

Curriculum Vitae

William Scott Reeburgh  
Professor of Earth System Science, Emeritus  
University of California Irvine

- Born: 25 February 1940, Port Arthur, Texas
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- Education: University of Oklahoma - B. S. in Chemistry, 1961  
Johns Hopkins University - M.A. (Oceanography) 1964  
M. A. Essay: New Measurements of the Electrical Conductivity of Seawater, Advisors: D. W. Pritchard and J. H. Carpenter  
Johns Hopkins University - Ph.D. (Oceanography) 1967  
Dissertation: Observations of Gases in Chesapeake Bay Sediments, Advisor: J. H. Carpenter
- Experience: Visiting Scientist, School of the Environment, Washington State Univ. Vancouver, 10/2016 – present  
Professor, University of California Irvine, 2/93- 2/09; Emeritus, 3/09  
Professor, University of Alaska, 1977-2/93, Emeritus, 1998  
Adjunct Professor, S.U.N.Y. Stony Brook, 1977  
Adjunct Associate Professor, S.U.N.Y. Stony Brook, 1976-1977  
Associate Professor, University of Alaska, 1972-1977  
Assistant Professor, University of Alaska, 1968-1972, Tenured, 1971  
Postdoctoral Research Staff Assistant, Johns Hopkins University, 1967-1968  
Graduate Research Assistant, Johns Hopkins University, 1961-1967
- Memberships: Professional  
American Chemical Society, Geochemical Society, American Geophysical Union, ASLO,  
American Society for Microbiology, AAAS, Alpha Chi Sigma (Chemistry)
- Honorary  
Phi Lambda Upsilon (Chemistry), Sigma Xi, President, Alaska Club 1974-5, 1979-80, 1989-91,  
Phi Kappa Phi (elected as faculty member, 1983)
- National/International Committees  
American Geophysical Union, Ewing Award Subcommittee, 1986-1988,  
Atmospheric Sciences Section, Committee on Biogeochemistry, chair  
International Geosphere Biosphere Program (IGBP), Coordinating Panel on Terrestrial  
Biosphere-Atmospheric Chemistry Interactions, member, P. Crutzen, chair  
International Global Atmospheric Chemistry Program (IGAC), member, Steering  
Committee, Convener, HESS (High Latitude Ecosystems as Sources and Sinks of Trace Gases) activity  
U.S.-U.S.S.R. Environmental Agreement, Working Group VIII-Influence of Environmental  
Changes on Climate, Atmospheric Composition- High Latitude Methane Fluxes, member  
ARCSS (Arctic System Science) Land/Air/Ice Interactions (LAI) Program, organizing  
committee member, M. Meier, chair  
SCOR Working Group 86-Ecology of Sea Ice Biota, group member  
ARCUS (Arctic Research Consortium of the United States), treasurer, 1991-1992  
U. S. Geological Survey Global Change Research Program, Review Panel member  
International Symposium on Environmental Biogeochemistry (ISEB), member, Executive  
Board, 1991-1994, International Committee, 1991-1997  
North Pacific Marine Science Organization (PICES), member, Scientific Committee on  
Environmental Quality, 1992-1995  
Editorial Board, *Global Biogeochemical Cycles*, 1993-1995, 3/97-12/97  
Editor, *Global Biogeochemical Cycles*, 1998-2001, 2002- 4/2004.  
Editorial Advisory Board, *Geobiology*. 2002-2005.  
NAS/NRC) Committee to Review DOE's Activities under the Methane Hydrate  
Research and Development Act of 2000, 4/03-10/04.  
President-Elect, American Geophysical Union Biogeosciences Section. 7/04-7/06.  
Board of Directors, Marine Conservation Research Institute, Aquarium of the Pacific, 2005-2010  
College of Reviewers, Canada Research Chairs Program, 10/05  
Member, Scientific Advisory Committee, Max-Planck-Institut für Terrestrische-Mikrobiologie,  
Marburg, FRG, 2006-2014.

President, American Geophysical Union Biogeosciences Section. 7/06-7/08.  
Associate Editor, *Journal of Geophysical Research – Biogeosciences*, 6/06 – 12/08  
NAS/NRC Committee on the Assessment of DOE's Methane Hydrate Research and Development  
Program: Evaluating Methane Hydrates as a Future Energy Source. 9/08 – 6/10, Chair to 8/09.  
AGU Development Board, 4/15-12/17.  
AGU Centennial Task Force. 4/15 – 12/15.  
Geochemical Society Strategic Planning Committee, 6/16 – 6/18  
AGU College of Fellows steering Committee, 2017 -

Awards: Bureau of Commercial Fisheries Fellow, 1962-1964  
Faculty Merit Award, School of Fisheries and Ocean Sciences, 1988  
1988 Editor's Citation for Excellence in Refereeing-*Global Biogeochemical Cycles*  
1998-9 Citation for Outstanding Contributions to Undergraduate Education, School of Physical  
Sciences, University of California Irvine  
2001 Fellow, American Geophysical Union  
2007 Fellow, American Academy of Microbiology  
2009 Fellow, American Association for the Advancement of Science  
2018 Geochemical Fellow (Geochemical Society and European Assn. of Geochemistry)

