Advisory Board of the Journal of Terrestrial, Atmospheric and Oceanic Sciences (TAO), 2012-present.
- Member of Editorial Advisory Board of Open Oceanography Journal, 2005-present.
- Member, External Advisory Review Panel, Ultrasensitive Nuclear Measurements Initiative, PNNL, 2013.
- Member, Review Panels of the SBR-PNNL, Early Career, SFA, and SBIR programs of the Department of Energy, 2009, 2010, 2011, 2012, 2013.
- Member, Review Panel of the Chemical Oceanography Program, National Science Foundation, 1990-1991, 2004, 2006, 2010, 2015.
- Member, International "Audit Team", Review Committee for Radiochemistry at the Paul Scherrer Research Institute (PSI) of the Swiss Institute of Technology (ETH), 2006.
- Member, Advisory Board, Aquatic Sciences, 1988-2001.
- Member, Actinide Migration Advisory Committee to Rocky Flats Environmental Technology Site (Kaiser-Hill/DOC), 1996-1999.
- Expert Member, Toxics and Pesticides Subcommittee of the Gulf of Mexico Program, 1990-1991.
- Swiss Delegate for Meetings of Int. Commission for Subseabed Disposal of Radioactive Waste , 1984-1987.
- Expert Member, International Committee for the Assessment of Chernobyl Fallout in Lake Constance, 1986-1988.
- Expert Member, Swiss National Committee for the Surveillance of Radioactivity, 1983-1988.
- Member of Professional Societies (e.g., ACS, AGU, EUG, AAS, ASLO, CERF, …)

AWARDS, HONORS AND MEMBERSHIP IN PROFESSIONAL SOCIETIES:

- Distinguished Professor of Texas A&M University (2021).
- Elected Member of the European Union Academy of Sciences (EUAS) (2020).
- Elected Member of the Selection Panel for the 2020 Kuwait Prize in the field of Fundamental Sciences (sub-specialization: Earth Sciences), the most prestigious price for Scientists from Arab Countries.
- Elected Geochemical Fellow of the Geochemical Society and the European Association of Geochemistry (2017).

• Elected a Fellow of the American Geophysical Union (2014).
• Environmental Science and Technology Outstanding Reviewer Recognition (2013).
• Distinguished Achievement Awards in Graduate Student Mentoring (2013) and for Research (2004) from Texas A&M's Association of Former Students.
• Regents Professor of Texas A&M University (2009).
• Member of Phi Kappa Phi Society of Texas A&M University Chapter (2005).
• Association of Former Student Distinguished Achievement Award for Research from Texas A&M University (2004).
• Limnology and Oceanography Outstanding Reviewer Recognition (2004).
• Listed in Marquis Who's Who in the South and Southwest, Macmillan Directory Division, Wilmette, Il., Who's Who in Science and Engineering, a Reed Ref. Publ. Comp., Wilmette, Il.; also in: Who's Who in America, and Who's Who in the World, all since 1991.
• Member of American Geophysical Union, American Society of Limnology and Oceanography, Oceanography Society, American Chemical Society, Estuarine Research Federation, AAAS, SETAC,
• Visiting Professor at Lamont-Doherty Earth Observatory of Columbia University (1982-1988), University of Rhode Island, School of Oceanography (1986), Dept. of Geology and Dept. of Chemistry, University of Geneva, Geneva, Switzerland (1996), Dept. of Chemistry and Biochemistry, University of Bern, Bern, Switzerland (2002), Dept. of Chemistry, University of Geneva, Geneva, Switzerland (2003), Swiss Institute of Technology, ETH, Zurich, Switzerland (2003), National Center for Oceanographic Research, NCOR, National Taiwan University, Taipei, Taiwan (2003), and Hong Kong University of Science and Technology (2004), National Taiwan Ocean University (2008).
• Lamont-Doherty Geological Observatory Postdoctoral Fellowship, 1976.
• Swiss National Science Foundation Postdoctoral Fellowship, 1976.

SERVICE TO SCIENTIFIC COMMUNITY, UNIVERSITY, COLLEGE, AND DEPARTMENTS:

A. Administrative Positions:

Section Head, Environmental Radiochemistry and Radiology, EAWAG – ETH (Swiss Institute of Technology), Zurich, Switzerland (1983-1988); Section Head, Chemical Oceanography, Department of Oceanography, Texas A&M University, College Station, TX (1990 – 1996). Director, Laboratory of Oceanographic and Environmental Research, and the Coastal Zone Laboratory (1990-present).

B. Committees:

2022:
MECS Dept: Promotion and Tenure Advisory Committee (Member)
TAMUG: Promotion and Tenure Advisory Committee (Member)
TAMUG: Member of the Honor Council.
TAMUG: Member of the Regents Professor Selection Committee

2021:

MECS Dept: Promotion and Tenure Advisory Committee (Co-Chairman)
TAMUG: Promotion and Tenure Advisory Committee (Member)
TAMUG: Research Award Committee (Chairman) til spring 2021

2020:
MECS Dept: Promotion and Tenure Advisory Committee (Chairman)
TAMUG: Research Award Committee (Chairman)

2019:
MARS Dept: Promotion and Tenure Advisory Committee (Member)
TAMUG: Research Award Committee (Chairman)

2018:
MARS Dept: Promotion and Tenure Advisory Committee (Chairman)
MARA Dept: Promotion and Tenure Advisory Committee (Member)
TAMUG: Research Award Committee (Chairman)

2017:
MARS Dept: Promotion and Tenure Advisory Committee (member)
TAMUG: Promotion and Tenure Advisory Committee (Chairman)

2016:
MARS Dept: Promotion and Tenure Advisory Committee (member)
TAMUG: Promotion and Tenure Advisory Committee (member)
MARS Dept.: Executive Committee (Member)
MARS Dept: Post Tenure Review Committee (Member)
TAMUG: Promotion and Tenure Advisory Committee (member)

2015:
MARS Dept: Promotion and Tenure Advisory Committee (Chair)

2014:
MARS Dept: Promotion and Tenure Advisory Committee (Member)
MARS Dept: DH Search Committee (Member)
MARS Dept.: Executive Committee (Member)
MARB Dept.: Marine Toxicologist Search Committee (Member)
OCNG Dept: Promotion and Tenure Advisory Committee (Member)
TAMUG: Promotion and Tenure Advisory Committee (Member)

2013:
MARS Dept: Promotion and Tenure Advisory Committee (Chair)
MARS Dept: DH Search Committee (Member)
MARS Dept.: Research Advisory Committee (Member)
MARS Dept.: Executive Committee (Member)
MARS Dept.: Metrics Committee (Member)
TAMUG: Promotion and Tenure Advisory Committee (Member)

TAMU: Eminent Scholar Committee (Member)

2012:
MARS Dept: Promotion and Tenure Advisory Committee (Chair)
MARS Dept.: Research Advisory Committee (Member)
MARS Dept.: Executive Committee (Member)
2011:
MARS Dept: Promotion and Tenure Advisory Committee (Member)
MARS Dept: Chemistry Faculty Search Committee (Chair)
OCNG Dept.: Tenure and Promotion Committee (member)
MARS Dept.: Research Advisory Committee (Member)
2010:
MARS Dept: Promotion and Tenure Advisory Committee (Chair)
MARS Dept: Department Head Search Committee (member)
MARS Dept: Strategic Planning Committee (member)
OCNG Dept.: Tenure and Promotion Committee (member)
OCNG Dept: Faculty Search Committee (member)
2009
MARS Dept: Promotion and Tenure Advisory Committee (Chair)
TAMUG - College: Tenure and Promotion Committee (member)
OCNG/Geosciences: Tenure and Promotion Committee (member)
2008
MARS Dept: Promotion and Tenure Advisory Committee (Chair)
TAMUG - College: Tenure and Promotion Committee (Chair)
OCNG/Geosciences: Tenure and Promotion Committee (member)
2007
MARS Dept: Promotion and Tenure Advisory Committee (Chair)
TAMUG - College: Tenure and Promotion Committee (Chair)
OCNG/Geosciences: Tenure and Promotion Committee (member)
2006
MARS Dept: Promotion and Tenure Committee (Chair)
MARS Dept: Promotion and Tenure Committee (Chair)
MARS Dept. Promotion and Tenure Committee (Member)
TAMUG - College: Tenure and Promotion Committee (Chair)
OCNG/Geosciences: Tenure and Promotion Committee (member)
College of Geosciences College Research Advisory Council (member)
2005/6
MARS Dept: Trace Biogeochemist Search Committee (Chair)
MARS Dept: Promotion and Tenure Committee (Chair)
TAMUG - College: Tenure and Promotion Committee (Chair)
OCNG/Geosciences: Tenure and Promotion Committee (member)
College of Geosciences College Research Advisory Council (member)
2004/5:
MARS Dept.: Academic Advisory Committee (Chair)
TAMUG: Tenure and Promotion Committee.
OCNG/Geosciences: Tenure and Promotion Committee.

2003/4:
MARS Dept.: Academic Advisory Committee (Chair)
TAMUG: Tenure and Promotion Committee.
OCNG/Geosciences: Tenure and Promotion Committee.
2002/3:
Sabbatical
2002:
MARS Dept.: Search Committee for Biogeochemist (Chair)
MARS Dept.: Academic Advisory Committee (Chair)
TAMUG: Tenure and Promotion Committee.
OCNG/Geosciences: Tenure and Promotion Committee.
TAMUG: Research Advisory Committee.
2001:
MARS Dept.: Search Committee for Marine Organic Chemist (Chair)
MARS Dept.: Search Committee for Biogeochemist (Chair)
MARS Dept.: Academic Advisory Committee (Chair)
TAMUG: Tenure and Promotion Committee.
OCNG/Geosciences: Tenure and Promotion Committee.
TAMUG: Promotion Committee.
TAMUG: Research Advisory Committee.
2000:
MARS Program/OCNG: Academic Advisory Committee.
TAMUG: Tenure and Promotion Committee.
OCNG Dept.: Tenure and Promotion Committee.
OCNG Dept. Search Committee for Physical Oceanographer (Chair).
OCNG Dept.: Search Committee for Geological Oceanographer (Chair).
Oceanography Dept.: Search Committee for Chemical Oceanographer (Chair).
TAMUG: Promotion Committee for Graham Worthy, TAMUG.
TAMUG: Research Advisory Committee, TAMUG.
1999:
MARS Program/OCNG Dept.: Academic Advisory Committee.
MARS Program/Dept.: Search Committee for Physical Oceanographer (Chair)
TAMUG: Research Advisory Committee
1998:
TAMUG: Committee for hiring Head of Fiscal Office, Terry Lovel
TAMUG: College Committee for promotion of Graham Worthy
MARS/OCNG Dept.: Academic Advisory Committee
1997:
None (sabbatical leave)
1996:
TAMU/College of Geosciences and Maritime Studies: Grievance Committee for Captain Bourgeois.
TAMU/ OCNG Dept.: Ship Committee.
TAMU/Dept. of Oceanography: Senior Executive Council, member.
TAMU/ OCNG Dept.: Promotion Advisory Committe.
TAMUG/MARS Program: Curriculum Committee

