

**VITAE FOR KEN C. MACDONALD**  
Dept. Earth Science, University of California,  
Santa Barbara, CA 93106.  
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**Professional Appointments:**

Professor UCSB 1984-2007  
Assoc Prof. UCSB 1979-84  
Asst Res Geophys. SIO 1976-79  
Green Scholar IGPP 1975-76  
NSF Fellow and Res. Asst. MIT/WHOI Joint Program 1970-75.

**Education:**

B.S. Engineering Sciences 1970, U.C. Berkeley  
Ph.D. Marine Geophysics 1975, Woods Hole/MIT Joint Program.

**Research experience:** extensive experience with submersible based geology and geophysics including Alvin and other submarines; use of remotely operated vehicles including Deep-Tow, Argo, ANGUS and various camera sleds and sonar systems; use of swath mapping systems including Sea Beam, Sea Beam 2000, Sea Marc II, HMR1; application of inverse theory to magnetic and gravity studies, heat flow measurements. Published over 130 peer-reviewed papers on the above subjects; Chief or Co-Chief scientist on over 20 seagoing expeditions.

**Teaching:** Introduction to Oceanography, Earth Systems Science, Introduction to Geophysics, Marine Geophysics, Field Studies in Marine Geophysics.

**Awards and Honors:**

1980 AAAS Newcomb-Cleveland Prize (Co-recipient) for the discovery of "black smoker vents"  
1994 Robert L. and Bettie P. Cody Gold Medal and Prize in Ocean Sciences (Scripps Inst. Oceanography)  
1995 Fellow Geological Society of America  
1995 Fellow American Geophysical Union  
2004 ISI Highly Cited Researcher, Charter Member  
2005 elected Fellow World Innovation Foundation  
2005 RIDGE/NSF Distinguished Lecturer  
2007 Fellow American Association for the Advancement of Science.  
2013 Fellow American Academy of Arts and Sciences

**Selected Professional Activities:**

2010- Ewing Medal Committee for American Geophysical Union  
2004-2008 AGU Fellow committees for Tectonophysics section and Ocean Sciences section  
2006-2007 Co-Editor Marine Geophysical Researches  
1999-01 Assoc. Editor Marine Geophys. Res.

1999-present Assoc. Editor Encyclopedia Ocean Sciences (currently revising for online edition)

2002 Chair National Undersea Research Panel, NOAA

1999-00 Committee member US Geodynamics Committee

2003-08 Assoc. Editor Encyclopedia of Geology

NSF OCE panels, 15 times 1984-2008

NSF Ocean Sciences Strategic Plan for Research and Education Committee 1993-94

Member, RIDGE Steering committee, 1987-90

Editor, Marine Geophysical Researches, 1986-1990

Editorial Board of Marine Science Reviews, 1986-2000

Associate Editor, Earth and Planetary Science Letters, 1978-1988

Member of "COSOD II" planning committee

Member, Lithosphere Panel Advanced Ocean Drilling Project, 1983-1985

Member, Ocean Science Board of the National Academy of Sciences, 1980-83

Associate Editor, Journal of Geophysical Research, 1979-82

Member/ALVIN Review Committee, 1979-82

**Graduate students:**

J.-C. Sempere [U.Wash.; Exxon]

S. Carbotte [LDEO]

L.J. Perram [Triton Technologies]

M. Cormier [LDEO]

D. Scheirer [Brown U.; USGS, Menlo Park]

J. Bicknell [USGS]

D. Castillo [Amoco, Stanford]

M. Magee [Amoco, Stanford]

L. Shure [Math Works, Inc.]

H. Sloan [Paris VI, American Museum]

M. Legg [ACTA Geotechnical]

J. Severinghaus [Scripps Inst.]

K. Sverdrup [Univ. Wisconsin]

C. Weiland [Stanford]

Scott White [Univ. S. Carolina]

Stacy Supak (consultant)

Siobhan Corish (Los Alamos National Laboratory).