

VITA
for
John M. Klinck

Date of Revision: September 1, 2008

Born: May 15, 1950 Ft. Monmouth, N.J.

Present Title: Professor and Interim Director
Address: Center for Coastal Physical Oceanography
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Military Status: Captain U.S. Army Reserve (Inactive)

Degrees: B.S. (Physics) Clemson University, 1972
M.S. (Physics) University of North Carolina, 1975
Ph.D. (Marine Science) North Carolina State University, 1980

Honorary and Professional Societies:

American Association for the Advancement of Science
American Geophysical Union
American Meteorological Society
European Geophysical Society
National Shellfisheries Association
Sigma Xi
The Oceanography Society

Research Interests:

Analytical and numerical modelling of physical and biological processes in oceanic, coastal and estuarine environments.

Employment:

2004-present Director, Center for Coastal Physical Oceanography
1996-present Professor, Old Dominion University
1989-1996 Associate Professor, Old Dominion University
June-Dec. 1987 Visiting Professor, Old Dominion University
1983-1989 Assistant Professor, Texas A&M University
Jan-May 1982 Visiting Assistant Professor, Texas A&M University
1981-1983 Assistant Research Scientist, Texas A&M University
1979-1981 Postdoctoral Research Associate, Florida State University
1975-1979 Graduate Research Assistant, Department of Marine Science and Engineering, North Carolina State University
1974 (summer) Oceanographic Assistant, Nova University

1973-1975 Graduate Teaching Assistant, Physics Department, University of North Carolina

1972 U.S. Army Officer (3 months active duty for training)

Committes and Panels:

- member National Science Foundation ITR review panel. Washington, D.C. May, 2004.
- Editor-in-Chief Journal of Geophysical Research, Oceans, 2003-Dec, 2005.
- member Individual Independent Technical Review of Biscayne Bay Feasibility Study Hydrodynamic model. Dept. of Env. Res. Management, Miami-Dade County, Florida. May, 2001.
- member Technical Review Committee for Craney Island (VA.) Eastward Expansion Project, 2000-2001.
- member Review Team for MMS program on Physical Oceanography of the Slope and Rise of the Gulf of Mexico, September, 2000.
- Editor Journal of Geophysical Research, Oceans, 2000-2002.
- member National Science Foundation Ocean Sciences review panel. Washington, D.C. November, 1998.
- member National Science Foundation Ocean Sciences special review panel. Washington, D.C. November, 1995.
- member National Science Foundation Polar Biology review panel. Washington, D.C. September, 1994.
- member National Science Foundation Land Margin Ecosystem Research review panel. Washington, D.C. April, 1994.
- member National Science Foundation High Performance Computing and Communication Grand Challenge Applications Group preproposal review panel. Washington, D.C. April, 1993.
- member National Science Foundation High Performance Computing and Communication Grand Challenge Applications Group review panel. Washington, D.C. July, 1993.
- member National Science Foundation and National Oceanic and Atmospheric Administration review panel on U.S. GLOBEC. Washington, D.C. December, 1992.
- Assoc. Editor Journal of Geophysical Research, Oceans, 1991-1992.
- member WOCE data management working group, 1991-1992.
- member program committee for Spring, 1992 American Geophysical Union meeting.
- member program committee for 1992 Ocean Sciences meeting.
- member National Science Foundation GLOBEC Biotechnology review panel, Washington, D.C. August, 1991.
- member program committee for Fall, 1991 American Geophysical Union meeting.
- member program committee for Spring, 1991 American Geophysical Union meeting.
- member program committee for Fall, 1990 American Geophysical Union meeting.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1990.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1988.
- member National Science Foundation Physical Oceanography review panel, Washington, D.C. August, 1986.

member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1986.

member National Science Foundation Physical Oceanography review panel, Washington, D.C. April, 1985.

Teaching Experience:

Freshman Oceanography for non-majors (Honors) Spring, 2004.

Introductory Physical Oceanography - core course for all graduate students. Spring, 1984; Spring, 1986; Spring, 1988; Spring, 1991.

Dynamical Oceanography I and II - introduction to geophysical fluid dynamics. Two semester course. Fall, 1991 and Spring, 1992; Fall, 1994 and Spring, 1995; Spring, 1999 and Fall, 1999; Spring, 2002 and Fall, 2002; Spring, 2005 and Fall, 2005; Spring, 2006 and Fall, 2006; Spring, 2007 and Fall, 2007.

Simulation Techniques - numerical techniques for ocean modelling. Fall, 1985; Spring, 1987; Spring, 1989; Spring, 1990; Fall, 1992; Spring, 1996; Fall, 1997; Spring, 2000; Fall, 2002; Spring, 2007.

Theory of Ocean Circulation - dynamics of large scale circulation. Spring, 1982; Fall, 1983; Fall, 1986; Fall, 1988; Spring, 1994.

Oceanographic Data Methods - analysis techniques appropriate for oceanographic observations. Fall, 1995.

Quantitative methods for oceanography - introduction to computer use for new graduate students. Fall, 1997; Fall, 1998; Fall, 1999.

Regional Descriptive Oceanography Spring, 1997.

Physical Oceanography of Estuaries - description and classification, dynamics of circulation. Fall, 1984; Spring, 1996.

Fluid dynamics for oceanography - introduction for new graduate students. Spring, 1990.

Physical Oceanography - survey for senior undergraduates. Summer, 1988; Fall, 1989.

Survey of Oceanography - undergraduate, nontechnical survey. Fall, 1983.

Seminar Techniques - practice seminars. Fall, 1990.

Ph.D. Student Committees Chaired:

2009 Mahmoud Kamel, Old Dominion University (expected).

2007 Bin Zhang, Old Dominion University (expected).

2007 Y. Sinan Husrevoglu, Old Dominion University (expected).

May, 2004 Kyung-Hoon Hyun, Old Dominion University.

December, 1999 David A. Smith, Old Dominion University.

July, 1995 Yvette H. Spitz, Old Dominion University.

December, 1992 Julie McClean-Padman, Old Dominion University.

M.S. Student Committees Chaired:

2008 Matthew Fuhrmann, non-thesis, Old Dominion University.

May, 1994 Andry Ratsimandresy, non-thesis, Old Dominion University.

August, 1991 Tim P. Boyer, non-thesis, Old Dominion University.

August, 1984 Annick Lopez-Garcia, A numerical study of seasonal circulation in the Gulf of Cariaco, Texas A&M University.