TAMUG/MARS Program: Promotion Advisory Committee
TAMUG: Research Advisory Council.
TIO: Galveston Bay Information Center Advisory Committee (Chair)
TIO: Center for Shelf and Coastal Oceanography Steering Committee.
1995:
TAMU/ OCNG Dept.: Ship Committee.
TAMU/ OCNG Dept.: Senior Executive Council.
TAMU/ OCNG Dept.: Promotion Advisory Committee.
TAMUG/MARS Program: Curriculum Committee
TAMUG/MARS Program: Promotion Advisory Committee
TAMUG: Research Advisory Council, member.
TIO: Galveston Bay Information Center Advisory Committee (Chair)
TIO: Center for Shelf and Coastal Oceanography Steering Committee.
1994:
TAMU/ OCNG Dept.: Ship Committee.
TAMU/ OCNG Dept.: Senior Executive Council.
TAMU/ OCNG Dept.: Promotion Advisory Committee.
TAMUG/MARS: Curriculum Committee
TAMUG/MARS: Promotion Advisory Committee
TAMUG: Research Advisory Council.
TIO: Galveston Bay Information Center Advisory Committee (Chair)
TIO: Coordinator for Texas Bays and Estuaries focal area.
TIO: Center for Coastal and Shelf Processes Advisory Steering Committee.
1993:
TAMU/ OCNG Dept.: Ship Committee.
TAMU/ OCNG Dept.: Senior Executive Council.
TAMU/ OCNG Dept.: Dept. Head Search Committee.
TAMUG: Promotion Advisory Committee for Dr. Randy Davis to Full Professor.
TAMUG: Promotion Advisory Committee for Dr. Graham Worthy.
TAMUG: Research Advisory Council.
TIO: Galveston Bay Information Center Advisory Committee: Chairman
TIO: Coordinator for Texas Bays and Estuaries focal area.
TIO: Center for Coastal and Shelf Processes Advisory Steering Committee, member.
College of Geosciences and Maritime Studies: Environmental Committee (Co-Chair).
1992:
TAMU/ OCNG Dept.: Ship Committee.
TAMU/ OCNG Dept.: Senior Executive Committee.
TAMU: Committee for Academic Issues, College of Geosciences and Maritime Studies.
TAMU: Search Advisory Committee for Dean of College of Geosciences and Maritime Studies.
TAMU/TAMUG: Search Committee for Assistant Professor, Chemical Oceanography and/or Marine Chemistry (Chair).
TAMUG: University Promotion Advisory Committee.
TAMUG: University Promotion Advisory Committee.
TAMUG: University Tenure Advisory Committee.
1991:
TAMU/ OCNG Dept.: Ship committee.

TAMU: Committee for Academic Issues, College of Geosciences and Maritime Studies
TAMU: Search Advisory Committee for Dean of College of Geosciences and Maritime Studies.
TAMUG: Advisory Committee for Research Enhancement Grants.
TAMUG: Promotion Advisory Committee for Dr. Steven Curley to Full Professor.
TAMUS: Committee on Intrasystem Initiative on Environmental Quality.
1990:
OCNG Dept.: Ship committee.

C. Service to Scientific Community

Scientific Journals:
• Associate Editor, Marine Chemistry, since 2000.
• Member of the International Advisory Board of the Journal of Terrestrial, Atmospheric and Oceanic Sciences (TAO), 2012-present.
• Member of the International Editorial Advisory Board of Open Oceanography Journal, 2005-present.
• Member, Advisory Board, Aquatic Sciences, 1988-2002.

Review and Advisory Panels:
• Member, Academic Advisory Committee (AAC) of the Research Center for Environmental Changes (RCEC) at Academia Sinica, Taipei, Taiwan, 2020-2023.
• Member of the Selection Panel for the 2020 Kuwait Prize in the field of Fundamental Sciences (sub-specialization: Earth Sciences).
• Member, review panel of Germany on proposals for Clusters of Excellence on "Geo 11", evaluating coordinated research proposals for 200 Mio € available funding, 2018.
• Member, DOE PNNL, Ultra-Sensitive Nuclear Measurements Initiative (USNMI) Annual review panel project, 2014, 2015.
• Member, NSF, Chemical Oceanography Review Panels, 2010, 2006, 2004, 1991, 1990.

• Reviewer of Proposals:
U.S. National Science Foundation (Chem., Bio., Geol., and Phys. Oceanography), Department of Energy – Office of Science, Seagrant of different States, Nat. Geography, Hudson River Foundation, ACS, Petroleum Res. Fund, National Science Foundations of UK, Switzerland, Austria, Poland, and Taiwan, and the International Science Foundation, the Research Corporation.
• Reviewer of Journal articles:
Nature, Science, Geochim. Cosmochim. Acta, Limnol. Oceanography, Est. Coast. Shelf Science, Environ. Sci. Technol., Aquatic Sciences, Marine Chemistry, Limnol. Oceanogr., Estuaries, J. Env. Radioact., Croat. Chim. Acta, Radiochim. Acta, Estuarine Coastal and Shelf Science, Estuaries, J. Hydrol., Deep-Sea Res., I&II, ODP, Aquatic Geochem., J.Mar.Res., AECT, Marine Biology, Mar. Ecol. Progr. Ser., J. Chromat., Exp. Mar. Biol. Ecol., Env. Chem. Lett., J. Environ. Radioactivity, J. Env. Quality, Env. Chem. Lett., The Scientific World Journal, ECSS, MECO, Marine Biol., Aquatic Sciences, Radiochim. Acta, Catena, Wat. Res. Res., Wat. Res., Env. Toxicol., Contin. Shelf Sci., Chem. Geol., Colloids and Surfaces, Rev. Min. Geol., Earth Planet. Sci. Lett., Geophys. Res. Lett., J. Geophys. Res., Environ. Chem., GLA, ACA, JEMBE, Environ. Chem., Current Nanoscience, Environ. Technol., J. Mar. Systems, JGR Atmosphere, JGR Oceans, …

FIELD EXPERIENCE:

Participant on various scientific expeditions to the North Atlantic and Pacific Ocean (e.g., GEOSECS-Indian Ocean, MANOP-Pacific, California Borderland, SEEP-Atlantic, Gulf of Mexico).

Chief scientist of 92G3, 93G1, 93G7, 94G4 R/V Gyre cruises to the Gulf of Mexico and the Middle Atlantic Bight (1992-1994).

EXPERIENCE WITH INDUSTRY AND COURT CASES:

Assessment of Natural Attenuation and Contaminant Mobility at Superfund Sites and Remediation Strategies: Natural Resources Defense Council and Maine People's Alliance on Mercury in Penobscot River and Estuary, Maine; Aluminum Company of America (ALCOA) on Mercury Contamination in Lavaca Bay, TX; Montrose Chemical Corporation of California, Stauffer Management Company, Rhone-Poulenc, and Chris-Craft Industries, on DDT in Palos Verdes Shelf sediments; Environ, and others.

Effluent and Emission Assessments, Contaminant Mobility, Speciation and Transport of actinides and other contaminants; Baseline Studies in Natural Environments: Kodak Company, Silver Council, Houston Lighting and Power, Texas Chemical Council, Kaiser-Hill Company, Anchor Environ. Company, Texas Clean Coal Technology Foundation.

SYNERGISTIC ACTIVITIES:

Development of analytical protocols for the determination of trace metals, thiols and sulfides, individual acid polysaccharides, of inorganic and organic iodine species, in natural waters. At any one time, I am responsible for mentoring 4-6 undergraduate students in the laboratory, which encourages some of them to pursue a career in science. Furthermore, I, or my graduate students and postdocs, routinely give presentations not only in a university class environment and in seminars, but also to high school students, as well as at local, national and international meetings to disseminate new research results. In 2002/2003, I also was visiting Professor in the Chemistry Departments of the University of Bern and Geneva, Switzerland, the Swiss Institute of Technology, Zurich, Switzerland, the National Center for Oceanographic Research at the National Taiwan University in Taipei, Taiwan, and in 2004, at the Hong Kong University of Science and Technology. These extended scientific visits help not only the scientific exchange with foreign countries, but also in the recruitment of graduate students and post docs.

RESEARCH EMPHASIS:

Research interests include a broad range of topics in Marine and Environmental Chemistry, including the role of natural nanoparticles in the biogeochemical cycling of trace substances, tracer applications using radioactive and stable isotopes, relationships between trace element and natural organic matter biogeochemistry, and the importance of exopolymeric substances and hydroxamate siderophores for trace element binding and removal from natural waters. That involves learning from new techniques, approaches and concepts that are used in related fields and applying them to solve questions in biogeochemistry and environmental science. Current themes of research are: Trace element speciation and cycling. Tracer applications in natural water systems using stable and radioactive isotopes. Sediment-water and particle-water interactions, with emphasis on

colloids. Natural organic matter geochemistry. Metal-organic matter binding. Mobility of radioactive and toxic trace contaminants in surface waters, sediments and ground water. Applications of atomic force microscopy, accelerator, thermal ionization, and gas chromatography mass spectrometry in marine and environmental chemistry and geochemistry.

TEACHING EXPERIENCE:

Graduate courses in the Oceanography Department at Texas A&M University, OCNG644 "Isotope Geochemistry", OCNG681 “Seminar in Oceanography/Marine Science”, OCNG646 “Dynamics of Environmental Colloids”; Graduate courses taught at other Universities: "Geochemical Oceanography", "Radioactivity in the Environment", and “Environmental Colloids” at the Swiss Institute of Technology (ETH) in Zurich, Switzerland. “Marine Organic Chemistry”, “Marine Colloids Chemistry”, and “Marine Radiochemistry” courses within a block course in “Marine Biogeochemistry” at AMCE, Hong Kong University of Science and Technology, HKUST. Undergraduate courses in the Department of Marine and Coastal Environmental Science at Texas A&M University at Galveston in MARS440 "Chemical Oceanography", MARS430 "Geological Oceanography", MARS340 “Geochemistry”, MARS481 “Seminar in Marine Science”, MARS491 “Research”, "Environmental Geology", CHEM383 "Environmental Chemistry", CHEM464 “Nuclear Chemistry”.

GRADUATE STUDENTS AND POSTDOCTORAL RESEARCH SCIENTISTS:

List of chaired or co-chaired graduate student committees at TAMU (Total number of sponsored graduate students: 26; 23 at TAMU/TAMUG, 1 at EAWAG-ETH Zurich, Switzerland, 2 at LDEO-Columbia University, New York):

- PhD: Russell Grandbois, ““Role of microbial processes in iodine interactions with soils”, Interdisciplinary Marine Biology Program, Texas A&M University (Removed from MARB IDP in 2021).
- MS: Matthew Athon, Oceanography, Texas A&M University (2016) “Chemisorption of Radionuclides on Commercial, Synthetic, and Biogenic Sorbents for Use in In-situ Gamma Spectrometry”.
- PhD: Chia Ying Chuang (Anderin), Oceanography, Texas A&M University (2013), “Examining The Binding Of Radionuclides With Marine Biopolymers, A Comparative Study On Th, Pa, Pb, Po And Be Isotopes”.
- PhD: Hsiu-Ping Li (Erin), Interdisciplinary Marine Biology Program, Texas A&M University (co-chair, 2012), “Roles of naturally occurring bacteria in controlling iodine-129 mobility in subsurface soils”.
- PhD: Chen Xu, Oceanography, Texas A&M University (2011), “Molecular Level Characterization and mobility of radionuclide-carrying natural organic matter in aquatic environments”.
- PhD: Saijin Zhang, Oceanography, Texas A&M University (2010), “Natural organic matter (NOM) in aquatic systems: Interactions with radionuclides, ^{234}Th(IV), ^{129}I, and biofilm”.
- MS: Chen Xu, Oceanography, Texas A&M University (2007), “Optimized Procedures for Extraction, Purification, and Characterization of Exopolymeric Substances (EPS) from Two

Bacteria (*Sagittula stellata* and *Pseudomonas fluorescens* Biovar II) with Relevance to the Study of Actinide Binding in Aquatic Environments".

