# James Kennett Curriculum Vitae

Professor Emeritus, Department of Earth Sciences University of California, Santa Barbara

Birthdate: September 3, 1940, Wellington, New Zealand

#### **Education**

1962 B.S. University of New Zealand

1963 B.S. (Hons.) Geology - Victoria University of Wellington

1964-65 Victoria University of Wellington Research Fellowship

1965 Ph.D. (Geology) - Wellington

1976 D.Sc. - Wellington, New Zealand

#### **Academic Positions**

2006- Professor Emeritus, Department of Earth Science, University of California Santa Barbara.

1987-06 Professor, Department of Geological Sciences, University of California Santa Barbara.

1987-97 Director, Marine Science Institute University of California, Santa Barbara.

1974-87 Professor, Graduate School of Oceanography University of Rhode Island.

1970-74 Associate Professor, Graduate School of Oceanography University of Rhode Island.

1968-70 Assistant Professor, Department of Geology Florida State University, Tallahassee.

1966-68 Research Associate, Allan Hancock Foundation University of Southern California.

1965-66 Scientific Officer, New Zealand Oceanographic Institution.

#### **Academic Honors**

Member of the U.S. National Academy of Sciences.

Honorary Fellow - Royal Society of New Zealand.

Fellow - American Geophysical Union.

Honorary Fellow - European Union of Geosciences.

Fellow - American Association for the Advancement of Science.

Fellow - Geological Society of America.

McKay Hammer Award, New Zealand Geological Society, 1966-67.

Joseph Cushman Award, Cushman Foundation for Foraminiferal Research.

Academic Achievement Award - University of Rhode Island, 1981.

The Faculty Research Lecturer, University of California, Santa Barbara, 2001.

The Distinguished Lecturer in Marine Sciences, University of South Carolina, 1982.

Distinguished Lecturer, JOI/USSAC, 1992-93.

The 2000 Cesare Emiliani Lecturer: American Geophysical Union. Distinguished Lecturer, Monterey Bay Aquarium Research Institute, 2001.

Shepard Medal, Society of Economic Paleontologists and Mineralogists, 2002.

Foundation Editor - *Paleoceanography*, American Geophysical Union. S.T. Lee Lecturer in Antarctic Studies, 2004, Victoria University of Wellington, New Zealand.

#### **Publications**

264 Research papers, 4 Books, 16 Edited volumes, 42 Published reports, 5 Book reviews, >300 Published abstracts

# **Research Areas**

Marine Geology; Paleoceanography; Paleoclimate; Earth System History; Micropaleontology; Stratigraphy; Foraminifera; Marine Biotic Evolution; Methane Hydrates; Cosmic Impact Events.

#### **Selected Professional Activities**

Eminent Scholar-Lecturer, University of South Florida, 1993. Chairman, Regional Committee on Pacific Neogene Stratigraphy, International Union Geological Sciences, 1984-87.

Chairman, 4<sup>th</sup> International Conference on Pacific Neogene Stratigraphy, Berkeley, 1987.

Member, Panel on Paleoceanography, Paleoclimatology and Paleogeography of Committee on Solid-Earth Sciences, National Academy of Sciences, National Research Council, Washington, D.C., 1988-90.

Co-Chair of session, "The Effects of Past Global Change on Life," National Academy of Science/National Research Council. Annual GSA meeting, October, 1990.

Invited Speaker: Académie des Sciences. In honor of induction of Jean Dercourt into Académie, Paris, 1992.

Editorial Advisory Board: The Island Arc: 1992-2002.

Editorial Board: Marine Micropaleontology: 1978-2000.

Editorial Board: Paleoceanography: 1989-2005.

Member, Pole-Equator-Pole (PEP) Paleoclimate Initiative, 1993.

International Advisory Board: New Zealand Journal of Geology and

Geophysics, 1998-2003.

Co-organizer, SCOR-IMAGES Workshop, Trins, Austria, February 2000.

Co-Chief Scientist, Deep Sea Drilling Project and Ocean Drilling Program Legs 29, 90, 113, 189 and 146 (Part 2; Santa Barbara Basin).

Co-Chair, SCOR Working Group on Synthesis of Decadal to Millennial Climate Records of the Last 80 ky, May, 2001.

