

CLARE E. REIMERS
CURRICULUM VITAE

EDUCATION

Ph.D., Oceanography, Oregon State University	1982
Dissertation- Sedimentary Organic Matter: Distribution and Alteration Processes in the Coastal Upwelling Region off Peru	
M.S., Oceanography, Oregon State University	1978
B.A., Environmental Sciences, University of Virginia	1976

ACADEMIC POSITIONS

Professor (with tenure), CEOAS (formerly COAS), OSU	2002-present
Director, Cooperative Institute for Marine Resources Studies, OSU	2000-2005
Professor, Senior Research College of Oceanic and Atmospheric Sciences (COAS), OSU	2000-2001
Professor (with tenure) Institute of Marine and Coastal Sciences, Rutgers University	1998-1999
Associate Professor (with tenure) Institute of Marine and Coastal Sciences, Rutgers University	1993-1998
Visiting Associate Professor, Institute of Marine Science, University of Alaska Fairbanks	1992-1993
Associate Research Geochemist, Scripps Institution of Oceanography	1992-1993
Assistant Research Geochemist, Scripps Institution of Oceanography	1984-1991
Post-Graduate Researcher, Scripps Institution of Oceanography	1982-1984

FIELDS OF SPECIALIZATION

Sediment biogeochemistry, applied electrochemistry, the development and application of chemical sensors, redox processes and carbon cycling in the ocean.

HONORS, AWARDS and FELLOWSHIPS

Forchheimer Visiting Professor, Interuniversity for Marine Sciences, Eilat, Israel	2011
AGU Fellow	2009
Continental Shelf Research Most Cited Paper 2003-2007 Award	2008
Alan Berman Research Publication Award, Naval Research Laboratory	2002
Visiting Scholar, Woods Hole Oceanographic Institution	Feb 1991
NASA Internship, Viking Orbiter Imagery Team Jet Propulsion Laboratory, Pasadena California,	Jun 1976
Woods Hole Summer Fellowship, Woods Hole Oceanographic Institution	1975
Phi Beta Kappa	1975

PROFESSIONAL ACTIVITIES**Professional Organizations**

American Geophysical Union
Association for the Sciences of Limnology and Oceanography
The Oceanography Society

Conference Session Chair, Workshop Invitee, etc.

Coastal & Estuarine Research Federation Meeting, “New Research Vessel Infrastructure for Estuarine and Coastal Science”, Workshop organizer	2015
Ocean Science Meeting, Honolulu, Early Career Workshop, “Cruise planning for chief scientists”, Panelist	2014
Chemical Oceanography Gordon Research Conference, session leader	2011
Ocean Sciences Meeting, session “Physical forcing and consequences of fluid and particle exchange in permeable sediments”, co-chair	2010
Ocean Research Priorities Plan Development Workshop, attendee	2006
Alliance for Coastal Technologies, DO Probes Workshop, invitee	2006
N. American Cont. Margins (NACM) Coastal CO ₂ Workshop, invitee	2005
Chemical Oceanography Gordon Research Conference, chair	2005
Coastal Benthic Exchange Dynamics (CBED) Workshop, co-chair	2004
Chemical Oceanography Gordon Research Conference, vice-chair	2003
NEPTUNE Pacific Northwest Workshop, invitee	2003
Ocean Sciences Meeting, co-chair of session “Quantification and Regionalization of Benthic Flux Rates: Implications for Ocean Budgets”	2002
FOCUS, The Future of Ocean Chemistry in the US, invitee/author	1998
ONR's COOLFONT II, III, IV, invitee	1998, 2000, 2003
Biofuel Cells hosted by ONR/DARPA, invitee	1996
NOAA-NURP Monterey Bay Research Initiative, invitee	1996
Chemical Oceanography Gordon Research Conference, session leader	1995

Invited External Lectures and Seminars (last 10 years)

Moss Landing Marine Laboratories, Moss Landing CA, seminar	2015
Texas A&M Oceanography Seminar Series, College Station TX	2014
4 th Eddy Correlation Measurement Workshop, invited speaker, Honolulu	2014
Marine Sciences Seminar series, IUI, Eilat, Israel	2011
Geosciences Seminar Series, Hebrew University of Jerusalem, Israel	2011
Ocean Carbon and Biogeochemistry Workshop, La Jolla CA, invited speaker	2010
NORTEK Users Symposium, Seattle WA, invited speaker	2010
Joint Assembly AGU, Toronto Canada, Ocean Sciences session	2009
Unknown Knowns and Known Unknowns: Chemical Oceanography in a Changing World symposium, Savannah GA, invited speaker	2009
Chemical Oceanography Gordon Research Conference, invited speaker	2007
Joint Assembly AGU, Acapulco, Mexico, Biogeophysics session	2007
Advanced training workshop on Southeast Asia regional carbon and water issues (SARCS) Chung-Li, Taiwan, lecturer -3 hours	2006
Evergreen State College- Women in Science Symposium	2006
Oregon Graduate Institute Seminar Series	2005
Goldschmidt Conference	2005