- PhD: Kimberly A. Roberts, Oceanography, Texas A&M University (2007). "The interaction of actinides (Pu, Th, and Pa), inorganic particles, and organic colloids (humic substances and extracellular polymeric substances, EPS) ".
- MS: CHARLES MELCHOR LANDIN. Oceanography, Texas A&M University (2007). "Dissolved Gaseous Mercury Behavior in Shallow Water Estuaries".
- MS: Sara E. Keach. Oceanography, Texas A&M University (2006). "Monomethylmercury Concentrations on the Texas-Louisiana Shelf during Hypoxia Formation".
- MS: Jennifer Haye, Oceanography, Texas A&M University (2005). "Role of Natural Organic Matter in Governing the Bioavailability of Toxic Metals to American Oysters (*Crassostrea virginica*)".
- PhD: Nicolas G. Alvarado Quiroz, Oceanography, Texas A&M University (2004). "Characterization of Marine Exopolymeric Substance (EPS) Responsible for Binding of Thorium (IV) Isotopes".
- PhD: Kathy Schwehr, Oceanography, Texas A&M University (2004). "Speciation and Transport of Anthropogenic ^{129}Iodine and Natural ^{127}Iodine in Surface and Subsurface Environments".
- PhD: Kevin Yaeger, Geology, Texas A&M University (2002). "Texas Coastal Plain Fluvial Processes and Marine Sedimentation Using Lithogenic and Atmospheric Radionuclides; Sediment Source Apportioning, Isotope Fractionation and Coupled Transport Processes".
- PhD: Kent Warnken, Oceanography, Texas A&M University (2002). "Trace Metal Inputs to Galveston Bay: Importance of Benthic and Riverine Fluxes".
- PhD: Degui Tang, Oceanography, Texas A&M University (2000). "The organic complexation of trace metals in estuarine waters of Galveston Bay: the importance of reduced sulfur species".
- PhD: M. Quigley, Oceanography, Texas A&M University (2000). "Tracing Colloid-Colloid and Colloid-Particle Interactions Using Thorium".
- PhD: S. Oktay, Oceanography, Texas A&M University (1999). "^{129}I Cycling in Terrestrial and Coastal Marine Environments".
- MS: J. Schwantes, Oceanography, Texas A&M University (1997). "Natural and Anthropogenic Radionuclides in the Marginal Seas of Siberia: Implications for the Fate and Removal of Pollutants".
- MS: R. Carvalho, Oceanography, Texas A&M University (1997). "Bioavailability of Colloidally-bound Metals in Penaeid Shrimp".
- PhD: Liang-Saw Wen, Oceanography, Texas A&M University (1996). "Geochemistry of trace metals in estuarine waters: A multi-phase speciation approach".
- PhD: Laodong Guo, Oceanography, Texas A&M University (1995). "Cycling of dissolved and colloidal organic matter in oceanic environments as revealed by carbon and thorium isotopes".
- MS: M. Ravichandran, Oceanography, Texas A&M University (1995). "Investigations on the Sediment Chronology and Trace Metal Accumulation in Sabine-Neches Estuary, Beaumont".

List of sponsored postdocs and visiting scholars at TAMU (Total number of sponsored postdoctoral and visiting scholars: 22)

- Hernando Bacosa (2019), visiting research scientist, Texas A&M University at Galveston.
- Peng Lin (2016-2017), assistant research scientist, Texas A&M University at Galveston, Research Scientist, Savannah River Ecology Lab (2023).

• Luni Sun (2016-2017), assistant research scientist, Texas A&M University at Galveston.
• You-min Lin (2015), presently research scientist at UTMB.
• Chia Ying Chuang (Anderin; 2014-2015), presently research scientist at Academia Sinica, Taipei.
• Hsiu-Ping Li (Erin; 2012-2014), was postdoctoral research scientist, Texas A&M University at Galveston, presently school teacher.
• Chen Xu (2011 - 2012), presently Associate Research Scientist, Texas A&M University at Galveston.
• Saijin Zhang (2010 - 2012), was Assistant Research Scientist, Texas A&M University at Galveston, presently working for industry.
• Shigeyoshi Otosaka (visiting scientist, 2010-2011), Research Scientist, Research Group for Environmental Science Japan Atomic Energy Agency (JAEA) 2-4, Shirakata-shirane, Tokai, Ibaraki 319-1195, Japan.
• Jinzhou Du (visiting scientist, 2009-2010), Professor, State Key Laboratory of Estuarine and Coastal Research East China Normal University, 3663, Zhongshan road-North, Shanghai,2000062, P.R.China.
• Aijun Miao (2006-2009), presently Associate. Professor, School of Environment, Nanjing University, #22 Hankou Road, Nanjing, Jiangsu Province 210093, China PRC
• Kathy Schwehr (2004-2007), presently Instructional Assistant Professor, Texas A&M University, Galveston, TX.
• Robin Brinkmeyer (2004-2006), was Assistant Professor, Texas A&M University, Galveston, TX.
• Kevin Yeager (2003-2005), presently Associate Professor, Department of Earth and Environmental Sciences, University of Kentucky, Lexington, KY
• Gary Schultz (2001-2003), presently Associate Professor in the Biology Department at Marshall University (Huntington, WV).
• Chin-Chang Hung (1999-2002), presently Professor, Institute of Marine Geology and Chemistry, National Sun Yat-sen University, Kaohsiung 80424, Taiwan, Taiwan.
• Degui Tang (2000), presently Principal Scientist at Pfizer, Inc.
• Liang-Saw Wen (1996-1998), presently Associate Professor, Dept. of Oceanography and National Center for Ocean Research, National Taiwan University Taipei, Republic of China.
• Laodong Guo (1995-1997), presently Professor, School of Freshwater Sciences, University of Wisconsin-Milwaukee, Milwaukee, WI 53204, USA
• Jean Moran (1995-1998), presently Associate Professor, Dept. of Earth and Environmental Sciences, California State University, East Bay, Hayward, CA.
• Bruce Honeyman (1990-1991, Senior Research Scientist), presently Emeritus Professor at Colorado School Mines, Golden, CO.
• Gaboury Benoit (1989, Visiting Professor), presently Professor of Environmental Sciences at Yale University.

External reader and examiner on Ph.D. Dissertations:
Dept. of Oceanography, Dalhousie University, Canada (Sherry E.H. Niven, 1989); Dept. of Chemistry, University of Geneva, Switzerland (Eric Balnois, 1997); Yale School of Forestry and Environmental Studies, Yale University (T.R. Rozan, 1998); Dept. of Civil Engineering, Texas A&M University (Jon Schwantes, 2002); Dept. of Earth Sciences, University of Geneva, Switzerland (Patrick Rossé, 2005); University of Lausanne, Switzerland (Fabienne Chawla, 2010).

BIBLIOGRAPHY:

A) THESIS, DISSERTATION AND HABILITATION

1. T-X Diagrams in the ternary system $SnCl_2$-$AlCl_3$-NaCl. Masters Thesis in Inorganic Chemistry, 1968, with Prof. Dr. Huber, Dept. of Chemistry, University of Berne, Switzerland.
2. Specific Adsorption of methylorange onto silica gel. Masters Thesis in Organic Chemistry, 1970, with Prof. Dr. Arm, Dept. of Chemistry, University of Berne, Switzerland.
3. Chemical processes in Lake Biel, Switzerland. Ph.D. Dissertation in Chemistry, 1975, with Prof. Dr. P.W. Schindler, Dept. of Chemistry, University of Berne, Switzerland.
4. Radioisotopes as tracers of sediment-water interactions in controlled experimental ecosystems: Case studies. Habilitation Thesis in Isotope Geochemistry, 1983, Department of Geology, Swiss Institute of Technology (ETH), Zurich, Switzerland.

B) PUBLICATIONS (underlined are Master/PhD students whose research was part of the publication; double underlined are past Master/PhD students; * at the end of the last name for undergraduate students who participated in the published research)

Peter H. Santschi has published as both Santschi, P.H. and Santschi, P. While most of his publications deal with some aspects of the field of environmental biogeochemistry and radiochemistry, they impacted many other fields, including Environmental Sciences - Ecology (235), Marine Freshwater Biology (180), Public Environmental Occupational Health (122), Oceanography (113), Chemistry (99), Biochemistry – Molecular Biology (99), Toxicology (89), Science Technology Other Topics (109), Physical Sciences Other Topics (76), Water Resources (69), Geochemistry Geophysics (56),.Agriculture (56), Energy Fuels (49), Engineering (45), Physics (34), Geology (33), Nuclear Science Technology (33), Geography (24), Radiology Nuclear Medicine Medical Imaging (23), Biodiversity conservation (21), Meteorology Atmospheric Sciences (23), Plant Sciences (23), Instruments Instrumentation (16), Microbiology (18).). As of November 3, 2022, his ISI (All Databases) listed publications (409) have been cited over 18,000 times, with an average citation per publication of over 45, and ISI **h-index of 75**, and productivity m-index = $h/\Delta t$ = 1.56 with Δt = 48 = years since the 1st publication in 1974. Other indexes are the *g*-index = 137; and Google Scholar *h*-index = 91 and *i*-10 index = 298, with well over 27,000 citations.

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Ecotoxicology and Engineering, ContaSed 2015, 8–13 March 2015, Congressi Stefano Franscini in Monte Verità, Switzerland.

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Morales-McDevitt, M.E., Wade, T.L., Knap, A., Gold-Bouchot, G., Shi, D., Sweet, S.T., Santschi, P.H., Quigg, A. 2016. Degradation of WAF, CEWAF, and DCEWAF in biologically enriched mesocosms. Texas Bays and Estuaries Conference, University of Texas Marine Science Institute Education Center, 855 E. Cotter Street, Port Aransas, TX 78373.

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Saijin Zhang, Chen Xu, Morgan Beaver*, Peng Lin, Luni Sun, Kathleen A. Schwehr, Terry L. Wade[3], Kendra Kopp[1], Antonietta Quigg[2,3], Uta Passow[4], Wei-Chun Chin[5], Patrick G. Hatcher[6], Anthony H. Knap[3], Peter H. Santschi, P.H. 2016. Effects of Water-Accommodated Fraction (WAF) of Macondo Oil and Corexit on Formation of Marine Snow and Their Fate in Mesocosm Experiments. 72nd Annual Southwest Regional Meeting (SWRM), ACS Symposium on "Chemical and Biological Processes Regulating Transport of Pollutants in the Gulf of Mexico and Its Estuaries", Galveston, TX, November 10-13, 2016.