Reviewed Publications:

- 2008 Powell, E.N., J.M. Klinck, E.E. Hofmann, and D. Hedgecock. Generation time and the stability of sex-determining alleles in oyster populations as deduced using a gene-based population dynamics model, manuscript in preparation
- 2008 Hofmann, E.E., J.M. Klinck, E.N. Powell, S.E. Ford, S. Jordan, E. Burreson, Modeling studies of climate variability and disease interactions in eastern oyster populations, manuscript in preparation.
- 2008 Powell, E.N., J.M. Klinck, K.A. Ashton-Alcox, N.N. Kraeuter, S.E. Ford, D. Bushek, Multiple stable points in oyster populations: implication for reference point-based management. *Fish. Bull.*, submitted.
- 2008 Loeb, V., E.E. Hofmann, J.M. Klinck, O. Holm-Hansen, W.B. White, ENSO drives interannual variability of the Antarctic Peninsula pelagic marine ecosystem. *Deep-Sea Res.*, submitted.
- 2007 Hyun, K.H. and J.M. Klinck. The effect of submarine canyon width on flow characteristics and across shelf transport forced by upwelling winds. *J. Geophys. Res.*, being revised.
- 2008 Soniat, T.M., E.E. Hofmann, J.M. Klinck, and E.N. Powell. Climate and Oyster disease. *International Journal of Earth Sciences*, doi: 10.1007/s00531-008-0364-6
- 2008 Kraeuter, J.N., J.M. Klinck, E.N. Powell, E.E. Hofmann, S.C. Buckner, R.E. Grizzle and V.M. Bricelj. Effect of the fishery on the northern quahog (=hard clam, *Mercenaria mercenaria* L.) population in Great South Bay, New York: a modeling study. *J. Shellfish Res.*, **27(4)**, 653-666.
- 2008 Zhang, B. and J.M. Klinck. The effect of Antarctic Circumpolar Current transport on the frontal variability in Drake Passage. *Dyn. Atm. Ocn.*, **45**, 208-228.
- 2008 Jordi, A., J.M. Klinck, G. Basterretxea, A. Orfila, and J. Tintore. Estimation of shelf-slope exchanges induced by frontal instability near submarine canyons. *J. Geophys. Res.*, **113**, C05016, doi:10.1029/2007JC004207.
- 2008 Costa, D., J.M. Klinck, E.E. Hofmann, M.S. Dinniman and J.M. Burns. Upper ocean variability in the west Antarctic Peninsula continental shelf waters as measured using instrumented seals, *Deep-Sea Res. II*, **55**, 323-337.
- 2007 Dinniman, M.S., J.M. Klinck and W.O. Smith, Jr. The influence of sea ice cover and icebergs on circulation and water mass formation in a numerical circulation model of the Ross Sea, Antarctica *J. Geophys. Res.*, **112** (C11),C11013. doi: 10.1029/2006JC004036.
- 2007 Polyakov, O. J.N. Kraeuter, E.E. Hofmann, S.C. Buckner, V.M. Bricelj, E.N. Powell and J.M. Klinck. Benthic predators and northern quahog (=hard clam)(*Mercenaria mercenaria* Linnaeus, 1758) populations. *J. Shellfish Res.*, **26(4)**, 995-1010.
- 2007 Powell, E.N. and J.M. Klinck. Is oyster shell a sustainable estuarine resource? *J. Shell. Res.*, **26**, 181-194.
- 2006 Fach, B.A. and J.M. Klinck. Transport of Antarctic krill (*Euphausia superba*) across the Scotia Sea Part I: Circulation and particle tracking simulations. *Deep-Sea Res. I*, **53**, 987-1010.
- 2006 Hofmann, E.E., J.M. Klinck, J.M. Kraeuter, E.N. Powell, R.E. Grizzle, S.C. Buckner, V.M. Bricelj. A population dynamics model of the Hard clam, *Mercenaria mercenaria*: development of the age- and length-frequency structure of the population. *J. Shellfish Res.*, **25(2)**, 417-444.

- 2006 Soniat, T.M., E.N. Powell, E.E. Hofmann, J.M. Klinck. Understanding the Success and Failure of Oyster Populations: Climatic Cycles and *Perkinsus marinus*. *J. Shellfish Res.*, **25(1)**, 83-94.
- 2005 Wiggert, J.D., A.G.E. Haskell, G.-A. Paffenhöfer, E.E. Hofmann, and J. M. Klinck. The role of feeding behavior in sustaining copepod populations in the tropical ocean. *J. Plank. Res.* **27(10)**, 1013-1031.
- 2004 Klinck, J.M., E.E. Hofmann, R.C. Beardsley, B. Salihoglu and S. Howard. Water mass properties and circulation on the west Antarctic Peninsula continental shelf in austral fall and winter 2001. *Deep-Sea Res. II*, **51**, 1925-1946.
- 2004 Dinniman, M.S. and J.M. Klinck. A model study of circulation and cross shelf exchange on the west Antarctic Peninsula continental shelf. *Deep-Sea Res. II*, **51**, 2003-2022.
- 2004 Powell, E.N., E.A. Bochenek, J.M. Klinck, and E.E. Hofmann. Influence of short-term variations in food on survival of *Crassostrea gigas* larvae: a modeling study. *J. Mar. Res.*, **62**, 117-152.
- 2004 Hofmann, E.E., A.G. Edward Haskell, J.M. Klinck and C.M. Lascara. Lagrangian modeling studies of Antarctic Krill (*Euphausia superba*) swarm formation. *ICES J. Mar. Sys.*, **61**, 617-631. DOI:10.1016/j.icesjms.2004.03.028.
- 2004 Hofmann, E.E., E.N. Powell, E.A. Bochenek and J.M. Klinck. A modelling study of the influence of environment and food supply on survival of *Crassostrea gigas* larvae. *ICES J. Mar. Sys.*, **61**, 596-616. DOI:10.1016/j.icesjms.2004.03.029.
- 2004 Prèzelin, B.B., E.E. Hofmann, M. Moline and J.M. Klinck. Physical forcing of phytoplankton community structure and primary production in continental shelf waters of the western Antarctic Peninsula *J. Marine Res.*, **62**, 419-460.
- 2003 Powell, E.N., J.M. Klinck, E.E. Hofmann, and M.A. McManus The influence of water allocation and freshwater inflow on oyster population: a hydrodynamic-oyster population model for Galveston Bay, Texas. *Environmental Management*, **31(1)**, 100-121. DOI: 10.1007/s00267-002-2695-6.
- 2003 Allen, S.E., M.S. Dinniman, J.M. Klinck, D.D. Gorby, A.J. Hewett and B.M. Hickey, On vertical advection truncation errors in terrain following numerical models: Comparison to a laboratory model for upwelling over submarine canyons. *J. Geophys. Res.*, **108(C1)**, 3-1-3-16. DOI: 10.1029/2001JC000978.
- 2003 Dinniman, M.S., J.M. Klinck, and W.O. Smith, Jr. Cross shelf exchange in a model of the Ross Sea circulation and biogeochemistry. *Deep-Sea Res. II*, **50**, 3103-3120.
- 2003 Smith, W.O., Jr., M.S. Dinniman, J.M. Klinck, and E.E. Hofmann. Biogeochemical climatologies in the Ross Sea, Antarctica: seasonal patterns of nutrients and biomass *Deep-Sea Res. II*, **50**, 3083-3101.
- 2002 Hofmann, E.E., J.M. Klinck, D.P. Costa, K.L. Daly, J.J. Torres and W.R. Fraser. U.S. Southern Ocean Global Ocean Ecosystem Dynamics Program. *Oceanography*, **15**, 64-74.
- 2002 Smith, D.A. and J.M. Klinck. Water properties on the west Antarctic Peninsula continental shelf: A model study of effect of surface fluxes and sea-ice. *Deep-Sea Res. II*, **49**, 4863-4886.
- 2002 Dinniman, M.S. and J.M. Klinck. The influence of open versus periodic alongshore boundaries on circulation near submarine canyons. *J. Atmos. Ocean. Tech.*, **19**, 1722-1737.