# **Professional Organizations**

American Geophysical Union (Fellow)

Geological Society of America (Fellow)

American Assoc. Advancement Science (Fellow)

Paleontological Society (Fellow)

Society of Sedimentologists

American Assoc. Petroleum Geologists

American Quaternary Association

North American Micropaleontological Society

New Zealand Geological Society

New Zealand Antarctic Society

Polar Society

Oceanography Society

Sigma XI

American Polar Society

The Antarctican Society

# **Organizational Positions:**

# 1969-1986

Program Chairman, Gulf Coast SEPM (Miami) 1969.

Member JOIDES Antarctic Drilling Advisory Committee 1970-1975.

Micropaleontologist, Leg 21 Deep-Sea Drilling Project (Tasman Coral Seas) November, 1971 to January, 1972.

Chairman of session, "Sediments and the Sedimentary Record" 53<sup>rd</sup> Annual Meeting AGU, Washington, D.C., 1972.

Chairman of symposium "Plate Tectonics" First International Conference on South Pacific Oceanography, Wellington, New Zealand, 1972.

Program Chairman, "Deep-Sea Quaternary Record" International Quaternary Association, Christchurch, New Zealand, December, 1973.

Co-Chief Scientist on Leg 29 of Deep-Sea Drilling Project (Second Antarctic Leg) - March-April, 1973. Co-Chief Scientist, Leg 90, December 1982-January 1983. Co-Chief Scientist, Leg 113, January-March, 1987.

Member IPOD Planning Committee 1975-1979, 1981-1983.

Member IPOD Paleoenvironmental Panel 1975-1981.

Chairman of session "Global Paleoclimatic Chronology" WMO/IAMOP symposium on Long-Term Climatic Fluctuations, Norwich, England, 1975.

Program Chairman of Session "Paleoceanography" 57<sup>th</sup> Annual Meeting AGU, Washington, D.C., 1976.

Oceanography Representative of Scientific Committee on Antarctic Research, International Council of Scientific Unions.

Member INQUA Subcommission on Deep-Sea Quaternary Record.

Member Working Group 114 - International Geological Correlation Program - Evaluation of Biohorizons of the Pacific Neogene.

Member South Atlantic Working Group - IPOD advisory panel.

Co-Chairman, First International Neogene Congress, Tokyo, Section 11A, Microbiostratigraphy, May, 1976.

Lecturer in Oceanography (temporary), University of Maine, 1976-1978.

Co-Chairman, X International Quaternary Association, Birmingham, England, SCAR Symposium on Late Cenozoic Studies and Group IV, Early Pleistocene, August, 1977.

Director, CENOP Program, 1977-1979, 1981-1984.

Chairman of Session, "Paleoceanography" Annual Meeting AGU, Miami, April 1978.

Chairman, S.W. Atlantic - Southern Ocean Working Group - IPOD advisory group.

Chairman, Nominations Committee Paleontological Society, 1978-1979, member 1978.

Editorial Board - Marine Micropaleontology, 1978-1988.

Co-Convenor, CENOP symposium, GSA Annual Meeting, San Diego, 1979.

Co-Chairman, Southern Ocean, IUGG, Canberra, 1979.

Member, Editorial Board Geophysical Surveys, 1980-1981.

Member, Long-Core Advisory Committee, 1982-87.

Co-Chairman of Session, "Frontiers of Paleontology", Annual GSA Meeting, Indianapolis, 1983.

Chairman, Southern Ocean Regional Panel, ODP, 1983-1986, Member 1987.

Member, Annual Conference Committee for Center for Ocean Management Study, University of Rhode Island - "Antarctic Politics and Marine Resources, Critical Choice for the 1980s". 1984

Chairman of Session - "The Mineral Regime - Antarctic Politics and Marine Resources, Critical Choice for the 1980s", Graduate School of Oceanography, University of Rhode Island, June 1984.

Member, AGU Ewing Medal Subcommittee, 1984-1986.

AGU Chairman, Ad hoc Committee for New Journal: <u>Paleoceanography</u>, 1984.

Chairman, Regional Committee on Pacific Neogene Stratigraphy, IUGS, 1984-1987, Member 1987.

Poster Session Chairman, Ocean history, Geologische Vereinigung, Kiel, W. Germany, 1985.