External Committees, Commissions and Boards

Chair, UNOLS Fleet Improvement Committee	2009-2015
Associate Editor, <i>Limnology and Oceanography Methods</i>	2003-present
UNOLS Fleet Improvement Committee member	2003-2008

Observatory Steering Committee ORION	2007 ¹
NSF Scientific Cabled Observatory for Time Series Committee	2002
UNOLS Nomination Committee member	1997, 1998 and 2000
UNOLS Council member	1997-1999
NSF-Coastal Ocean Processes (CoOP), Steering Committee	1997-1999

International Examination Committees

Official Opponent for Doctorate Defense of R.N. Glud, Univ. Copenhagen 2007

Review Panels

Regional Class Research Vessel Design Down-select Panel, NSF	2009
Panel member in review of proposals for next UNOLS Office	2008
NOPP Panel for Proposals on: Sensors for Measurement of Biological, Bio-optical or Chemical Properties of the Ocean	2008
NOPP Panel for Proposals on: Sensors for Sustained, Auton. Measurement	2005
NSF Chemical Oceanography Program	1989, 1999
NSF SBIR Program	1998
DOE's North Atlantic CO ₂ Program Review	1996
DOE's Ocean Margins Science Review	1995
National Undersea Research Program	1993

Participation in Multi-investigator National and International Experiments

MANOP An investigation of manganese nodule formation and organic carbon cycling in the deep Pacific Ocean, sponsored by US NSF. 1981-1982.

PHOSREP An investigation of Quaternary Phosphorite formation and Organic Carbon Cycling on the E. Australian continental margin, sponsored by Australia's BMR, 1987.

Major Seagoing and Other Field Expeditions

October 2014, R/V *Pt Sur* Central California Margin (4 days); Early Career Chief-Scientist Training program; mentor

June 2014, R/V *Pacific Storm* Oregon Shelf (3 days); NNMREC surveys

October 2013, R/V *Endeavor* Mid-Atlantic Bight (7 days); Early Career Chief-Scientist Training program; mentor

July 2013, R/V *Oceanus* Oregon Shelf (10 days); chief scientist

November 2012, R/V *New Horizon* California Borderlands basins (7 days); Early Career Chief-Scientist Training program; mentor

October 2012, R/V *Oceanus* Oregon Shelf (10 days); chief scientist

April 2012, R/V *Oceanus* Oregon Shelf (10 days); chief scientist

October 2011, R/V *Wecoma* Oregon Shelf (8 days); chief scientist

July and September, 2011 R/V *Wecoma* Oregon-Washington continental margin.

UNOLS Early Career Chief-Scientist Training program cruises (14 days); mentor

July 2011 R/V *Thompson* Saanich Inlet Canada (3 days); participating scientist

Mar., Jun., August and Oct. 2009, R/V *Wecoma* Oregon Shelf (24 days); chief scientist

July 2005, R/V *Wecoma*, Oregon Shelf (8 days); chief scientist

¹ Asked to withdraw after 3 months due to institutional conflict of interest

September-October 2004, R/V *Wecoma*, Oregon Shelf (11 days); chief scientist
May and Oct. 2003, R/V *Pt. Lobos*, ROV *Ventana* operations Monterey Canyon
(6 days); chief scientist
Apr., Aug. and Dec. 2000, May, Jul. and Nov. 2001 (5 days each) R/V *Cape
Henlopen*; chief scientist
1976-1999, Cruises on the R/V's *Edwin Link*, *Sea Diver*, *Atlantis II*, *Thomas
Washington*, *Melville*, *New Horizon*, *Knorr*, *Wecoma*, *Gyre*, *R.G. Sproul*, *Rig
Seismic* (Australian vessel), *Matamoros* (Mexican vessel), *Arabella*, *Caleta*,
Atlantic Surveyor, *Neskay* and *Fay*. (total of > 24 months at sea for research
projects involving ROVs, free vehicles (landers), sediment trap and current meter
moorings, box-, gravity-, and piston coring, under-water photography, CTD casts,
hydrocasts, dredging, MOCNESS). Experience as Chief Scientist and dives in
Alvin, *Clelia* and *Sea-Link* submersibles included.