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and Its Estuaries",, Galveston, TX, November 2016.72nd Annual Southwest Regional Meeting (SWRM), ACS Symposium, Galveston, TX, November 2016.

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Sun, L., Xu, C., Chin, W.C., Zhang, S., Lin, P., Schwehr, K.A., Quigg, A., Chiu, M.-H., Chin, W.-C., Santschi, P.H. 2017. Light-induced aggregation of microbial exopolymeric substances. Goldschmidt 2017, Paris, August 13-18, 2017.

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Sun, L., Chiu, M.-H., Xu, C., Lin, P., Schwehr, K.A., Bacosa, H., Kamalanathan, M., Quigg, A., Chin, W.-C., Santschi, P.H. 2018. The effects of sunlight on the composition of exopolymeric substances affecting aggregate formation during oil spills. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 5-8, 2018.

Schwehr, K.A.; Chiu, M.-H.; Kamalanathan, M.; Xu, C.; Sun, L.; Lin, P.; Bacosa, H., Bergen, C.; Yard*, A.; Beaver*, M., Chin, W.-C.; Quigg, A.; Santschi, P.H. 2018. Does oil aggregate or emulsify with added dispersant? Results from measurements of surface tension, FTIR, and microscopy of colloidal EPS protein-polysaccharide interactions when oil and/or dispersants were added. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 5-8, 2018.

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Xu, C., Lin, P., Sun, L., Schwehr, K.A., Xing, W., Yard, A.*, Wade, T.L., Knap, A.H., Quigg, A., Santschi, P.H. 2018. Effects of Water-Accommodated Fraction of Macondo Oil and Corexit

on Oil Transport in Mesocosm Experiments. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 5-8, 2018.

Kaplan, D.I,, Price, K.A., Seaman, J.C., Li, D., Lin, P., Xu, C., Schwehr, K.A., Tanaka, K., Ohnuki, T., Santschi, P.H. 2018. Radioiodine Speciation Impact on Ag-Activated Carbon Immobilization in Cementitious Environments. Goldschmidt 2018 International Conference, Boston, August 12-17, 2018.

Kaplan, D.I., Xu, C., Lin, P., Li, D., Schwehr, K.A., Tanaka, K., Ohnuki, T., Santschi, P.H. 2018. Radioiodine Speciation in Cementitious Environments. Goldschmidt 2018 International Conference, Boston, August 12-17, 2018.

Lin, P., Xu, C., Kaplan, D.I., Yeager, C.M., Schwehr, K.A., Santschi, P.H. 2018. Molecular Characterization of Organic Compounds Binding ^{239,240}Pu in Nagasaki Soils. Goldschmidt 2018 International Conference, Boston, August 12-17, 2018.

Ohnuki, T., Kozai, N., Tanaka, K., Tokunaga, K., Utsunomiya, S., Ikehara, R., Komiya, T., Takeda, A., Kaplan, D.I., Santschi, P.H. 2018. Alkaline-activated metakaolin solidification of iodine sorbed by layered double hydroxides. Goldschmidt 2018 International Conference, Boston, August 12-17, 2018.

Kaplan, D.I., Xu, C., Lin, P., Schwehr, K.A., Fujitake, N., Yeager, C.M., Santschi, P.H. 2018. Soil Organic Matter and Plutonium Interactions. ACS Symposium, Boston, MA,

Kaplan, D. I., P. Santschi, T. Ohnuki, K. Roberts, D. Li, K. Price, C. Xu, P. Lin, K. Tanaka, J. Seaman. 2018. Influence of Aqueous Radioiodine Speciation on Uptake by Silver-Granulated Activated Carbon. 19th International Conference on Heavy Metals in the Environment – 2018, Athens, GA, July 21 – 25, 2018.

Ohnuki, T., N. Kozai, K. Tanaka, K. Tokunaga, S. Utsunomiya, D. I. Kaplan, P. Santschi. Sorption and Solidification of Iodate. RadChem 2018. Marianske Lazne, Czech Republic,May 13 – 18, 2018.

Kaplan, D. I.; Santschi, P.; Ohnuki, T.; Li, D.; Nichols, R.; Price, K.; Xu, C.; Lin, P.; Xing, W.; Schwehr, K.; Tanaka, K.; Seaman, J., 2018.Radioiodine Speciation in Cementitious Environments. In *19th International Conference on Heavy Metals in the Environment*, Athens, GA, July 22 – 25, 2018.

Bretherton, L., Kamalanathan, M., Genzer, J., Hillhouse, J., Setta, S., Liang, Y., Brown, C.M., Bradet-Legris, M., Xu, C., Julia Sweet, J., Passow, U., Finkel, Z.V., Irwin, A.J., Santschi, P,H., Quigg, A. 2019. Response of natural phytoplankton communities exposed to crude oil and chemical dispersants during a mesocosm experiment. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 4-7, 2019.

White, A.R., Jalali, M., Bacosa, H.P., Xu, C., Chin, W.-C., Schwehr, K.A,, Santschi, P.H., Quigg, A., Sheng, J. 2019. Drastic differences in aggregation on a rising oil droplet caused by unique EPS characteristics. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 4-7, 2019.

Xu, C., Passow, U., Chin, W.-C., Chen, H.M., Chiu, M.-H., Waggoner, D.C., Lin, P., Wei Xing, W., Sun, L., Schwehr, K.A., Hatcher, P.G., Quigg, A., Santschi, P.H. 2019. Comparison of Exopolymeric Substances (EPS), Transparent Exopolymeric Particles (TEP) and Microgels in Mesocosms and batch experiments with without the surrogate Macondo oil water accommodated fraction. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 4-7, 2019.

Waggoner, D.C., Hughey, M., Yard, A., Wozniak, A.S., Schwehr, K.A., Doyle, S., Chen, X., Wade, T.L., Quigg, A., Santschi, P.H., Hatcher, P.G. 2019. An investigation into the Effects

of Biodegradation vs. Photodegradation During Mesocosm Experiments. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 4-7, 2019.

Schwehr, K.A., Kamalanathan. M., Xu, C., Lin, P., Sun, L., Doyle, S., Sylvan, J., Quigg, A., Santschi, P.H. 2019. Using radiolabels as an indicator to understand the interplay of phytoplankton and their associated bacteria in the presence and absence of oil. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 4-7, 2019.

Sun, L., Chin, W.-C., Chiu, M.-H., Xu, C., Lin, P., Schwehr, K.A., Quigg, A., Santschi, P.H. 2019. Sunlight induced aggregation of dissolved organic matter in seawater: role of proteins in a biologically mediated processes. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 4-7, 2019.

Lin, P., Xu, C., Kaplan, D.I., Yeager, C.M., Xing, W., Schwehr, K.A., Santschi, P.H. 2019. Molecular Characterization of Natural Organic Matter Binding ^{239,240}Pu in the northwestern Fukushima Prefecture, Japan. Goldschmidt 2019 Conference, Barcelona, Spain, Aug. 18-23, 2019.

Grandbois, R.H., Xu, C., Santschi, P.H., Kaplan, D.I., Chris M. Yeager, C.M. 2019. Binding of iodide to forest soils is principally related to the activity of extracellular oxidases. Goldschmidt 2019 Conference, Barcelona, Spain, Aug. 18-23, 2019.

Santschi, P.H., Xu, C., Schwehr, K.A., Lin, P., Sun, L., Chin, W.-C., Kamalanathan, M., Bacosa, H.P., Quigg, A. 2020. Can the protein/carbohydrate (P/C) ratio of exopolymeric substances (EPS) be used as a proxy for its 'stickiness' and other biophysical properties? Abstract # 642136 at the Ocean Sciences Meeting, 16-21 February 2020, San Diego, CA, USA.

Sun, L., et al., 2020. Photo-oxidation facilitating the preservation of dissolved organic nitrogen in the ocean; Abstract 647727 at the Ocean Sciences Meeting, 16-21 February 2020, San Diego, CA, USA.

Lin, P., et al. 2020. Incorporation of hydroxamate siderophore and associated Fe into marine particles in natural seawater, Abstract 646643 at the Ocean Sciences Meeting, 16-21 February 2020, San Diego, CA, USA.

Santschi, P.H., 2020. Reconstruction of pollutant input into sediments and assessment of ecosystem recovery. Keynote speaker at the ContaSed 2020 - 2nd International Conference on Contaminated Sediments, 14 – 18 June 2020, University of Bern, Switzerland. Conference postponed to 2021 due to Covid19.

Santschi, P.H. 2020. Reconstruction of pollutant input into sediments and ecosystem recovery depend on post-depositional immobility. Invited talk at the Geological Society of America Meeting, 20-22 March 2020 | Reston, Virginia. Talk canceled due to Covid19.

Santschi, P.H., **2021.** Reconstruction of pollutant input into sediments and assessment of ecosystem recovery. Keynote speaker at the ContaSed 2021 - 2nd International Conference on Contaminated Sediments, 9 – 12 June 2021, University of Bern, Switzerland.

Santschi, P.H., Chin, W.-C., Xu, C., Quigg, A., Kamalanathan, M., Lin, P. **2021.** Review: Effects of micro- and nano-plastics on EPS aggregate formation. 3rd Annual TX Plastic Pollution Symposium, March 4, 2021, South Padre Island, TX.

Santschi, P.H., Chin, W.-C., Xu, C., Quigg, A., Kamalanathan, M., Lin, P. **2021.** Formation of marine plastic snow from micro- and nano-plastics and exopolymeric substances (EPS). ASLO 2021 Aquatic Sciences Meeting, 22–27 June 2021, Virtual Meeting.

Kamalanathan, M., Meng-Hsuen Chiu, Hernando Bacosa, Kathy Schwehr, Shih-Ming Tsai, Shawn Doyle, Alexandra Yard, Savannah Mapes, Carlos Vasequez, Laura Bretherton, Jason B. Sylvan, Peter H. Santschi, Wei-Chun Chin, and Antonietta Quigg. 2021. Polysaccharide and

its role during an oil spill. ASLO **2021** Aquatic Sciences Meeting, 22–27 June 2021, Virtual Meeting.

Santschi, P.H., Chin, W.-C., Xu, C., Quigg, A., Kamalanathan, M., Lin, P. **2021.** Biophysical Mechanisms of How Natural Organic Matter (NOM) Affects Micro- and Nano-Plastics Pollution in the Marine Environment: The Formation of 'Marine Plastic Snow'. 15 & 16 July 2021, Virtual EUAS e-Conference.

Santschi, P.H. **2021.** ROS mediated chemical crosslinking reactions of proteinaceous compounds in the Ocean. Invited (virtual) lecture at the Alfred-Wegener-Institute Bremerhaven, Germany.

Santschi, PH., Xu, C., Lin, P., Kaplan, D.I., Yeager, C.M., Hatcher, P.G., 2022. Watershed Controls on Uranium Concentrations Tied to Natural Organic Matter in Streambeds and Wetlands in the Tims Branch Watershed", abstract, at Virtual 2022 ESS (Environmental Systems Science) PI Meeting of the Department of Energy. May 24 – 26, 2022.