- 2002 Powell, E.N., E.A. Bochenek, J.M. Klinck, E.E. Hofmann. Influence of food quality and quantity on the growth and development of *Crassostrea gigas* larvae: a modeling study, *Aquaculture*, **210**, 89-117.
- 2002 Klinck, J.M., E.E. Hofmann, E.N. Powell and M.M. Deksheniaks. Impact of channelization on oyster production: a hydrodynamic-oyster population model for Galveston Bay, Texas. *Environmental Modeling and Assessment*, **7**, 273-289.
- 2001 Hyun, K.-H., I.-C. Pang, J.M. Klinck, K.-S. Choi, J.-B. Lee, E.N. Powell, E.E. Hofmann and E.A. Bochenek. The Effect of Food Composition on Pacific oyster *Crassostrea gigas* (Thunberg) Growth in Korea: A Modeling Study, *Aquaculture*, **199**, 41-62.
- 2001 Bochenek, E.A., J.M. Klinck, E.N. Powell and E.E. Hofmann. A biochemically based model of the growth and development of *Crassostrea gigas* larvae. *J. Shellfish Res.*, **20**, 243-266.
- 2001 Hofmann, E.E., S.E. Ford, E.N. Powell, and J.M. Klinck. Modeling studies of the effect of climate variability on MSX disease in Eastern Oyster (*Crassostrea virginica*). *Hydrobiologia*, **460**, 195-212.
- 2001 Klinck, J.M., E.N. Powell, J.N. Kraeuter, S.E. Ford and K.A. Ashton-Alcox. A fisheries model for managing the oyster fishery during times of disease. *J. Shellfish Res.*, **20**, 977-989.
- 2001 Gustaf-Adolf Paffenhöfer and others. Future marine zooplankton research—a perspective. *Mar. Ecol. Progress Series*, **222**, 297-308.
- 2000 Prézelin, B.B., E.E. Hofmann, C. Mengelt and J.M. Klinck. The linkage between upper circumpolar deep water (UCDW) and phytoplankton assemblages on the west Antarctic Peninsula continental shelf. *J. Mar. Res.* **58**, 165-202.
- 2000 Deksheniaks, M.M., E.E. Hofmann, J.M. Klinck and E.N. Powell. Quantifying the Effects of Environmental Variability on an Oyster Population Using a Coupled Oyster-Circulation Model, *Estuaries*, **23**, 593-610.
- 2000 She, J. and J.M. Klinck. Flow near submarine canyon driven by constant upwelling winds. *J. Geophys. Res.*, **105**, 28,671-28,694
- 1999 Powell, E.N., J.M. Klinck, S.E. Ford, E.E. Hofmann and S.J. Jordan. Modeling the MSX parasite in eastern oysters (*Crassostrea virginica*) populations. III. Regional application and the problem of transmission. *J. Shellfish Res.*, **18**, 517-537.
- 1999 Paraso, M.C., S.E. Ford, E.N. Powell, E.E. Hofmann and J.M. Klinck Modeling the MSX parasite in eastern oyster (*Crassostrea virginica*) Populations. II. Salinity Effects *J. Shellfish Res.*, **18**, 501-516.
- 1999 Ford, S.E., E.N. Powell, J.M. Klinck and E.E. Hofmann Modeling the MSX parasite in eastern oyster, (*Crassostrea virginica*) populations. I. Model development, implementation and verification. *J. Shellfish Res.*, **18**, 475-500.
- 1999 Smith, D.A., E.E. Hofmann, J.M. Klinck and C.M. Lascara. Hydrography and circulation of the West Antarctic Peninsula continental shelf. *Deep-Sea Res.*, **46**, 925-949.
- 1998 Soniat, T.M., E.N. Powell, E.E. Hofmann, and J.M. Klinck. Understanding the success and failure of oyster populations: the importance of sampled variables and sample timing. *J. Shellfish Res.*, **17**, 1149-1165.
- 1998 Hofmann, E.E., J.M. Klinck, R.A. Locarnini, B. Fach and E. Murphy, Krill transport in the Scotia Sea and environs. *Antarctic Science*, **10**, 406-415.

- 1998 Spitz, Y., and J.M. Klinck. Estimate of bottom and surface stress during a spring-neap tide cycle by dynamical assimilation of the tide gauge observations in the Chesapeake Bay. *J. Geophys. Res.*, **103**, 12,761-12,782.
- 1998 Cook, T., M. Folli, J. Klinck, S. Ford and J. Miller. The relationship between increasing sea-surface temperature and the northward spread of *Perkinsus marinus* (DERMO) disease epizootics in oysters. *Est., Coast. and Shelf Sci.*, **46**, 587-597.
- 1998 Klinck, J.M. Heat and salt changes on the continental shelf west of the Antarctic Peninsula between January 1993 and January 1994, *J. Geophys. Res.*, **103**, 7617-7636.
- 1997 Powell, E.N., J.M. Klinck, E.E. Hofmann and S. Ford. Varying the timing of oysters transplant: Implications for management from simulation studies. *Fisheries Oceanography*, **6:4**, 213-237.
- 1997 Deksheniaks, M.M., E.E. Hofmann, J.M. Klinck and E.N. Powell, A modeling study of the effects of size- and depth-dependent predation on larval survival. *J. Plankton Res.*, **19**, 1583-1598.
- 1997 Kobayashi, M., E.E. Hofmann, E.N. Powell, J.M. Klinck and K. Kusaka. A population dynamics model for the Japanese oyster, *Crassostrea gigas*. *Aquaculture*, **149**, 285-321.
- 1996 Valle-Levinson, A., J.M. Klinck, G.H. Wheless. Inflows/outflows at the transition between a coastal plain estuary and the coastal ocean. *Cont. Shelf Res.*, **16**, 1819-1847.
- 1996 Deksheniaks, M.M., E.E. Hofmann, J.M. Klinck and E.N. Powell, Modeling the vertical distribution of oyster larvae in response to environmental conditions, *Mar. Ecol. Prog. Series*, **136**, 97-110.
- 1996 Powell, E.N., E.E. Hofmann, and J.M. Klinck, Modeling diseased oyster populations II. triggering mechanisms for *Perkinsus marinus* epizootics, *J. Shell. Res.*, **15**, 141-165.
- 1996 Klinck, J.M. Circulation near submarine canyons: a modelling study. *J. Geophys. Res.*, **101**, 1211-1223.
- 1995 McClean, J.L. and J.M. Klinck. Description and dynamics of 50-day oscillations in the western tropical region of the CME model. *J. Phys. Oceanogr.*, **25**(Part 1), 2498-2517.
- 1995 Smith, R.C., K.S. Baker, W.R. Fraser, E.E. Hofmann, D.M. Karl, J.M. Klinck, L.B. Quetin, B.B. Prezelin, R.M. Ross, W.Z. Trivelpiece and M. Vernet. The Palmer LTER: A long-term ecological research program at Palmer Station, Antarctica. *Oceanography*, **8**, 77-86.
- 1995 Hofmann, E.E., E.N. Powell, J.M. Klinck and G. Saunders, Modeling diseased oyster populations I. modeling *Perkinsus marinus* infections in oysters, *J. Shell. Res.*, **14**, 121-151.
- 1995 Powell, E.N., E.E. Hofmann, J.M. Klinck, E.A. Wilson-Ormond and M.S. Ellis, Modeling Oyster Populations V. Declining Phytoplankton Stocks and the Population Dynamics of American Oyster (*Crassostrea virginica*) Populations, *Fisheries Research*, **24**, 199-222.
- 1995 Klinck, J.M. Thermohaline structure of an eddy resolving North Atlantic model: the influence of boundary conditions. *J. Phys. Oceanogr.*, **26**, 1174-1195.
- 1995 Wheless, G.H. and J.M. Klinck. On density driven circulation over sloping bottom topography. *J. Phys. Oceanogr.*, **25**, 888-901.