Member, Circum-Pacific Jurassic Project No. 171.

Chairman, Stratigraphy, Biostratigraphy and Correlation (Final Session). Hornibrook Symposium, Christchurch, New Zealand, December 1985.

Member Organizing Committee - Second International Conference in Paleoceanography - Woods Hole, Massachusetts, 1986.

Chairman of Session, "Evolution and Paleoceanography", Second International Conference in Paleoceanography, Woods Hole, Massachusetts, 1986.

# 1987-88

Chairman, Technical Program, 4<sup>th</sup> International Conference on Pacific Neogene Stratigraphy, Berkeley, July 1987; Session Chairman, plenary contributions.

Member USSAC Committee, 1987-Oct. 90

Member UNOLS Committee, 1987-May 89

Channel Islands Research Coordinating Committee, 1988-1993.

Co-Chairman, "Modern Approaches to Stratigraphy", AAPG Pacific Section Convention, Santa Barbara, 1988.

Co-Convener, The Marine Environment of Santa Barbara and its Coastal Waters: A Symposium/Workshop, Santa Barbara, 1988.

### 1988-89

Editorial Board, Paleoceanography, 1988-1989.

Chairman of session, "Dynamic Processes of the Coastal Zone", International Symposium on the Coastal Zone, with Special Reference to the Coastal Zone of China, Beijing, China, August 1988.

Member, Panel on Paleoceanography, Paleoclimatology and Paleogeography of the Committee on the Solid-Earth Sciences. National Academy of Sciences-National Research Council, Washington, D.C. 1988-March, 1990.

Member, Editorial Search Committee for JGR-Oceans, February, 1989 Co-Moderator of session, "Neogene Sedimentation in the Pacific Rim", Japan-U.S. Seminar on Neogene Siliceous Sediments of the Pacific Region, Lompoc, California, June 15, 1989.

Regional Committee on Pacific Neogene Stratigraphy, IUGS (member 1988-1989)

Member, SCOR Working Group 82, Polar Deep-Sea Paleoenvironments, 1986-September 1990.

Adjunct Professor of Oceanography, University of Rhode Island, 1987 - July 1990.

# 1989-90

Co-Convener, Antarctic Drilling, 28<sup>th</sup> International Geological Congress, Washington, D.C., July 9-19, 1989.

Member, Marine Geology Committee, AAPG, 1989.

Member, Publications Committee, AAPG, 1989-ongoing.

Editorial Board, Marine Micropaleontology, 1989.

Editorial Board, Paleoceanography, 1989.

Member, The Oceanography Society - Life Member.

Convener, UCSB Workshop on "Global Change", May, 1990.

Member, Global Change Steering Committee, UCSB, May, 1990-

California Ocean Resources Management (CORM) Program, June 1990-

Channel Islands Research Coordinating Committee, 1988-ongoing

Member, SCOR Working Group 82, Polar Deep-Sea Paleoenvironments, 1986-September 1990.

Member USSAC Committee, 1987-October 1990.

UNOLS Committee (member).

Member, Panel on Paleo-oceanography, Paleoclimatology and Paleogeography of the Committee on the Solid-Earth Sciences. National Academy of Sciences-National Research Council, Washington, D.C. 1988-March, 1990.

Adjunct Professor of Oceanography, University of Rhode Island, 1987 - July 1990.

# 1990-91

Co-Chair of session, "The Effects of Past Global Change on Life", National Academy of Science/National Research Council. Annual GSA Meeting, October, 1990.

Introduction, Southern California Education Initiative Socioeconomics Workshop, Sheraton Hotel, October 25, 1990.

Member, Environmental Sciences/Marine Science Institute Building Committee, December 1990-.

Member, Global Change Steering Committee, UC Santa Barbara, May, 1990-ongoing.

Paleogene Paleoceanography Workshop, Lake Arrowhead, CA "Paleogene Paleoclimate History", January 4-6, 1991.

U.S. Geological Survey's Global Change and Climate History Program Workshop, Pajaro Dunes, CA, January 14-17, 1991.

Chairman, External Review Committee, Earth Sciences Program, UC Santa Cruz, April, 1991.

Sponsored the California Paleontology Conference, Santa Barbara, April, 1991.