Santschi, P.H., Xu, C., Sun, L., Lin, P. 2022. Photo - oxidation Facilitating the Preservation of High Molecular Weight Dissolved Organic Nitrogen in the Ocean, paper presented at the Virtual EUAS e-Conference. 14 & 15 July 2022.

Kaplan, D.I.*, Boyanov, M.I., Losey, N., Kuehn, W., Lin, P., Xu, C., Santschi, P.H., Xing, W., Weisenhorn, P., Kemner, K.M. 2023. Uranium enrichment in the rhizosphere of a riparian wetland. ICOBTE & ICHMET 2023 Conference, September 6-10, 2023, Wuppertal, Germany.

Santschi, P.H., Kaplan, D.I., Yeager, C.M., Xu, C., Lin, P. 2023. Watershed controls on Uranium concentrations tied into natural organic matter and iron interactions in streambeds and wetlands. Abstract, at 2023 ESS (Environmental Systems Science) PI Meeting of the Department of Energy. May 16 – 17, 2023, Bethesda, MD.

Xu, C., Chin, W.-C., Santschi, P.H. 2023. Micro- and nano-plastics induced release of protein-enriched exopolymeric substances (EPS) from phytoplankton and bacteria. 5th Annual Texas Plastic Pollution Symposium, April 5, 2023, at the University of Houston - Clear Lake in Houston, Texas.

Santschi, P.H. 2023. Wondering about what it takes to make Earth a Habitable Planet. EU Academy of Sciences (EUAS) e-Symposium. 13 & 14 July 2023, Virtual Meeting.

LECTURES AT NATIONAL AND INTERNATIONAL CONFERENCES OR WORKSHOPS:

1980: Invited lecture at the Int. Conference on Biological and Chemical Research in Marine Mesocosms, Victoria, B.C., Canada.

1981: Invited lecture at the Gordon Research Conference in Chemical Oceanography, Plymouth, N.H., USA.

1984: Invited lecture at the Int. Conference on Interactions between Sediments and Water, Geneva, Switzerland, Int. Assoc. of Sediment-Water Science.

1985: Invited lecture at the UNESCO Symposium on Comparative Ecology of Fresh Water and Coastal Marine Ecosystems, Nairobi, Kenya.

1986: Invited lecture at the 3ème Cycle Romand: Workshop on the Storage and Disposal of Domestic, Industrial and Nuclear Wastes, Neuchâtel, Switzerland.

1986: Invited lecture at the Annual ASLO/PSA Meeting in Kingston, R.I., USA.

1986: Invited lecture at the DOE Workshop on the Role of Colloids in the Transport of Trace Substances in Subsurface Waters, Manteo, N.C., USA.

1986: Invited lecture at the Conference on "Radioactivity Measurements in Switzerland after Chernobyl and their Scientific Interpretation", Berne, Switzerland.
1987: Invited lecture at the 4th Internat. Symp. on the Interaction between Sediments and Water, Melbourne, Australia, Int. Assoc. of Sediment-Water Science.
1987: Invited lecture at the Chemrawn IV, Internat. IUPAC Symp. and Workshop on Modern Chemistry and Chemical Technology Applied to the Ocean and its Resources, Denver, Colorado, USA.
1987: Invited lecture at the Swiss Conference on Radiation Physics and Biology, Bellinzona, Switzerland.
1988: Invited participant at the Radiochemistry within GOFS, Workshop organized by GOFS at WHOI, Woods Hole Oceanographic Institution, Massachusetts, USA.
1989: Invited lecture at the Texas Academy of Sciences, Annual Meeting, Beaumont, Texas, USA.
1989: Invited participant at the Workshop on Biogeochemical Pathways of Artificial Radionuclides in the Environment, Scientific Committee on Problems of the Environment, International Council of Scientific Unions, SCOPE-RADPATH, University of Essex, Colchester, U.K.
1989: Invited lecture at the 32nd IUPAC Congress, Section II, Atmospheric and Marine Chemistry, Stockholm, Sweden.
1989: Invited lecture at the 7th Internat. Conf. on Heavy Metals in the Environment, Geneva, Switzerland.
1990: Invited participant at the U.S. - Hungarian - Soviet Trilateral Science Summit, Budapest, Hungary.
1990: Invited participant at the DOE sponsored Workshop on Ocean Margins in Virginia Beach, VA.
1990: Keynote lecture in Environmental Chemistry, Italian Chemical Society Meeting in San Benedetto del Trento, Italy.
1990: Invited participant at the Workshop on Characterization and Fate of Particles in the Environment, IUPAC International Commission on Environmental Analytical Chemistry, in Wageningen, Holland.
1991: Invited participant at the Workshop on the "The Ocean Option for Future Waste Management", WHOI, Woods Hole, Mass., USA.
1991: Invited lecture at the Second International Symposiumon the Biogeochemistry of Model Estuaries: Estuarine Processes and Global Change, Jeckyll Island, Georgia, USA.
1991: Invited lecture at the 11th Biennial Internat. Estuarine Research Conference, San Francisco, CA, USA.
1992: Invited lecture at the International Workshop on Benthic Chambers: State of the Art and New Approaches, CISE - Milan.
1993: Invited lecture at the 205th ACS National Meeting, Div. of Geochemistry, Symposium Honoring Paul W. Schindler: Mineral/Water Interface Geochemistry, Paper 33, Denver, CO.
1993: Invited lecture at the 12th Biennial International Estuarine Research Conference, Hilton Head, South Carolin.
1994: Invited lectures at the 207th ACS National Meeting., American Chemical Society, San Diego, CA.
1995: Invited plenary lecture at the 4th International Symposium on Model Estuaries, Nantes, France.

1995: Invited plenary lecture at the 3rd International Argentum Conference, Washington, D.C.
1996: Invited lecture at the AGU/Ocean Sciences Meeting in San Diego, CA.
1996: Invited plenary lecture at the 4th International Conference on Nuclear and Radiochemistry, St. Malo, France.
1997: Invited lecture at the 214th ACS National Meeting, Las Vegas.
1997: Invited lecture at the 5th International Argentum Conference on the Transport, Fate, and Effects of Silver in the Environment. Hamilton, Ontario, Canada,
1998: Invited plenary lecture at the 8th Annual Meeting of the Society for Environmental Toxicology and Chemistry, SETAC-Europe, Bordeaux, France.
1998: Invited plenary lecture at the 44th International Conference on Analytical Sciences and Spectroscopy in Kingston, Ontario, Canada.
1999: Invited lectures at University of Geneva, Switzerland, on "Environmental Radiochemistry".
1999: Invited lecture at the International Symposium on Isotope Techniques in Water Resources Development and Management, IAEA-SM-361, Vienna, Austria.
1999: Invited participant at the International Argentum VI Conference and Workshop in Madison, Wisconsin.
1999: Invited lecture at the International Conference of the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) and 45th International Conference on Analytical Sciences and Spectroscopy (ICASS) in Vancouver, Canada.
2000: Invited lecture, chairman, and convenor of session, American Society of Limnology and Oceanography, ASLO-2000, Copenhagen, Denmark.
2000: Invited lecture, International Conference on Analytical Sciences and Spectroscopy (ICASS) in Winnipeg, Canada.
2000: Invited lecture, 5th International Conference on Nuclear and Radiochemistry, Pontresina, Switzerland.
2001. Invited lecture, Galveston Bay National Estuary Symposium V "State of the Bay", Jan. Galveston, TX.
2001. International Symposium on Actinides-2001 in Hayama, Japan.
2002: AGU/ASLO Aquatic Sciences meeting in Honolulu, Hawaii.
2002: Invited seminar at Tulane University, New Orleans, LA.
2002: Invited lecture at the EURESCO – Natural Waters and Water Technology Conference on Aquatic Colloids in Spa, Belgium.
2003: EGS-AGU-EUG Joint Assembly, Nice, France.
2003: Invited participant and chairman of "WG8 – Tracers of particle dynamics and carbon flux" working group at the GEOSECS - II – International GEOTRACES planning workshop, Toul ouse, France (13-16 April, 2003).
2003: Invited seminars at University of Bern, Dept. of Chemistry, Bern, Switzerland.
2003: Invited seminar at University of Geneva, Dept. of Chemistry, Geneva, Switzerland.
2003: Invited seminar at EAWAG, Swiss Institute of Technology, Zurich, Switzerland.
2003: Invited seminar at Southwest Research Institute, San Antonio, Texas.
2003: Invited lecture, Workshop on Flocculation in Natural and Engineered Environmental Processes, Canada Center for Inland Waters, Burlington, Ontario, Canada.
2003: Invited talk at Gel Workshop, Centennial FHL Symposium on Global Biogeochemical Cycles: A tribute to Prof. John I. Hedges, Friday Harbor Laboratory, University of Washington.

2003: Invited lecture, NSF Nanoscale Science and Engineering Grantees Conference. National Science Foundation, Arlington, Virginia.
2004: Lecture at ASLO 2004 Ocean Research Conference, Honolulu, Hawaii.
2004: Invited lecture and chairman of session, ACS National Meeting, Anaheim, CA.
2004: Invited plenary lecture at 8th International Estuarine biogeochemistry Symposium in Solomons, MD.
2004: Convenor, chairman of session, and presenter, at the International Goldschmidt 2004 Conference in Copenhagen, Denmark.
2004: Invited participant at the International Conference on Aquatic Colloids, University of Birmingham, UK.
2004: Invited lecture at University of Lancaster, UK.
2005: Session chairman, and invited presentation at the ASLO 2005 Aquatic Sciences Meeting, Salt Lake City, Utah, USA.
2005: Invited presentation at the Chemical Oceanography Gordon Conference, Tilton, NH, USA.
2005: Presentation at Migration'05, the 10th International Conference on Chemistry and Migration Behavior of Actinides and Fission Products in the Geosphere, in Avignon, France.
2006: Invited member to the International Audit Team for the Laboratory for Radiochemistry and Environmental Chemistry of the Paul Scherrer Institute and the University of Bern, Switzerland.
2006: Invited Presentation at the Second International Conference on Natural Aquatic Colloids and Nanoparticles, at the University of Plymouth, U.K.
2007: Session co-chairman and presentation at the SLO 2007 Aquatic Sciences Meeting, Santa Fe, New Mexico, USA.
2007: Invited Presentation and participant for the workshop "Basic Research Needs for Geosciences: Facilitating 21st Century Energy Systems," BRN Geosciences Nuclear Panel "Scientific Challenges for Stewardship of Nuclear Wastes from Present and Future Generation Technologies", organized by the Office of Basic Energy Sciences of the Department of Energy, Washington, DC.
2008: Ocean Sciences Meeting in Orlando, Florida, where P.H. Santschi was co-chairing a session (018) 'The Aquatic Gel Phase, Its Role in Biogeochemical Cycles':
2007: Presentation at the Migration '07, 11th International Conference on the Chemistry and Migration of Actinides and Fission Products in the Geosphere. Munich, Germany, Aug. 26 – Aug. 31, 2007.
2008: Presentation at the SETAC Europe 18th Annual Meeting in Warsaw, Poland, 25-29 May 2008.
2008: Presentation at the Seagrant Symposion on "Geochemical Factors Regulating Microbial Degradation of Dioxins in Estuarine Sediments: Houston Ship Channel and Galveston Bay, Texas".
2008: Presentation at Pacific Northwest Laboratory on ""Interactions of Pu with natural organic matter in the environment".
2008: Presentation on "Toxicity of zinc oxide and silver engineered nanoparticles to marine phytoplankton" at the SETAC North America Annual Meeting in Tampa, FL, Nov. 16-21, 2008.
2008: Presentation on "Radiobiogeochemical Research, Working Across Boundaries" at the Swiss Institute for Water Research, ETH Zurich, Switzerland.