- 1994 Powell, E.N., J.M. Klinck, E.E. Hofmann and S.M. Ray. Modeling oyster populations. IV. Rates of mortality, population crashes and management. *Fish. Bull.*, **92**, 347-373.
- 1994 Hofmann, E.E., J.M. Klinck, E.N. Powell, S. Boyles and M. Ellis. Modeling oyster populations. II. Adult size and reproductive effort, *J. Shell. Res.*, **13**, 165-182.
- 1993 Klinck, J.M. and D.A. Smith. The effect of wind changes during the Last Glacial Maximum on the circulation in the Southern Ocean. *Paleoceanography*, **8**, 427-433.
- 1992 Hofmann, E.E., E.N. Powell, J.M. Klinck and E.A. Wilson. Modeling oyster populations. III. Critical feeding periods, growth and reproduction. *J. Shell. Res.*, **11**, 399-416.
- 1992 Powell, E.N., E.E. Hofmann, J.M. Klinck and S.M. Ray. Modeling oyster populations. I. A commentary on filtration rate. Is faster always better?, *J. Shell. Res.*, **11**, 387-398.
- 1992 Klinck, J.M. The effects of wind, density and bathymetry on a one-layer, Southern Ocean model. *J. Geophys. Res.*, **97**, 20,179-20,189.
- 1991 Timm, U., J.M. Klinck and A. Okubo. Self- and mutual shading and competition effect on competing algal distributions: Biological implications of the model. *Ecological Modelling*, **59**, 11-36.
- 1991 Klinck, J.M. Vorticity dynamics of seasonal variations of the Antarctic Circumpolar Current from a modelling study. *J. Phys. Oceanogr.*, **21**, 1514-1533.
- 1989 Klinck, J.M. Geostrophic adjustment over submarine canyons. *J. Geophys. Res.*, **94**, 6133-6144.
- 1988 Klinck, J.M. The influence of a narrow, transverse canyon on initially geostrophic flow. *J. Geophys. Res.*, **93**, 509-515.
- 1986 Nowlin, W.D., Jr. and J.M. Klinck. The Physics of the Antarctic Circumpolar Current. *Rev. Geophys.*, **24**, 469-491.
- 1986 Klinck, J.M. and E.E. Hofmann. Deep flow variability in central Drake Passage. *J. Phys. Oceanogr.*, **16**, 1281-1292.
- 1985 Klinck, J.M. EOF analysis of central Drake Passage currents from DRAKE 79. *J. Phys. Oceanogr.*, **15**, 288-298.
- 1981 Klinck, J.M., J.J. O'Brien, H. Svendsen. A Simple Model of Fjord and Coastal Circulation Interaction. *J. Phys. Oceanogr.*, **11**, 1612-1626.
- 1981 Klinck, J.M., L.J. Pietrafesa, G.S. Janowitz. Continental Shelf Circulation Induced by a Moving, Localized Wind Stress. *J. Phys. Oceanogr.*, **11**, 836-848.
- 1980 Hofmann, E.E., J.M. Klinck, G.A. Paffenhöfer. Concentration and Vertical Fluxes of Fecal Pellets on a Continental Shelf. *Marine Biology*, **61**, 327-335.
- 1980 Hofmann, E.E., L.J. Pietrafesa, L.P. Atkinson, J.M. Klinck. A Time Dependent Model of Nutrient Distributions in Continental Shelf Waters. *Ecological Modelling*, **10**, 193-214.

Chapters in Books:

- 2001 Klinck, J. and W. D. Nowlin, Jr., Antarctic Circumpolar Current, *Encyclopedia of Ocean Sciences*, Academic Press., J. Steele, S. Thorpe, K. Turekian, eds., 151-159.
- 1998 Hofmann, E.E. and J.M. Klinck, Hydrography and circulation of the Antarctic continental shelf: 150°E to the Greenwich Meridian, *The Sea, The Global Coastal Ocean, Regional Studies and Synthesis*, Volume 11, A.R. Robinson and K.H. Brink, eds., 997-1042.
- 1998 Hofmann, E.E. and J.M. Klinck, Thermohaline variability of the waters overlying west Antarctic Peninsula continental shelf, *Ocean, Ice and Atmosphere: Interactions at the Antarctic Continental Margin*, AGU Antarctic Research Series, Volume 75, S. Jacobs and R. Weiss, eds., 67-81.
- 1996 Hofmann, E.E., J.M. Klinck, C.M. Lascara and D.A. Smith, Water mass distribution and circulation west of the Antarctic Peninsula and including Bransfield Strait, *Foundations for Ecological Research West of the Antarctic Peninsula*, R.M. Ross, E.E. Hofmann and L.B. Quetin, eds., AGU Antarctic Research Series, Volume 70, 61-80.
- 1992 Klinck, J.M., E.N. Powell, E.E. Hofmann, E.A. Wilson, S.M. Ray. Modeling oyster populations: the effect of density and food supply on production. *Eight Annual Proceedings of Advanced Marine Technology Conference*, 85-105.
- 1986 Klinck, J.M. Channel dynamics and its application to the Antarctic Circumpolar Current. *Advanced Physical Oceanographic Numerical Modelling* J.J. O'Brien, Ed. D. Reidel Pub., 299-328.
- 1983 Klinck, J.M., B. Cushman-Roisin, J.J. O'Brien. Considerations of coastally forced flow in a branched fjord. *Coastal Oceanography* H. Gade, A. Edwards and H. Svendsen, Eds. Plenum Publishing, 451-474.
- 1981 Klinck, J.M., J.J. O'Brien, H. Svendsen. Coastal wind effects on fjord circulation. *The Norwegian Coastal Current*. R. Saetre and M. Mork, Eds. Proceedings of "Symposium on the Norwegian Coastal Current", Geilo, Norway, 6-11 June, 1982, 178-214.

