

CURRICULUM VITAE

Richard W. Murray

Woods Hole Oceanographic Institution, Woods Hole, MA, 02543, USA; rickmurray@whoi.edu

History of Employment

Deputy Director / Vice President for Science & Eng., Woods Hole Oceanographic Inst. 9/19 – present
Senior Scientist, Department of Marine Chemistry and Geochemistry
Adjunct Scientist, Dept. of Marine Chemistry & Geochem., Woods Hole Ocean. Inst. 9/18 - 9/19
Dept. of Earth & Environment (prior Earth Sciences, prior Geology), Boston Univ. 11/92 - 9/19
Professor (9/02-9/19); Director, Boston University Marine Program (1/07-8/09); Chairman (9/00-9/05); Associate Chairman (1/99-9/00); Associate Professor, tenured; (9/99–9/02); Assistant Professor (9/94-8/99); Assistant Research Professor (11/92-8/94).
Director, Division of Ocean Sciences, National Science Foundation (IPA detail) 1/15 – 6/18

- Co-Chair, Sub-committee on Ocean Science & Technology (SOST), Office of Science and Technology Policy (OSTP), Executive Office of the President (EOP).
- Steering Committee, National Ocean Council, OSTP (EOP).

Visiting Scholar (sabbatical), Harvard University, Center for the Environment 01/06 - 12/06
Post-Doctoral Associate, Graduate School of Oceanography, Univ. Rhode Island 9/91 - 10/92
Research and Teaching Assistant, University of California at Berkeley 9/86 - 8/91
Graduate Research Assistant, Sedimentology Group, U. of Wisconsin, Madison 9/85 - 6/86
Geol. Intern / Geologist, USGS Menlo Park, Pacific Marine Geology Summer 1985, 1986
Teaching and Research Assistant, Dept. of Geology, Hamilton College 9/82 - 12/85

Degrees and Educational Background

B.A. (Honors), Geology	Hamilton College, Clinton, NY	1985
Sea Education Association	Woods Hole, MA	1983
Ph. D., Geology	Univ. of California at Berkeley	1991
Post-doctoral Associate	Grad. School of Oceanography, Univ. Rh. Island	9/91 - 10/92

Research Experience

Originally interested (and published) in the field of sedimentary and tectonic geology, through my career I seem to have progressively studied younger and younger sediments, oceanographic processes, and the linkages between the ocean, atmosphere, volcanism (ash), and even the seafloor biosphere. Accordingly, I consider myself as a blend of oceanography, marine geology, sediment chemistry, marine biogeochemistry, sedimentology, and paleoceanography. Throughout my career, I have also engaged policy makers at the local, state, and national level, reflecting my interest in the broad realm of “science and society”.

Key Publications (*italics* denotes a student of Murray’s at the time)

A few from each decade, in reverse chronological order:

Sauvage J. F., Flinders A., Spivack A. J., Pockalny R., Dunlea A. G., Anderson C. H., Smith D. C., Murray R. W., and D’Hondt S. D., 2021. The contribution of water radiolysis to marine sedimentary life. *Nature Communications*, **12**, 1297. <https://doi.org/10.1038/s41467-021-21218-z>.

Anderson C. H., Murray R. W., Dunlea A. G., Giosan L., Kinsley C. W., McGee D., and Tada R., 2018. Climatically driven changes in the supply of terrigenous sediment to the East China Sea. *G³ (Geochemistry, Geophysics, Geosystems)*, **19**, [https://doi: 10.1029/2017GC007339](https://doi.org/10.1029/2017GC007339).

- Dunlea A. G., Murray R. W., Sauvage J., Spivack A. J., Harris R. N., and D'Hondt S., 2015, Dust, volcanic ash, and the evolution of the South Pacific Gyre through the Cenozoic. *Paleoceanography*, **30**, 1078-1099, doi:10.1002/2015PA002829.
- Scudder R.P., Murray R.W., Schindlbeck J.C., Kutterolf S., Hauff F., and McKinley C. C., 2014, Regional scale input of dispersed and discrete volcanic ash to the Izu-Bonin and Mariana subduction zones. *G³ (Geochemistry, Geophysics, Geosystems)*, **15**, 4369-4379, doi:10.1002/2014GC005561.
- Ziegler C. L., Murray R. W., Hovan S. A., and Rea D. K., 2007, Resolving eolian, volcanogenic, and authigenic components in pelagic sediment from the Pacific Ocean. *Earth and Planetary Science Letters*, **254**, 416-432.
- Murray R. W., Knowlton C., Leinen M., Mix A. C., and Polsky C. H., 2000, Export production and carbonate dissolution in the central equatorial Pacific Ocean over the past 1 Ma. *Paleoceanography*, **15**, 570-592.
- Murray R. W. and Leinen M., 1996, Scavenged excess Al and its relationship to bulk Ti in biogenic sediment from the central equatorial Pacific Ocean. *Geochimica et Cosmochimica Acta*, **60**, 3869-3878.
- Murray R. W., Buchholtz ten Brink M. R., Jones D. L., Gerlach D. C., and Russ G. P., III, 1990, Rare-earth elements as indicators of different marine depositional environments in chert and shale. *Geology*, **18**, 268-271.
- Howell D. G. and Murray R. W., 1986, A budget for continental growth and denudation. *Science*, **233**, 446-449.

Summary

- > 100 articles in peer-reviewed journals and books
- ~ 240 meeting presentations
- ~ 40 other publications (Op-Eds, reviews, etc).
- Google Scholar: h-index = 41; i10 index = 76; 7500+ total citations.

Honors and Awards (from graduate school forward)

- | | |
|--------------|---|
| 2015: | <i>Certificate of Appreciation</i> , World Ocean Assessment Team, U.S. Dept. of State |
| 2014 - 2015: | <i>Distinguished Lecturer</i> , Consortium for Ocean Leadership (declined) |
| 2006: | <i>Honorary Initiate</i> , Phi Beta Kappa, Boston University |
| 2005: | <i>Alumni Distinguished Achievement Medal</i> , Hamilton College |
| 2002: | <i>Distinguished Teaching Award</i> , Honors Program, Boston University |
| 2002: | <i>Excellence in Reviewing</i> , American Geophysical Union |
| 2001: | <i>Distinguished Teaching Award</i> , Honors Program, Boston University |
| 1999: | <i>Fellow</i> , Geological Society of America |
| 1999: | <i>Excellence in Student Advising</i> , Boston University |
| 1998 - 1999: | <i>Distinguished Lecturer</i> , Joint Oceanographic Institutions |
| 1997: | <i>Distinguished Teaching Award</i> , Honors Program, Boston University |
| 1993: | <i>Excellence in Reviewing</i> , American Geophysical Union |
| 1990: | <i>Outstanding Graduate Student Instructor</i> , UC - Berkeley |

Professional Societies and Memberships

American Geophysical Union (AGU); American Association for the Advancement of Science (AAAS); The Oceanography Society (TOS); Society for Women in Marine Science (SWMS).