2008: Invited Plenary Talk at the International Conference 'Chemodynamics of Ecosystems', to honor the work of Dr. Jacques Buffle, 26-31 October 2008, at the Monte Verita Centre in Ascona, Switzerland.

2009: Session Convenor (Session 15, Geochemical Processes Controlling the Fate of Radionuclides in the Environment) and Presenter at Goldschmidt 2009 - "Challenges to Our Volatile Planet". International Conference, June 21 - 26 in Davos, Switzerland.

2010: Presentation at International "2010 Western Pacific Geophysics Meeting in Taipei, Taiwan, 22–25 June 2010.

2011: Invited Presentation "Biopolymers as carriers of natural (Th, Pa, Pb, Po, Be) radionuclides in aquatic systems" at the 2nd workshop on Exotic Radionuclides from Accelerator Waste for Science and Technology (ERAWAST II) August 29-Sept. 2, 2011, at the Paul Scherrer Institute in Villigen, Switzerland.

2011: Invited Presentation "The role of particulate and colloidal biopolymeric carriers in the biogeochemical cycle of for natural radioisotopic tracers (e.g., Th, Pa, Be, Pb, Po isotopes)" at the 3rd GEOTRACES Data-Model Synergy Workshop (November 14-17, 2011), at the Autonomous University of Barcelona, Spain).

2012: Invited Presentation "Biopolymers as carriers of radionuclides in marine aggregates" at the International Workshop on Marine Aggregates (IWOMA) - From Molecular principles to Biogeochemical Impacts (August 15-17, 2012), in Bremen, Germany.

2013. Presentation at the International Goldschmidt 2013 Conference (August 25-30, 2013) in Florence, Italy.

2014: Invited Presentation at the Ocean Sciences Meeting (February 23-28) in Honolulu, HI.

2014: Invited Presentation at the International Goldschmidt 2014 Conference (June 8-13, 2014) in Sacramento, CA.

2014: Invited Presentation at the International Plutonium Futures Conference (September 7-12) in Las Vegas Nevada.

2015: Invited Keynote Speaker at The International Conference on Contaminated Sediments, Environmental Chemistry, Ecotoxicology and Engineering, ContaSed 2015, 8–13 March 2015, Congressi Stefano Franscini in Monte Verità, Switzerland, organized by the Swiss Institute of Technology, ETH Zurich.

2016: Invited Keynote Speaker at the International Goldschmidt Conference in Yokohama, Japan, June 26 - July 1, 2016, in the Session "Biological Transformation and Fate of Natural and Anthropogenic Radionuclides in the Environments".

2016: Presenter and Member of Scientific Committee of ICRM-LLRMT (International Committee for Radionuclide Metrology – Low Level Radioactivity Measurements Techniques) conference, Seattle (WA, USA) September 26-30, 2016.

2016: Organizer of special ACS Symposium on "Chemical and Biological Processes Regulating Transport of Pollutants in the Gulf of Mexico and Its Estuaries" at the 72nd Annual Southwest Regional Meeting (SWRM), Galveston, TX, November 10-13, 2016.

2017: Session Co-Organizer, Co-Chair and presenter at the Gulf of Mexico Oil Spill and Ecosystem Science Conference 2017, New Orleans, LA. February 6-9, 2017.

2018: Co-Organizer and Co-Chair of Session "Processes Controlling the Mobility of Contaminant Radionuclides in Natural and Engineered System" at Goldschmidt 2018 International Conference, Boston, August 12-17, 2018.

2019: Session Co-Organizer and Co-Chair at the Gulf of Mexico Oil Spill and Ecosystem Science Conference 2017, New Orleans, LA. February 4-7, 2019.

2019: Co-Organizer and Co-Chair of Session "Radionuclides in the Environment: modeling, experimental, scaling, controlling chemical/microbial/hydrological processes" at Goldschmidt 2019 International Conference, Barcelona, Spain, August 18-23, 2019.

2019: Invited presentation "Purposeful Experimental Additions of Radioactive Tracers to Natural Aquatic Systems" in honor of Wallace Broecker at the "The Wally Broecker Symposium" at LDEO of Columbia University, Oct. 24-26, Palisades, NY.

2020: Invited keynote speaker at 2nd International Conference on Contaminated Sediments (ContaSed), Oeschger Centre, title: "Sediment dating for pollutant input reconstruction and ecosystem recovery assessment", postponed to 2021 due to Covid-19.

2020: Invited speaker at 2020 GSA Southeast/Northeast Joint Section Meeting. Title "Reconstruction of pollutant input into sediments and ecosystem recovery depend on post-depositional immobility", canceled due to Covid-19.

2021: Invited (virtual) lecture at the Alfred-Wegener-Institute Bremerhaven, Germany on "ROS mediated chemical crosslinking reactions of proteinaceous compounds in the Ocean", June 8, 2021.

2021: Invited keynote speaker at 2nd International Conference on Contaminated Sediments (ContaSed), title: "Sediment dating for pollutant input reconstruction and ecosystem recovery assessment", Oeschger Centre for Climate Change Research (OCCR), University of Bern, Switzerland, 9 – 11/12 June 2021, hybrid and in-person meeting.

2021: Chair person for SS55 session, " Let it snow! Towards understanding the drivers of marine snow in a changing global ocean", and presentation "Formation of marine plastic snow from micro- and nano-plastics and exopolymeric substances (EPS)", 22–27 June 2021, Virtual Meeting.

2021: Invited speaker at the Virtual EUAS e-Conference. Title "Biophysical Mechanisms of How Natural Organic Matter (NOM) Affects Micro- and Nano-Plastics Pollution in the Marine Environment: The Formation of 'Marine Plastic Snow". 15 & 16 July 2021, Virtual Meeting.

2022: Presentation of "Watershed Controls on Uranium Concentrations Tied to Natural Organic Matter in Streambeds and Wetlands in the Tims Branch Watershed" at the virtual 2022 ESS (Environmental Systems Science) PI Meeting of the Department of Energy. May 24 – 26, 2022.

2022: Invited speaker at the Virtual EUAS e-Conference. Title "Photo - oxidation Facilitating the Preservation of High Molecular Weight Dissolved Organic Nitrogen in the Ocean". 14 & 15 July 2022, Virtual Meeting.

2022: Invited lecture for the Research Center for Environmental Changes (RCEC), Academia Sinica, Taipei, Taiwan, "Photo - oxidation Facilitating the Preservation of High Molecular Weight Dissolved Organic Nitrogen in the Ocean", September 2022, Virtual Presentation.

2022: Invited (virtual) lecture for the BioGeo- Colloquium at the Institute of Geosciences, Friedrich-Schiller-Universität, Jena, Germany, on "How do Exopolymeric Substances affect Micro- and Nano-Plastics in the Environment? - The biophysical mechanisms leading to the formation of 'Marine Plastic Snow'". November 2022, Virtual Presentation.

FUNDING HISTORY:

Principal and co-principal investigator of the following projects:

AT LAMONT-DOHERTY GEOLOGICAL OBSERVATORY:

EPA - Experiments with radioactive tracers in the facility for the experimental analysis of coastal marine ecosystems, 1976-1981, P.H. Santschi, co-PI, with W.S. Broecker and Y.-H. Li.

NSF - Bottom chamber and benthic flux experiment, 1978-1984, P.H. Santschi, co-PI, with W.S. Broecker.

NSF - Collection and analysis of GEOSECS samples collected in the Indian Ocean for Radium-228, 1978-1979, P.H. Santschi, co-PI, with W.S. Broecker, T.H. Peng.

NSF - Experimental Acidification of Lakes, 1980 - 1983, P.H. Santschi, co-PI, with W.S. Broecker, H.J. Simpson, R.H. Hesslein and R. Anderson.

NSF - Removal and fate of Pollutant Trace Metals in Coastal Waters, 1981-1983, P.H. Santschi, co-PI, with Y.-H. Li.

NOAA - Removal and Fate of Pollutant Trace Metals in Coastal Waters, 1981-1983, P.H. Santschi, co-PI, with Y.-H. Li.

NSF - Lander Science: Active Experiments, 1984-1986, P.H. Santschi, co-PI, with W.S. Broecker and R. Anderson ($250,000).

AT EAWAG (Swiss Institute for Water Resources and Water Pollution Control)

EAWAG-Research Enhancement Fund: - Metals and particulates cycling in Lake Zurich, 1984, P.H. Santschi, co-PI, with L. Sigg, M. Sturm, J. Davis, and W. Stumm ($15,000).

EAWAG-Research Enhancement Fund: - Natural radionuclides in the sediments of Lake Greifen, 1984-1987, P.H. Santschi, co-PI, with Wan Guojang, M. Sturm and Ch. Schuler ($20,000).

EAWAG-Research Enhancement Fund: - Geochemical flux balance at the sediment-water interface, 1985, P.H. Santschi, co-PI, with R. Gächter ($30,000).

EAWAG-Research Enhancement Fund: - Production and decomposition of sedimenting particles in Lake Lucerne, 1985, P.H. Santschi, co-PI, with M. Sturm, R. Schwarzenbach, J. Schneider, C. Lee, S. Wakeham, and J. McKenzie ($10,000).

EAWAG-Research Enhancement Fund: - Radionuclide and particle dynamics in Lake Zurich, 1985 - 1987, P.H. Santschi, PI, with M. Sturm and Ch. Schuler ($10,000).

Swiss Atomic and Chemical Laboratory of Swiss Army (GRD, Spiez) and Swiss Dept. of Health - Contamination of drinking water supplies after radioactive fallout, P.H. Santschi, PI, 1986 - 1987 ($15,000).

Swiss National Science Foundation - Relevance of the slow sorption kinetics of thorium isotopes in natural waters, 1986 - 1988, P.H. Santschi, PI, with B. Honeyman ($100,000).

AT TEXAS A&M UNIVERSITY:

State of Texas Coordinating Board, Texas Advanced Research Program - Natural radionuclides in coastal waters, P.H. Santschi, PI, 1988 - 1990 ($100,546).

Texas A&M University at Galveston - Start-up grant from the President, for Excellence in Research, P.H. Santschi, PI, 1988 - 1989 ($125,000).

NSF - U.S. National Science Foundation, Transfer coefficients in the benthic boundary layer, P.H. Santschi, co-PI, with R. Anderson, Lamont-Doherty Geological Observatory, 1987 - 1989 ($109,472).