Abstracts and other publications:

- 2007 Klinck, J.M. and M.S. Dinniman Circulation modelling in support of US SO GLOBEC studies *GLOBEC Int. Newsletter*, **13(1)**, 55.
- 2006 Dinniman, M.S., J.M. Klinck, W.O. Smith, Jr. and E.E. Hofmann Circulation and water mass changes in a numerical circulation model of the Ross Sea, Antarctica *EOS Trans. AGU*, **87(36)**, Ocean Sci. Meet. Suppl., Abstract OS22G-05.
- 2006 Husrevoglu, Y.S. and J.M. Klinck A modeling study of the seasonal change of sea ice in the Ross Sea, Antarctica *EOS Trans. AGU*, **87(36)**, Ocean Sci. Meet. Suppl., Abstract OS25Q-04.
- 2006 Zhang, B. and J.M. Klinck Modeling study of frontal variability in Drake Passage *EOS Trans. AGU*, **87(36)**, Ocean Sci. Meet. Suppl., Abstract OS25Q-05.
- 2006 Soniat, T., E.N. Powell, J.M. Klinck and E.E. Hofmann Climatic cycles influence Perkinsus marinus infection of Eastern Oysters, Crassostrea virginica *EOS Trans. AGU*, **87(36)**, Ocean Sci. Meet. Suppl., Abstract OS26E-11.
- 2006 Powell, E.N., E.E. Hofmann, J.M. Klinck, J.N. Kraeuter, R.J. Marzec and M. Bricelj Can hard clam larvae survivorship explain recruitment failure in Great South Bay: a modeling study *EOS Trans. AGU*, **87(36)**, Ocean Sci. Meet. Suppl., Abstract OS32O-06

- 2006 Klinck, J.M. and M.S. Dinniman Modeling the coastal current along the west Antarctic Peninsula: the effect of precipitation *EOS Trans. AGU*, **87(36)**, Ocean Sci. Meet. Suppl., Abstract OS36B-23.
- 2005 Ford, S., E. Powell, C. Paillard, J. Flye Sainte-Marie, F. Jean, J. Klinck, E. Hofmann. Brown Ring Disease: The Integrated Model, (abstract) *J. Shellfish Res.*, **24**, 654-655.
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Research Grants and Contracts:

- NSF Grant, 09/01/06 - 08/31/09, "Collaborative Research: Field and Modeling Studies in Support of Understanding Disease Resistance in Estuarine Populations and Response to Climate Change", \$324,904. (with E. Hofmann, E. Powell, D. Haidvogel)
- NSF Grant OPP - , 04/01/06 - 03/31/09, "Collaborative Research: U.S. SO GLOBEC Synthesis and Modeling: Circulation and Hydrographic Data Analysis and Modeling Studies", \$278,511. (with E. Hofmann)
- NSF Grant OPP - , 09/01/05 - 08/31/08, "Comparative habitat utilization by two Southern Ocean seals: foraging behavior of Crabeater and Elephant seals using novel methods of oceanographic data collection", \$120,718. (with E. Hofmann, D. Costa, D. Crocker, M. Goebel)
- NSF Grant OPP - , 03/01/04 - 02/28/07, "Collaborative Research: Seasonal Biogeochemical processes in the Ross Sea: A Modeling Approach", \$397,293. (with E. Hofmann, W. Smith)
- NOAA, SW Fisheries Center, 09/01/04 - 08/31/06, "Continued Hydrographic Studies and Analysis in support of the U.S. AMLR Program", \$24,997. (with E. Hofmann).
- NOAA, 10/01/04 - 09/30/06, "Modeling Oyster Larvae Transport in Chesapeake Bay", \$50,186. (with E. Hofmann, E. Powell)
- EPA-STAR, 12/01/04 - 08/31/07, "The Importance of Blooms of Brown Tide, *Aureococcus anophagefferens*, in Coastal Lagoonal Systems: Coupling Numerical Simulation Modeling with ...", \$135,049. (with E. Hofmann and E. Powell)
- NY Sea Grant, 1042799, 8/15/04 - 8/14/05, "A model study of the growth, survival and recruitment of Hard Clam (*Mercenaria mercenaria*) larval and post-settlement populations", \$30,465. (with E. Hofmann)
- NSF Grant OCE-0412696, 8/1/04 - 7/31/07, "Genomic approaches to understanding genetic and physiological causes of variation in survival, dispersal, and recruitment of larval marine organisms", \$114,897. (with E. Hofmann, D. Hedgecock, D. Manahan and E. Powell)
- NSF Grant OCE-9911731, 6/15/00 - 5/31/03, "Collaborative research: Comparative modeling and data analysis studies for the Ross Sea and west Antarctic Peninsula regions: a JGOFS synthesis and modeling project", \$236,250. (with E. Hofmann, B. Prezelin and W. Smith)
- NOAA Grant NFFR7000-2-00073, 9/10/02 - 8/31/03, "Hydrographic Studies & Analyses in Support of the US AMLR Program" \$39,881. (with E. Hofmann)
- NSF Grant OCE-0136403, 04/15/2002 - 03/31/2005, "Doppler turbulence techniques for ocean observatories: An interactive approach using in situ measurements and LES models", \$845,885. (with A. Gargett and C.E. Grosch).

- ONR Grant N00014-02-1-0184, 12/1/01 - 10/30/02, "Effect of internal radius and shorter horizontal scale bathymetric variations on coastal dynamics and models", \$50,000.
- NSF Grant OPP-0087690, 2/15/01 - 1/31/04, "Variability in transport and recruitment of antarctic krill across the Scotia Sea", \$348,575. (with E. Hofmann and E. Murphy)
- NSF Grant OPP-9909956, 9/15/00 - 9/14/03, "WinDSSoCK: Winter distribution and success of Southern Ocean krill", \$305,471. (with E. Hofmann and R. Locarnini)
- Sea Grant (NOAA), New York Sea Grant, 9/1/00 - 8/31/02, "Modeling hard clam growth, survival and environmental interactions: what are the controlling factors?", \$68,198. (With E. Hofmann)
- NSF Grant OCE-9911731, 6/15/00 - 5/31/03, "Collaborative research: Comparative modeling and data analysis studies for the Ross Sea and west Antarctic Peninsula regions: a JGOFS synthesis and modeling project", \$236,250. (with E. Hofmann, B. Prezelin and W. Smith)
- Sea Grant (NOAA), Virginia Graduate Marine Science Consortium, 10/1/99 - 9/30/00, "Effect of climate variability on the prevalence and intensity of Dermo and MSX diseases in eastern oyster populations", \$87,652. (with E. Hofmann)
- NSF Grant OCE-9618293, 3/1/97 - 2/28/00, "Dynamics of steep sided coastal submarine canyons", \$146,000. (with B. Hickey and S. Allen)
- NSF Grant OPP-9525806, 10/1/95 - 9/30/98, "Modeling the transport and exchange of krill between the Antarctic Peninsula and South Georgia", \$212,149. (with E. Hofmann and E. Murphy)
- Sea Grant (NOAA), Virginia Graduate Marine Science Consortium, 9/1/95 - 8/31/97, "Crassostrea Virginica pathogens in Chesapeake Bay oyster populations; a dual disease simulation model of parasite-host interactions over a large spatial scale", \$101,068. (with E. Powell and E. Hofmann)
- NSF Grant OCE-9416748, 6/1/95 - 5/31/98, "Effects of external forcing and turbulent mixing on the dynamics of an estuarine plume", \$170,000. (with G. Wheless)
- Sea Grant (NOAA), Virginia Graduate Marine Science Consortium, 9/1/91 - 8/31/93, "South Atlantic Bight recruitment experiment (SABRE): physical oceanography and modeling", \$100,000. (with L. Atkinson and E. Hofmann)
- U.S. Army Corps of Engineers, 7/1/91 - 30/6/93, "Coupled oyster-hydrodynamics model for Galveston Bay and the Galveston Bay ship channel project", \$139,720. (with E. Powell and E. Hofmann)
- NSF Polar Programs, 10/31/91 - 9/30/97. "Long-term ecological research on the Antarctic marine ecosystem: an ice dominated environment". Total award is \$3,761,395 with \$318,668 to Hofmann and Klinck. (with R. Ross, L. Quetin, B. Prezelin, R. Smith, E. Hofmann, W. Trivelpiece and W. Fraser)
- Commonwealth of Virginia, State Council of Higher Education, 6/91 - 5/96. "Center for Coastal Physical Oceanography", \$500,000 per year. (with L. Atkinson, G. Csanady, C. Grosch, E. Hofmann, A. Kirwan and J. Kroll)
- NSF Grant OCE-89-22860, 4/1/90 - 3/31/92. "Analysis of the Community Modelling Effort North Atlantic Simulation", \$92,210. (with G. T. Csanady).
- NSF Grant OCE-89-96235, 6/89 - 12/92 "Modelling of the total transport of the Antarctic Circumpolar Current using realistic wind fields", \$183,721 (continuation of previous project, no additional funds).
- NSF Grant OCE-87-09777, 7/87 - 6/90. "Modelling of the total transport of the Antarctic Circumpolar Current using realistic wind fields", \$183,721.