University Service: University of Alaska, Fairbanks  
UAF Program on Oceanography and Ocean Engineering (now Graduate Program in Marine  
Sciences and Limnology), Head 1971-73, 1975-76, 1990-1992  
UAF Graduate Director, (formed UAF Graduate School) 1983-85.  
UAF Center for Global Change and Arctic System Research, Chairman, Science Steering Committee,  
1990-92  
University of California, Irvine  
Lead author, Earth System Science Ph.D. proposal, 1994  
Lead author, Earth System Science Department proposal, 1995  
Earth System Science Graduate Coordinator, 1994-9/2000  
University Corporation for Atmospheric Research UCI Member Representative, 1997-2003  
Faculty Senate, Irvine Division,  
UCI Graduate Council, 1998-9, chair, School of Engineering Program  
Review, 1999; 2003-6, chair, Academic Program Review Subcommittee, 2003-5.  
2004 program reviews: School of Humanities (chair), School of Social Ecology; 2005 program  
reviews: Samueli School of Engineering (chair), Bren School of Information and Computer Sciences;  
2006 program reviews (chair): Merage School of Business, Trevor School of the Arts.  
Chair, Department Earth System Science, 9/2000 – 9/2003  
Faculty Senate, Irvine Division, Committee on Privilege and Tenure, 2007- 2009

Graduate Students Supervised: David T. Heggie, M.S., 1973, Dissolved Permanent Gases in Alaskan Aquatic Environments,  
(*Australian Geological Survey Organisation, Canberra*)  
David L. Musgrave, Ph.D., 1983, Penetrative Convection in Sediment, (*Assoc. Professor, Marine  
Science, Univ. of Alaska Fairbanks, retired*)  
David M. Glover, Ph.D., 1985, Processes Controlling Radon-222 and Radium-226 on the  
Southeastern Bering Sea Shelf, (*Sr. Research Specialist, Woods Hole Oceanographic  
Institution, retired*)  
Roy E. Erickson, M.S., 1987, A Sulfate Reduction Rate Time-Series for Skan Bay Sediments.  
(*Research Associate, Forest Soils Laboratory, University of Alaska Fairbanks*)  
Marc J. Alperin, Ph.D., 1988, The Carbon Cycle in an Anoxic Marine Sediment: Concentrations,  
Rates, Isotope Ratios and Diagenetic Models, (*Assoc. Professor, Marine Science, Univ. of  
North Carolina, Chapel Hill*)  
Torben Christensen (field research advisor), Ph.D. 1994, Scott Polar Research Institute,  
Cambridge University, UK, Exchange of Radiatively Active Trace Gases in Tundra  
Environments, with Particular Attention to Methane, *Professor (Physical Geography and  
Ecosystem Science, Lund University, Sweden)*  
Valerie Barber, M.S. 1995, Comparison of Chamber and <sup>222</sup>Rn-based Methane and  
Carbon Dioxide Fluxes in Boreal Forest Soils. (*Ph.D., University of Alaska  
Fairbanks, Res. Assoc., Dept of Forest Sciences, University of Alaska Fairbanks*).  
Shannon K. Regli (Bucher), M.S. 1996, Earth System Science/Chemistry, University of California,  
Irvine. (*Magnet middle school science teacher, Fullerton, CA*).  
Jennifer Y. King, M.S. 1997, Ph.D. 1999, "Effects of Vegetation on Methane Emissions from  
Arctic Tundra Ecosystems" (*Professor, Dept. of Geography, Univ. of California Santa Barbara*)  
David L. Valentine, Ph.D. 2000, "Biogeochemistry of hydrogen and methane in anoxic  
environments: Thermodynamic and isotopic studies" (*Professor, Geological Sciences, Univ. of  
California, Santa Barbara*)  
John D. Kessler, M.S. 2003, Ph.D. 2005 (defense 8/26/05), "Studies on Oceanic Methane:  
Concentrations, Stable Isotope Ratios, and Natural Radiocarbon Measurements". (*Assoc.  
Professor, University of Rochester*)  
Mary A. Pack, M.S. 2009, Ph.D. 2011, (defense 12/3/10) "Development and application of a method  
to quantify methane oxidation rates using low-levels of <sup>14</sup>C-CH<sub>4</sub> and accelerator mass

spectrometry (*Instructor, Cal. State Univ., Channel Islands*)

Postdoctoral Associates:

Stephen C. Whalen, Ph.D., University of Alaska (Limnology) 1985-1993, (*Professor, Environ. Sci. & Engineering, Univ. of North Carolina Chapel Hill*)

Kenneth A. Sandbeck, Ph.D., University of Washington (Microbiology) 1987-1989 (*Self-employed consultant*)

JoLynn Butts Carroll, Ph.D., University of South Carolina (Marine Radiochemistry) 1990-1992, (*Akvaplan NIVA, Tromsø, Norway*)