Texas Chemical Council - Trace metals in coastal waters of Texas, and Chromium in Corpus Christi Bay, P.H. Santschi, PI, with G. Benoit, 1989-1992 ($80,000).

Texas Institute of Oceanography - Radionuclides and trace metals in the Gulf of Mexico, P.H. Santschi, PI, 1990-1991 ($50,000).

NSF - Physicochemical Processes Controlling Thorium Behavior in the Ocean, P.H. Santschi, PI, with B. Honeyman, M. Baskaran and G. Benoit, 1990 - 1993 ($527,654).

NSF - Research Experience for Undergraduates Program Supplement to "Physicochemical Processes Controlling Thorium Behavior in the Ocean", P.H. Santschi, PI, with B. Honeyman, M. Baskaran and G. Benoit, 1990 - 1993 ($4,000).

Sea Grant College Program, Processes which control the cycling of the toxicant lead in Galveston Bay, 1991 - 1993 ($98,380).

Department of Energy, OHER, Ocean Margins Program, The Production of Colloids in the Benthic Boundary Layer and Particle-Particle Interactions, P.H. Santschi, PI, with M. Baskaran and B. Honeyman, 1992 - 1995 ($1,027,192).

Texas Institute of Oceanography - Matching grant to: The Production of Colloids in the Benthic Boundary Layer and Particle-Particle Interactions, P.H. Santschi, PI, 1992-1993 ($70,000).

National Science Foundation - United States/China Cooperative Science Program, Studies of the Effects of Pb Mobility on ^{210}Pb Geochronology in Aquatic Environments, P.H. Santschi, PI, 1993-1994 ($34,184.-).

National Science Foundation - Ocean Sciences, ^{129}I: A New Tracer for Carbon Cycling, P.H. Santschi, co-PI, with D. Schink, 1992-1994 ($250,904).

Office of Naval Research - Estuarine Colloids: Sorption Capacity, Colloid Facilitated Transport and Bioavailability, P.H. Santschi, PI, with G. Gill and M. Benfield, 1993 - 1995 ($336,818).

Office of Naval Research - Characterization of Nuclear Contaminants Released to the Kara Sea by the Ob and Yenisey Rivers, P.H. Santschi, co-PI, with J. Brooks, M. Champ, T. Wade, M. Baskaran, 1993-1994 ($185,000 to TAMUG).

Seagrant College Program - Speciation of selected Heavy Metal Ions and Radioactive Isotopes in Galveston Bay..., P.H. Santschi, PI, 1993-1995 ($94,000.-).

National Oceanographic and Atmospheric Administration - Historical Contamination of Mississippi River Delta and Galveston Bay Sediments, P.H. Santschi, co-PI, 1994-1995 ($55,000 to TAMUG).

Houston Lighting and Power, Environmental Program - Analysis of Metals and Metalloids in Tissue of Oysters from Shell and Coal Ash Pellet Cultches for an Artificial Reef Project, P.H. Santschi, PI, 1993-1995 ($46,000.-).

Silver Coalition, KODAK Company - Silver measurements in watersheds of Texas, 1993 - 1995, P.H. Santschi, PI, (49,000).

Environmental Protection Agency, subcontract from Batelle Memorial Institute (EEAM) - Work/Quality Assurance Project Plan for Air Toxics Deposition Monitoring in Galveston Bay, Texas, 1994-1995, P.H. Santschi, co-PI, ($20,300).

Coordinating Board - Texas Advanced Research Program - ^{129}I: A new tracer for distinguishing terrestrial from marine organic matter, P.H. Santschi, PI, 1996-1997 ($181,173).

Office of Naval Research - The importance of colloids to chemical speciation and metal cycling in aquatic systems, P.H. Santschi, PI, 1996-1998 ($504,755).

Department of Energy, OHER, Ocean Margins Program - The Production of Colloids in the Benthic Boundary Layer and Particle-Particle Interactions, P.H. Santschi, PI, 1994-1995 ($84,000).

Department of Energy, through Brookhaven National Laboratory, DOE-OMP-Organic Carbon Export, P.H. Santschi, PI, 1997-1998 ($50,000.).

Department of Energy, OHER, Ocean Margins Program - Carbon Transport in the Bottom Boundary Layer, P. Santschi, PI, 1996 - 1997 ($100,000).

National Association of Photographic Manufacturers, Organic Sulfur Complexes of Silver, P.H. Santschi, PI, 1996 - 1997 ($40,000).

National Science Foundation, OCE, Relationship of Th(IV) speciation to scavenging in marine environments, P.H. Santschi, PI, 1996 - 1998 ($125,000)

Aluminum Company of America, Radiochemical Investigations in Lavaca Bay, P.H. Santschi, PI, 1996 - 1997, ($53,200.-).

Aluminum Company of America, Radiochemical Investigations in Lavaca Bay, P.H. Santschi, PI, 1997-1998 ($75,000.-).

Kaiser-Hill/Dept. of Energy, Actinide Migration Studies at the Rocky Flats Environmental Technology Site, P. Santschi, co-PI, 1997 ($43,392 to TAMUG).

Kaiser-Hill/Dept. of Energy, Actinide Migration Studies at the Rocky Flats Environmental Technology Site, P. Santschi, co-PI, 1997-1998 ($49,200 to TAMUG).

Kaiser-Hill/Dept. of Energy, Actinide Migration Studies at the Rocky Flats Environmental Technology Site, P. Santschi, co-PI, 1998-1999 ($98,000.- to TAMUG).

Coordinating Board, Texas Advanced Research Program - Reconstruction of Terrestrial ^{129}I Inputs into Marine Environments, P.H. Santschi, PI, 1998-1999 ($96,358.-).

Texas Seagrant - Bioavailability of colloid-associated metals to estuarine bivalves, P.H. Santschi, PI, with Laodong Guo and Sammy Ray, co-PIs, 1998 - 2001 (174,312.-).

Office of Naval Research, Complexation reactions between trace metals and specific functional groups in natural organic matter from estuarine waters, P. Santschi, principal investigator, with Liang-Saw Wen, co-PI, 1998 – 2001 ($350,000.-).

National Science Foundation, Ocean Sciences, A Collaborative Proposal on the Interaction of Th(IV) with Organic Compound Classes of Marine Organic Matter, P. Santschi, principal investigator, with Laodong Guo and Ian Walsh, co-principal investigators, 1999-2002 ($394,430 to TAMUG).

Minerals Management Service, Gulf of Mexico OCS Region, Deepwater Program: Northern Gulf of Mexico Continental Slope Habitats and Benthic Ecology (HABEN), Gilbert Rowe, principal investigator, Kennicut, Morse, Presley, Wade, Bryant, Santschi, etc., co-PIs, 1999-2002 ($66,855 to TAMUG).

Kaiser-Hill/Dept. of Energy, Actinide Migration Studies at the Rocky Flats Environmental Technology Site, P.H. Santschi, PI, 1999-2000 ($120,000).

Kaiser-Hill/Dept. of Energy, Actinide Migration Studies at the Rocky Flats Environmental Technology Site, P.H. Santschi, PI, 2000-2001 ($100,000).

Water Resources Research Institute (WRRI)/USGS, Test of a potential method to date recharge and surface waters/ground water interactions using anthropogenic ^{129}Iodine and ^{127}Iodine species, some of them chemical analogs for nitrate, P.H. Santschi, PI, 2000-2001 ($25,000).

Kaiser-Hill/Dept. of Energy, Actinide Migration Studies at the Rocky Flats Environmental Technology Site, P.H. Santschi, PI, 2001-2002 ($100,000).

Texas Seagrant - Role of natural organic matter in governing the bioavailability of potentially toxic metals to estuarine bivalves, P.H. Santschi, PI, with Laodong Guo and Sammy Ray, co-PIs, 2001 - 2004 (241,859).

Kaiser-Hill/Dept. of Energy, Actinide Migration Studies at the Rocky Flats Environmental Technology Site, P.H. Santschi, PI, 2001-2002 ($100,000).

Dept. of Energy - NABIR program - Microbial stabilization of Plutonium in the subsurface environment, P.H. Santschi, co-PI, 2001 – 2004 ($300,000).

NSF - Collaborative Research: NIRT: The Role of Nano-Scale Colloids in Particle Aggregation and Trace Metal Scavenging in Aquatic Systems, P.H. Santschi, lead-PI, 2002-2005 ($520,276).

Texas Water Development Board – "Quantification of Terrestrial and Marine Sediment Sources to a Managed Fluvial, Deltaic and Estuarine System: The Nueces-Corpus Christi Estuary, Texas", P.H. Santschi, PI, 2002 – 2004 ($37,290).

NSF – OCE, "Collaborative Proposal: Th(IV) and Pa(IV,V) binding to exopolymeric acid polysaccharides in marine environments", P.H. Santschi, lead-PI, 2004 – 2009 ($486,531).

State of Texas, "The Legacy question for Dioxins in Houston Ship Channel Sediments", Subcontract from University of Houston, P.H. Santschi, PI, Kevin Yeager, co-PI, 2004-2005 ($125,000).

Department of Energy - NABIR program – "Biogeochemical Cycling and Environmental Stability of Pu Relevant to Long-Term Stewardship of DOE Sites" P.H. Santschi, PI, 2004-2007 ($300,000).

Anchor Environmental, L.L.C., "Radiochemical Sample Analysis for the Portland Harbor Superfund Site Round 2", P.H. Santschi, PI, Kevin Yeager, co-PI, 2004-2005 ($50,500).

State of Texas, CMP 9, "Quantification of sediment sources of the Nueces-Corpus Christi Estuary System", P.H. Santschi, PI, Kevin Yeager, co-PI, 2005 ($48,852).

State of Texas, CMP10, "Stage I: A Preliminary Evaluation of the Impacts of Dredging Activities on the Fate of Dioxin in the Houston Ship Channel", P.H. Santschi, PI, Kevin Yeager and Robin Brinkmeyer, co-PIs, 2006 ($49,995).

National Science Foundation, OCE, Chemical Oceanography Program, "Acquisition of additional radio-analytical capabilities, TAMUG's Laboratory for Oceanographic and Environmental Research, Coastal Zone Laboratory and Coastal Geology Laboratory", P.H. Santschi, PI, K. Yeager, and T. Dellapenna, co-PIs 2005-2006 ($20,388).

National Science Foundation, DBI, Major Research Instrumentation, "Acquisition of Instruments to Facilitate and Enhance Research Projects and Undergraduate Education in Aquatic Environmental Biogeochemistry at TAMUG", Rainer Amon, PI, A. Quigg, A. Anis, G. Gill, P.H. Santschi, co-PIs, 2005-2008 ($72,842).

National Science Foundation – Hydrology, "$^{129}I/^{127}I$ ratios and Iodine Speciation in Surface and Groundwaters: Link Between Speciation and Retardation", P.H. Santschi, PI, 2006-2009 ($210,000),

Texas Seagrant, "Factors regulating microbial degradation of dioxins in estuarine sediments: Houston Ship Channel and Galveston Bay, Texas", P.H. Santschi, PI, K. Yeager and R. Brinkmeyer, co-PIs, 2006-2009 ($250,505).