- NASA Equipment Grant NAGW-1109, 6/87 - 5/88. "Video display hardware for a satellite ocean data analysis system", \$46,985. (with W. Nowlin).
- ONR Grant N00014-80-C-0113 (continued), 1/87 - 12/88. "Modelling the circulation in a canyon/shelf system", \$55,722.
- ONR Grant N00014-80-C-0113 (continued), 1/86 - 12/86. "Modelling the circulation in a canyon/shelf system", \$45,000. (with D. C. Smith, IV).
- NSF Equipment Grant OCE-84-16099, 5/85 - 10/86. "Video graphics display system", \$25,484.
- ONR Grant N00014-80-C-0113, 1/85 - 12/85. "Modelling the circulation in a canyon/shelf system", \$36,099. (with D. C. Smith, IV).
- NSF Grant OCE 83-08959, 8/83 - 7/85. "Analysis of vorticity dynamics at Drake Passage from DRAKE79 current meter records", \$65,000.
- Subcontract to NSF Grant OCE 79-25351 through Florida State University, 3/81 - 6/82, "The effect of coastal upwelling events on fjord circulation", \$12,142.

Presentations at Professional Meetings:

- 2008 Klinck, J.M., Y.S. Husrevoglu and M.S. Dinniman. A model study of the influences of sea-ice and the Ross Ice Shelf on water properties. SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Dinniman, M.S. and J.M. Klinck A high resolution coupled sea-ice/ocean model of the Antarctic Peninsula region: warm oceanic water intrusions onto the shelf SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Pinones, A., E.E. Hofmann, M.S. Dinniman, and J.M. Klinck Simulations of the lagrangian particles on the western Antarctic Peninsula: the effect of circulation dynamics SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Pinones, A., E.E. Hofmann, M.S. Dinniman, and J.M. Klinck Circulation on the western Antarctic Peninsula and implications for biological production SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Loeb, V.J., E.E. Hofmann, J.M. Klinck, and O. Holm-Hansen ENSO drives interannual and decadal-scale variability of the Antarctic Peninsula pelagic marine ecosystem SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia, July 8-11.
- 2008 Dinniman, M.S. and J.M. Klinck. A high resolution coupled sea-ice/ocean model for the Antarctic Peninsula Region. Ocean Sciences Meeting, Orlando, FL, March 2-7.
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- 2008 Klinck, J.M., Y.S. Husrevoglu and M.S. Dinniman. Contintal shelf water mass distribution, tranformation and off-shelf transport in a sea ice-ocean model of the Ross Sea, Antarctica Ocean Sciences Meeting, Orlando, FL, March 2-7.
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- 2008 Polyakov, O., E.N. Powell, J.N. Kraeuter, E.E. Hofmann, V.M. Bricelj, J.M. Klinck, S.C. Buckner. Virtual population analysis of Great South Bay hard clam

- (*mercenaria mercenaria*) populations. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2008 Narvaez, D.A. J.M. Klinck, E.E. Hofmann, E.N. Powell, D. Hedgecock. The effect of immigration on disease resistance in an oyster population: a numerical model study. Ocean Sciences Meeting, Orlando, FL, March 2-7.
- 2007 Klinck, J.M. and M.S. Dinniman, The importance of high spatial resolution for models of Antarctic coastal circulation. 2nd Antarctic Meteorological Observation, Modeling, and Forecasting Workshop, Rome, Italy, 26-28 June.
- 2006 Klinck, J.M., M.S. Dinniman, S. Husrevoglu, E.E. Hofmann, W.O. Smith, Jr A regional numerical model of the Ross Sea, Antarctica: circulation, nutrients, and ice. AnSlope and CLIMA Workshop, LDGO, Palisades, NY, 13-15 June.
- 2006 Klinck, J.M., M.S. Dinniman and E.E. Hofmann Modelling the circulation on the west Antarctic Peninsula: the effect of buoyancy forcing SCAR Open Science Conference, Hobart, Australia, 9-19 July.
- 2006 Klinck, J.M. and M.S. Dinniman. Modeling the coastal current along the west Antarctic Peninsula: the effect of precipitation. Ocean Sciences Meeting, Honolulu, Hawaii, 20-24 February.
- 2005 Soniat, T.M., E.N. Powell, J.M. Klinck, and E.E. Hofmann. *Perkinsus marinus* infection of eastern oysters, *Crassostrea virginica*. Estuarine Research Foundation 18th Biennial Conference, Norfolk, VA, 16-20 October.
- 2005 Ocean processes on Antarctic shelves: small dynamical scales and global influence. Gordon Conference on Coastal Ocean Circulation, New London, NH, 5-10 June.
- 2004 Circulation and oceanic exchange on the west Antarctic Peninsular shelf using a numerical model. SCAR Open Science Conference, Bremen, Germany, 25-31 July.
- 2004 Klinck, J.M., M.S. Dinniman and E.E. Hofmann. Coastal-Ocean exchange on the west Antarctic Peninsula shelf using observations and a model. Ocean Sciences Meeting, Portland, Oregon, 26-30 January.
- 2003 Klinck, J.M. Effect of submarine canyon geometry on coastal circulation and shelf-ocean exchange. Gordon Conference on Coastal Ocean Models, New London, NH, 22-27 June, 2003.
- 2003 Klinck, J.M. Circulation and nutrient flux west of the Antarctic Peninsula and in the Ross Sea. Symposium for Upper ocean circulation and air-sea interaction, Tallahassee, FL, April 28-29.
- 2001 Klinck, J.M. and E.E. Hofmann. Ocean Observations west of the Antarctic Peninsula: a Southern Ocean GLOBEC project. Seventh Biannual Coordinating meeting of iAnZone. Ischia-Naples, Italy, October 15-17.
- 2001 Klinck, J.M., M.S. Dinniman and W.O. Smith, Jr. Model Study of Circulation and Biogeochemical Processes in the Ross Sea. Second International Conference on the Oceanography of the Ross Sea. Ischia-Naples, Italy, October 8-13.
- 2001 Klinck, J.M. and M.S. Dinniman. Modeling the circulation in the Ross Sea and on the west Antarctic Peninsula: a prelude to biogeochemical modeling. Gordon Conference on polar marine science. Ventura, California, March 11-16, 2001.
- 1999 Klinck, J.M. and M.S. Dinniman. Boundary conditions and coastal dynamics. Sigma Coordinate Ocean model users meeting. Bar Harbor, Maine, 20-22 September.