Participated in field programs involving quantitative geochemical measurements in
lake waters and sediments (Lake Washington, WA, Lake Michigan, WI), tundra
soils (Alaska) and hydrothermal microbial mats (Yellowstone).

MISCELLANEOUS/OTHER

U.S. Patent 6,913,854: "Method and apparatus for generating power from voltage
gradients at sediment-water interfaces". Issued July 2005. Inventors: R. Alberte,
H. Bright, C. Reimers and L. Tender

U.S. Provisional Patent Application Nos.: 61/056,764 and 61/113,704
Entitled: METHANE-POWERED MICROBIAL FUEL CELLS
Inventor(s): Peter R. Girguis and Clare E. Reimers

TEACHING AND ADVISING

Student Thesis/Research Project Advisor

Peter Chace, MS in progress, Oceanography, Oregon State University
Andrea Albright, MS 2014, Oceanography, Oregon State University
Kristina McCann-Grosvenor, MS 2011, Oceanography, Oregon State University
Mark Nielsen, PhD 2009, Oceanography, Oregon State University
Rebecca Poulson, PhD 2008, Oceanography (co-advisor), OSU
Pascal Brignole, Graduate student Intern from France, March-August 2008.
Natacha Ryckelynck, student trainee March-August 2001 at OSU from CPE
Lyon, France for research experience in chemistry/chemical engineering.
OSU Oceanography MS program started January 2002, graduated 2004.
Tomoko Komada, MS 1997, Ph.D 2001, Oceanography, Rutgers University
Wei-Jun Cai, Ph.D 1992, Scripps Institution of Oceanography, UCSD
Heike Schmidt, MS 1990, Scripps Institution of Oceanography, UCSD

Student Advisory (Thesis) Committee

Shelby Labuhn, PhD in progress, University of Wisconsin-Milwaukee
Jianghui Du, PhD in progress, Oceanography-OSU

WeiLi Hong, PhD 2014, Oceanography-OSU
Shoutao Xu, PhD 2012, Biological and Ecological Engineering-OSU
Louise Hunt, MS 2002, Oceanography-OSU
Tracey Wiegner, Ph.D. 2001, Oceanography- Rutgers University

Undergraduate Summer Interns (REUs)

Weiwu Li (Stony Brook U) 2015
Peter Chace (Monmouth U.) 2013
Keith Chavez (U. Illinois) 2010
Vivian Lin (Scripps College) 2008
Diane Wu (Cornell University) 2007
Rena Kate Shultz (Evergreen College) 2005
Leslie Soule (Williamette University) 2004

Teaching Programs

Ocean Ecology and Biogeochemistry
Marine Resource Management Faculty

Invited Instruction

USC International Geobiology Course 2004, gave 3 lectures and assisted graduate students with laboratory projects over 1 week
Graduate 1-week summer course in *The Use of Microelectrodes in Biogeochemistry*, given at the Darling Marine Center, University of Maine, Aug. 1998 (100%).

Courses Taught

Sediment Biogeochemistry, OC 657, Spring 2009, 2011, 2013, 2015
Applications in Ecology and Biogeochem, OC 599, Spring 2012 (50%)
Chemical Oceanography Seminar, OC 607/507, Fall 2007
Chemical Oceanography Laboratory, OC 652, Spring 2006, Fall 2008
Sediment Biogeochemistry, OC 669, Spring 2005
Chemical Oceanography Core Course, OC 450/550 Fall 2002 OSU (100%)
Graduate and upper-level undergraduate course in *Chemical Oceanography*, Rutgers University: Spring 1995, 1996, 1997 and Fall 1998, 1999, U. Alaska: Spring 1993 (100%).
Undergraduate course in *Oceanographic Methods and Data Analysis*, Rutgers University, Spring 1998 and 1999 (50%).
Introductory undergraduate course in *Marine Science*, Rutgers Univ., Fall 1995, 1996, 1997, 1998 (10%).

RESEARCH

Current Funded Proposals

ONR, Apr 2015- Sep 2016, \$171,445 “Sensors powered by benthic microbial fuel cells relaying data to autonomous underwater gateways-II”, PI

NSF, Feb 2013-Dec 2015, \$6,494,445 cumulative award to date-further amendments expected, “Design and Construction of Three Regional Class Research Vessels (RCRVs) --Enabling Effective and Efficient Coastal Ocean Science”, PI (and Project Scientist)

Prior Funding

Dr. Reimers research has been supported at different times by grants from NSF, ONR, NOAA-Sea Grant, NOAA-NURP, DARPA and the M.J. Murdock Charitable Trust.