National Science Foundation - MRI "Acquisition of Instrumentation to Facilitate and Enhance Research Projects and Undergraduate and Graduate Education in Chemistry and Environmental Chemistry at TAMUG", P.H. Santschi, PI, R. Amon and A. Balaban, co-PIs, 2006 ($91,252).

Integral Consulting, Inc., Subcontract, "Sediment dating of Upstream Downstream Sediment samples, Lower Willamette Group (LWG) – Portland Harbor RI/FS", Peter H. Santschi, PI, 2007 ($87,780).

Defense Intelligence Agency - MASINT Consortium (NCMR ID 06P07PNNLSchw), "Autonomous High-Resolution in-situ Gamma Counter for Monitoring Marine and Coastal Waters", Peter H. Santschi, co-PI, Jon Schwantes (PNNL), Peter H. Santschi, Co-PI, 2007-2010 ($168,000).

Dept. of Energy, ERSP Program, "COLLABORATIVE RESEARCH: BIOGEOCHEMICAL AND MICROBIAL CONTROLS OF IODINE-129 MOBILITY IN GROUNDWATER RELEVANT TO LONG-TERM STEWARDSHIP OF DOE SITES", Peter H. Santschi, Robin Brinkmeyer and Kathleen Schwehr, co-PIs, 2008-2011 ($721,248).

Penobscot River Mercury Study Panel - Radiochemical analyses of sediment cores from the Penobscot River and Estuary, Peter H. Santschi, PI, Bryce Johnson, Kathleen Schwehr, Patrick Louchouarn, co-PIs, 2009-2011 ($330,400).

National Geospatial Intelligence Agency, "ENHANCED "HOT SUSHI" Lowering target isotope limits of detection for an existing design of a compact, high-resolution, *in situ* gamma counter for aqueous environments by enhancing on-board filtration and chemosorption capabilities", for Postdoctoral Fellowship to Bryce, Johnson, Peter H. Santschi, PI, 2008-2010 ($240,000).

NSF-OCE, "Collaborative Research: Examining the Binding of Radionuclides with Marine Biopolymers, A Comparative Study on Th, Pa, Be, Po and Pb Isotopes", Peter H. Santschi, PI, Kathy Schwehr, Laodong Guo, co-PIs, 2009-2012 ($460,487).

NSF-CBET, " Collaborative Research: Effects of exopolymeric substances (EPS) on engineered nanoparticle (EN) into marine phytoplankton cells", Peter H. Santschi, PI, Kathleen A. Schwehr, and Antonietta Quigg, co-PIs, 2009-2012 ($248,158).

NSF-MRI-R2, "Acquisition of instruments to facilitate and enhance education and research on marine ecosystems at TAMUG", Jay Rooker, Peter H. Santschi, and Antonietta Quigg, co-PIs, 2010-1011 ($383,127).

DOE, Office of Science, SBR, "Plutonium Speciation and Mobility through the Subsurface Environment: Nature of Organic Colloidal Carriers", Santschi, P.H., PI, Schwehr, K.A., Hatcher, P.G., co-PIs, 2011-2016 ($660,128.-).

DOE, Office of Science, SBR, "Collaborative Research: "The Importance of Organo-Iodine and Iodate In Iodine-127,129 Speciation, Mobility and Microbial Activity in Groundwater at DOE Sites", Santschi, P.H., PI, Schwehr, K.A., Kaplan, D.I., and Yeager, C.M., co-PIs 2011-2015 ($671,819.- to TAMUG).

Lawrence Berkeley National Laboratory, "Using Humic Acid to Immobilize Radioiodine (1-129) in Acidic Waste Plumes", Santschi, P.H., PI, Sept. 1, 2011 – August 31, 2013 ($25,000).

Pacific Northwest National Laboratory, "Subsurface Characteristics and Treatment of Iodine-129 Contaminated Groundwater for UP-1 Final Record of Decision", Peter H. Santschi, PI, April 11 – September 30, 2012 ($175,000).

Pacific Northwest National Laboratory, "Quantification of Iodine Speciation in Contaminated Groundwater and Sediment", Peter H. Santschi, PI, June – September 30, 2013 ($65,000).

National Consortium for Measurement and Signature Intelligence (MASINT) Research Program, Naval Postgraduate School - "Chemisorption Studies of Selected Radionuclides for Use in Autonomous Collection and In-Situ Detection Systems for Monitoring Marine and Coastal Waters", Peter H. Santschi, PI, 2013-2014 ($167,477).

National Science Foundation – Chemical Oceanography, "Biopolymers produced by diatoms and coccolithophores as carriers for selected natural radionuclides (of Th, Pa, Pb, Po, Be) in the ocean", Peter H. Santschi, PI, Quigg, A., Schwehr, K.A., and Xu, C., co-PIs, Feb. 1, 2014 – Jan. 31, 2018 ($506,849).

DOE, Office of Science, SBR, "Collaborative Research: The Importance of Organo-Iodine and Iodate In Iodine-127,129 Speciation, Mobility and Microbial Activity in Groundwater at DOE Sites", Santschi, P.H., PI, 2014-2015 ($60,000 supplement to TAMUG).

Gulf of Mexico Research Initiative (GoMRI), "Role of microbial exopolymers in aggregation and degradation of oil and dispersants", Santschi, P.H. (Deputy Director and PI), with Quigg, A. (Consortium Director), and Knapp, T., Wade, T.L., Chin, W.-C., Passow, U., Hatcher, P.G., Silvan, J., and Finkel, Z. (co-PIs), Jan. 1, 2015 – Dec. 31, 2017 ($7,245,432 total, $3,209,495 to TAMUG).

DOE, Office of Science, SBR, "Collaborative Research: Natural Organic Matter and Microbial Controls on Mobilization/Immobilization of I and Pu in soils in USA and Japan", Santschi, P.H. PI, Xu, C., Schwehr, K.A., and Zhang, S., Kaplan, D.I., and Yeager, C.M., co-PIs, Aug. 1, 2015-July 31, 2019 ($600,000 total, $300,000 to TAMUG).

DOE, PNNL, "Post Detonation Maritime Collection and Analysis paper study", subcontract from PNNL, Santschi, P.H., PI, 2016 ($20,000 to TAMUG), March 28, 2016 through September 30, 2016.

DOE, NEUP, Office of Nuclear Energy "Using Radioiodine Speciation to Address Environmental Remediation and Waste Stream Sequestration Problems at the Fukushima Daiichi Nuclear Power Plant and a DOE Site", Santschi, P.H., PI ($420,000 to TAMUG), Oct.1, 2016-Sept. 30, 2019.

DOE, LDRD, "Silver-iodine Secondary Waste Stabilization: Multiscale Evaluation", Santschi, P.H., PI ($40,000 to TAMUG, subcontract from SRNL), January 1, 2017 - September 30, 2017.

DOE, subcontract from SRNS, "Radioiodine Speciation on G-SOW-A-01859 Waste Form Stabilization (SRNS RFP No.0000318991)", Santschi, P.H., PI, ($40,000 to TAMUG), 2017-2018 ($40,000 to TAMUG, subcontract from SRNL).

Amec Foster Wheeler Environment & Infrastructure, Inc., fixed price contract for court-mandated study, "Radiochemical Analyses of sediments from the Penobscot River", Santschi, P.H., PI, ($177,600 to TAMUG), Sept. 30-Dec. 31, 2017.

Gulf of Mexico Research Initiative (GoMRI), "ADDOMEx 2: Towards a synthesis of processes and pathways of marine oil snow formation", Santschi, P.H. (Deputy Director and PI), with Quigg, A. (Consortium Director), and Knapp, T., Wade, T.L., Chin, W.-C., Passow, U., Hatcher, P.G., Silvan, J., and Finkel, Z. (co-PIs), Jan. 1, 2018 – Dec. 31, 2019 ($2.54 Million total, $390,000 to PHS).

DOE, LDRD, "Silver-iodine Secondary Waste Stabilization: Multiscale Evaluation", Santschi, P.H., PI ($40,000 to TAMUG, subcontract from SRNL), January 1, 2018 - September 30, 2018.

DOE-PNNL, "*Evaluation of Adsorbent Performance for the Extraction of Uranium from Seawater*", Santschi, P.H., PI ($60,000 to TAMUG), June 28, 2019 – Nov. 22, 2020.

DOE-Office of Science, SBR program: "COLLABORATIVE RESEARCH: Natural Organic Matter and Microbial Controls on Mobilization/Immobilization of I and Pu in Soils and Waters Affected by Radionuclide Releases in USA and Japan: A Supplemental. Santschi, P.H., PI ($80,000 to TAMUG), April 15, 2019 – Dec. 31, 2020.

DOE-SRNL, "Radioiodine Speciation in Aqueous Systems - Impact of Radioiodine Speciation on Waste Form Stabilization", Santschi, P.H., PI ($55,000 to TAMUG), July 1 – Sept. 30, 2019.

Exxon Corporation, Project Title: Assessment of impact and modeling of extracellular polymeric substance (EPS) aggregates/streamers over oil micro-droplets on their transport fates", Jian

Sheng (TAMUCC), PI, Santschi (TAMUG), co-PI. $15,000, Sept. 1, 2019 – March. 31, 2020, funded; second year for $50,000 (TAMUG) pending.

DEPARTMENT OF THE ARMY, FORT WORTH DISTRICT, CORPS OF ENGINEERS. “Measurements sedimentation within Addicks and Barker Reservoirs using 239+240 Pu Isotope Geochronology”, Timothy Dellapenna, PI, Santschi, P.H., co-PI, May 1, 2020-April 30, 2021, $50,000, funded; $200K per year for up to 4 additional option years, pending.

Department of Energy, Office of Science, Subsurface Biogeochemical Research Program, "WATERSHED CONTROLS ON URANIUM CONCENTRATIONS TIED INTO NATURAL ORGANIC MATTER AND IRON INTERACTIONS IN STREAMBEDS AND WETLANDS", Peter H. Santschi, PI, $270,000 to TAMUG, August 2020-August 2022.

Department of Energy, Office of Science, Subsurface Biogeochemical Research Program, Supplemental grant for "WATERSHED CONTROLS ON URANIUM CONCENTRATIONS TIED INTO NATURAL ORGANIC MATTER AND IRON INTERACTIONS IN STREAMBEDS AND WETLANDS", Peter H. Santschi, PI, $40,000 to TAMUG, Sept. 1 2021-August 31, 2023.

Bureau of Safety and Environmental Enforcement, BSEE Oil Spill Preparedness Division, “Ecology-on-a-Chip (eCHIP) to Examine Degradation and Microbial Colonization of Rising Oil and Dispersed Oil Droplets”, Jian Sheng (TAMU-CC), PI, Peter H. Santschi and Chen Xu, co-PIs, $173,915 to TAMUG, Sept. 1, 2022- Feb. 28, 2024.

Bureau of Safety and Environmental Enforcement, BSEE Oil Spill Preparedness Division, “Ecology-on-a-Chip (eCHIP) to Examine Degradation and Microbial Colonization of Rising Oil and Dispersed Oil Droplets”, Jian Sheng (TAMU-CC), PI, Peter H. Santschi and Chen Xu, co-PIs, $25,000 to TAMUG, Sept. 1, 2022- Feb. 28, 2024.