- 1999 Klinck, J.M. Particle drift in Drake Passage and the southern Scotia Sea. workshop on Large-scale variability in the Southern Ocean - patterns, mechanism and impacts. British Antarctic Survey, Cambridge, UK, 2-7 August.
- 1998 Klinck, J.M. Circulation near submarine canyons driven by transient upwelling winds. SEOM/SPEM/SCRUM users group meeting. Davis, CA, 28-30 October.
- 1998 Klinck, J.M. Effect of estuary width on coastal buoyant discharge. Poster presentation at 1998 Ocean Sciences Meeting, San Diego, CA, 9-13 February.
- 1997 Klinck, J.M., E.E. Hofmann, D.A. Smith and C.M. Lascara, Hydrography, heat and salt budgets on the West Antarctic Peninsula Continental Shelf. Poster presentation at the Gordon Research Conference on coastal ocean circulation, Colby-Smith College, NH, 15-20 June.
- 1996 Klinck, J.M. and G.H. Wheless, The influence of stratification, inlet width and tides on ocean-estuary exchange. Presented at 1996 Ocean Sciences Meeting, San Diego, CA, 12-16 February.
- 1995 Klinck, J.M. Cross shelf transport driven by flow over submarine canyons. Annual meeting of the European Geophysical Society, Hamburg, Germany.
- 1994 Hofmann, E.E., B.L. Lipphardt, C.M. Lascara, D.A. Smith, J.M. Klinck, R.A. Locarnini, R.C. Smith, Palmer LTER: Seasonal Changes in the Hydrographic Structure of the Upper 100 m of the Water Column, Poster presentation, SCAR Sixth Biology Symposium on Antarctic Communities: Species, Structure and Survival, Venice, Italy, 30 May to 3 June.
- 1994 Hofmann, E.E., D.A. Smith, B.L. Lipphardt, J.M. Klinck, R.A. Locarnini and R.C. Smith, Palmer LTER: Circulation and Heat Distributions on the Continental Shelf West of the Antarctic Peninsula, Presented at 1994 Ocean Sciences Meeting, San Diego, CA, 21-25 February.
- 1994 Hofmann, E.E., J.M. Klinck, E.N. Powell, *Perkinsus marinus* and Oyster Populations: Modeling the Disease, Presented at National Shellfisheries Association Meeting, Charleston, SC, 24-28 April.
- 1994 Klinck, J.M. Model study of effects of alongshore flow on circulation in submarine canyons. Ocean Sciences Meeting, San Diego, California.
- 1993 Klinck, J.M., C. M. Lascara, R. C. Smith. Hydrography and krill distributions in the Bellingshausen Sea as part of a long term ecological research program. Annual meeting of the European Geophysical Society, Wiesbaden, Germany.
- 1992 Klinck, J.M. Thermohaline structure of an eddy resolving North Atlantic model: the influence of boundary conditions. Annual meeting of the European Geophysical Society, Edinburgh, Scotland.
- 1992 Klinck, J.M., E.E. Hofmann, E.N. Powell. Modeling oyster populations. Adult size and reproductive effort. Aquaculture, '92, Orlando, Florida.
- 1992 Hofmann, E.E., J.M. Klinck, E.N. Powell, E.A. Wilson, Modeling Oyster Populations: Critical Feeding Periods, Growth and Reproduction, Presented at the 1992 Ocean Sciences Meeting, New Orleans, LA.
- 1992 Hofmann, E.E., E.N. Powell, J.M. Klinck and S.M. Ray, Modeling Oyster Populations: Population Crashes and Management, Presented at The Second Meeting of The International Society for Ecological Economics, Stockholm University, Stockholm, Sweden.
- 1991 Klinck, J.M. A T-S volumetric census of the CME North Atlantic simulation. Fall meeting of the American Geophysical Union, San Francisco, California.

- 1991 Hofmann, E.E., E.N. Powell and J.M. Klinck, Modeling the Dynamics of Diseased Oyster Populations, Presented at the 1991 Marine Benthic Ecology Meeting, Williamsburg, VA.
- 1991 Klinck, J.M. Large scale physical oceanography of the Southern Ocean. GLOBEC workshop on Southern Ocean zooplankton and climate change, Scripps Institute of Oceanography, May 9-11, 1991.
- 1990 Klinck, J.M. Seasonal transport variations in the Southern Ocean calculated from a one-layer spherical coordinate numerical model. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1990 Klinck, J.M., E.N. Powell, J.D. Gauthier, K.-S. Choi and D.H. Lewis. Simulating the population dynamics of diseased oyster populations: environmental variation and disease Fifth International Congress on Ecology. Yokohama, Japan, 23-30 August.
- 1990 Klinck, J.M., E.N. Powell, J.D. Gauthier, K.-S. Choi, D.H. Lewis. Simulating the population dynamics of diseased oyster populations: environmental variation and disease. Annual meeting of the National Shellfisheries Association, Williamsburg, Virginia.
- 1988 Klinck, J.M. Wind forced variations in a one-layer model of the Antarctic Circumpolar Current. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1987 Klinck, J.M.. Effect of a submarine canyon on stratified, geostrophic flow. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1986 Klinck, J.M. The influence of a narrow transverse canyon on initially geostrophic flow. Spring meeting of the American Geophysical Union, San Francisco, California.
- 1986 Klinck, J.M. Fronts in the Antarctic Circumpolar Current with emphasis on Drake Passage and the South Atlantic. SCOR symposium on interfaces in the ocean, Hobart, Australia, 24-26 November.
- 1986 Klinck, J.M. The influence of a transverse canyon on geostrophic flow: steady solutions. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1985 Klinck, J.M. The calculation of potential vorticity in central Drake Passage from DRAKE 79 current meter data. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1984 Klinck, J.M. EOF analysis of central Drake Passage currents from DRAKE 79. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1982 Klinck, J.M. Evidence for shelf waves in northern Drake Passage. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1981 Klinck, J.M. Flow variability in northern Drake Passage. Fall meeting of the American Geophysical Union, San Francisco, California.
- 1978 Klinck, J.M., G.S. Janowitz and L.J. Pietrafesa. Time dependent response of a continuously stratified shelf to a moving storm. Fall meeting of the American Geophysical Union, San Francisco, California.

Invited Lectures (last four years):

- 2005 Ocean processes on Antarctic shelves: small dynamical scales and global influence. Gordon Conference on Coastal Ocean Circulation, June 5-10, New London, NH.
- 2004 Ocean and sea ice processes near the Antarctic Peninsula: present conditions and possible variations. Workshop on Antarctic Peninsula Climate Variability, Scott Polar Institute, Sept. 17, Cambridge, UK.
- 2004 Ocean Processes on Antarctic Continental Shelves: Current Understanding and Possible Oceanic Responses to Climate Change. Norwegian Meteorological Institute, August 6, Oslo, Norway.
- 2003 Effect of submarine canyon geometry on coastal circulation and shelf-ocean exchange. Gordon Conference on Coastal Ocean Models, June 22-27, New London, NH.

Professional Awards:

- 1997 Editor's Citation for Excellence in Refereeing. *Journal of Geophysical Research - Oceans*. Citation by Wendell Brown.

Professional Services:

Reviewer for - *Journal of Geophysical Research*
Journal of Physical Oceanography
Journal of Marine Research
Science
Atmosphere-Oceans
Annales Geophysicae
 National Science Foundation
 National Aeronautics and Space Administration
 National Oceanic and Atmospheric Administration

Seagoing Experience:

- 2002 SO GLOBEC cruise on the RVIB N. B. Palmer (NBP0202), April 9 to May 19. Coordinator of ctd and xbt casts and data reduction.
- 2001 SO GLOBEC cruise on the RVIB N. B. Palmer (NBP0104), July 21 to September 2. Coordinator of ctd and xbt casts and data reduction.
- 1993 LTER cruise 93C on the R/V Polar Duke, August 22 to September 29. activities included acoustics logging, xbt and ctd casts, data reduction.

Professional Experience:

- 2006 AnSlope/CLIMA workshop, Lamont-Doherty Earth Observatory, NY, 13-15 June.
- 2006 ORION design and implementation workshop, Salt Lake City, Utah. 27-30 June.
- 2005 participant in the Cetacean-Ecosystem Linkage Workshop, ODU, Norfolk, VA, November 2-4.
- 2004 participant in the Mid Atlantic Bight Physical Oceanography and Meteorology meeting. VIMS, VA, November 4-5.
- 2004 participant in the workshop on Antarctic Peninsula Climate Variability: History, causes and impacts. Cambridge, UK. September 16-18.
- 2004 participant in the SCAR Open Science Conference. July 26-28, Bermen, Germany.
- 2003 participant in the Chesapeake Community Model Program Workshop. November 19, 20, VIMS, Gloucester Point, VA.

- 2001 participant in the Seventh Biannual Coordinating meeting of iAnZone. October 15-17, Ischia-Naples, Italy
- 2001 participant in the Second International Conference on the Oceanography of the Ross Sea. October 8-13, Ischia-Naples, Italy.
- 2001 participant in the Gordon Conference on Polar Marine Science. March 11-16. Ventura, California.
- 1999 participant in Sigma Coordinate ocean model users group. September 20-22. Bar Harbor, Maine.
- 1999 participant in Large-scale variability in the Southern Ocean - patterns, mechanism and impacts. 2-7 August, British Antarctic Survey, Cambridge, UK.
- 1999 participant in the Second Marine Zooplankton Colloquium. 8-10 February. Savannah, Georgia.
- 1998 participant in the SEOM/SPEM/SCRUM users group. October 28-30. Davis, California.
- 1998 participant in the UCAR members meeting, Boulder, Colorado, October 6-7.
- 1998 participant in Southern Ocean GLOBEC planning workshop. September 31 - October 1, Arlington, Virginia.
- 1997 participant in international iAnZone/ASPeCt meeting to organize Antarctic research activities, Oracle, Arizona, December 1-5.
- 1997 participant in the UCAR members meeting, Boulder, Colorado, October 7-8.
- 1997 participant Gordon Research Conference on coastal ocean circulation. June 15-20.
- 1996 participant in the UCAR members meeting, Boulder, Colorado, October 8-9.
- 1995 participant in the SPEM uses group meeting, New Brunswick, New Jersey, October 30-November 1.
- 1995 participant in the UCAR members meeting, Boulder, Colorado, October 9-10.
- 1995 participant in the workshop on Southern Ocean modelling, Stevenson, Washington, January 17-19.
- 1994 participant in the UCAR members meeting, Boulder, Colorado, October 11-12.
- 1994 participant in ICES Symposium on Secondary Production. Plymouth, United Kingdom, August 15-19.
- 1994 participant in a workshop on the Benguela Ecology Programme. Cape Town, South Africa, July 25-27.
- 1994 participant in implimentation workshop for GLOBEC Southern Ocean Program. Bremerhaven, Germany, June 6-8.
- 1994 participant in SCAR 6th Biology Symposium. Venice, Italy, May 30 - June 3.
- 1994 participant in IAPSO Workshop on Interbasin Exchanges in the Southern Ocean. Sea Fisheries Research Institute, Cape Town, South Africa, March 28 - April 1.
- 1993 participant in workshop on GLOBEC Southern Ocean Planning, Old Dominion University, 15-17 June.
- 1993 participant in GLOBEC workshop on Secondary Production Modeling, Skidaway Institute of Oceanography, 23-25 February.
- 1992 attended the second meeting of the International Society for Ecological Economics, Stockholm University, Stockholm, Sweden, 3-6 August, 1992.
- 1992 convened a special session at the Ocean Sciences meeting on comparison of high resolution numerical models to observations.

- 1991 participant in GLOBEC workshop on Southern Ocean zooplankton and climate change, Scripps Institute of Oceanography, May 9-11, 1991.
- 1991 participant in Ocean Color Workshop by NASA. Honolulu, Hawaii. May 6-9.
- 1990 participant in workshop by NOAA on Coastal Ocean Program. Charleston, S.C., 27-29 June.
- 1990 participant in a workshop by DOE on ocean margins. Norfolk, Va., 18-20 June.
- 1989 represented ODU at the University Corporation for Atmospheric Research annual meeting. Boulder, Co., 10-11 October.
- 1989 participant in workshop for CoPO on shelf/deep ocean exchange. Norfolk, Va., 17-18 July.
- 1989 participant in workshop to describe the WOCE Community Modelling Effort North Atlantic simulation. Princeton, N.J., 27-28 February.
- 1988 participant in a workshop to design the WOCE Community Modelling Effort North Atlantic simulation. Boulder, Co., 14-15 January.
- 1988 participant in a workshop by Institute for Naval Oceanography on atmospheric forcing of ocean circulation. New Orleans, La., 5-8 January.
- 1987 attended Mid Atlantic Bight Physical Oceanography and Meteorology workshop. Norfolk, Va., 17-18 October.
- 1987 participant in meeting of Gulf States Scientific Computing Network to coordinate the regional network. Gulfport, Miss., 9-10 November.
- 1986 participant in a workshop to plan the WOCE Community Modelling Effort North Atlantic simulation. Princeton, N.J., 19 November.
- 1986 participant in the WOCE working group on numerical modelling to consider process dynamics in large-scale ocean circulation. Sidney, B.C., Canada, 22-25 July.
- 1985 lecturer at the NATO Advanced Study Institute on advanced physical oceanography numerical modelling. Banyuls-sur-Mer, France, 2-15 June.
- 1982 lecturer at the NATO Advanced Research Institute on coastal oceanography. Os, Norway, 6-11 June.

Languages:

some reading and speaking knowledge of Russian, Spanish and German.