# 1991-92

Member, Council on Ocean Affairs, Washington, D.C., August, 1991-93 (Elected).

Co-Chair of session, "Paleoceanography", Geological Society of America. Annual Meeting in San Diego, October, 1991.

Sponsor and Co-Convenor, "International Conference on the Role of the Southern Ocean and Antarctica in Global Change: An Ocean Drilling Prospective", UC Santa Barbara, August, 1991. Field Trip Leader: Santa Barbara County, "International Conference on the Role of the Southern Ocean and Antarctica in Global Change: An Ocean Drilling Perspective", UC Santa Barbara, August, 1991.

Member, Steering Committee: "The Effects of Past Global Change on Life", National Academy of Science/ National Research Council, 1991-94.

Member, External Review Committee, Department of Geological Sciences, University of Puerto Rico.

Member, Subcommittee on Architecture and Physical Environment (S.C.A.P.E.), UC Santa Barbara, 1991- 93.

# 1992-93

Editorial Advisory Board: The Island Arc: 1992.

Chairman of session, "Paleowind and Paleo-Ocean Circulation—How and How Strong," Society for Sedimentary Geology (SEPM), August, 1993.

Member, Pole-Equator-Pole (PEP) Paleoclimate Initiative, 1993.

## 1993-94

Member, U.C. Marine Research Coordinating Council, 1993.

Member, Climates of the Past (CLIP), 1993 - ongoing.

Member, Past Global Changes (PAGES) IGBP, 1993-ongoing.

Member, California Sea Grant Coordinating Council (SGCC), 1994-ongoing.

Co-organizer, Marine Science Institute 25<sup>th</sup> Anniversary Symposium-Adventures in Discovery: Marine and Freshwater Systems, UCSB, 1994.

Member, Consortium on Oceanographic Research and Education (CORE), 1994-1997.

Member, Institute Geophysics and Planetary Physics, University of California.

Member, Working IGCP Group 114 - Pacific Neogene.

### 1994-96

Member, Working IGCP Group 355 - Neogene Evolution of Pacific Ocean Gateways.

Editorial Board: Marine Micropaleontology.

Editorial Board: <u>Paleoceanography</u>.

Editorial Advisory Board: The Island Arc.

Co-Chairman of Session, "Sea-level changes since the late Pleistocene, and prediction of their future trend," International Geological Congress, Beijing, August, 1996.

### 1997-2004

Workshop Participant, "Paleontology in the 21<sup>st</sup> Century", Senckenberg Museum,

Frankfurt, Germany, 1997.

Workshop Participant, Gas Hydrates; Department of Energy, Denver, Colorado, 1998.

Workshop Participant, COMPLEX; Future of Ocean Drilling, Vancouver, Canada, 1999.

Chair, Committee for obtaining new editor: Paleoceanography.

Editorial Board, Micropaleontology, Paleoceanography, Island Arc, New Zealand Journal of Geology and Geophysics, 1999-2003.

Co-Convenor, Millennial Scale Climate Change, Workshop, UCSB, 2001.

Member, Cody Award Selection Committee, Scripps Institute of Oceanography, 2002.

Presenter, Cody Award (Maureen Raymo), Scripps Institute of Oceanography, 2002.

Chief Scientist, Palmer Cruise, Santa Barbara Channel (November), 2002.

Workshop Participant, Role of Methane Hydrates and Climate Change, NSF

(MESH), Washington, D.C., 2002.

Co-Chair, Working Group on the Synthesis of Decadal to Millennial Climate Records of the last 80 ky. Scientific Committee on Oceanic Research (SCOR), 2002-2003.

Workshop Participant, Methane Hydrates, Carbon Cycle Climate Change, NOAA, Boulder, CO, 2004.

# 2005-2011

Member, Editorial Board (Geology): Proceedings National Academy of Sciences, 2005-2010.

Member, International Scientific Evaluation Team: Methane Emission Mitigation and Climate Change; of New Zealand Crown Research Institutions, 2007.

Member, Evaluation Committee: Ocean Sciences Board, National Research Council. U.S. National Academy of Sciences, U.C. Irvine, 2007.

Member, Organizing Committee: ISAES meeting, U.C. Santa Barbara, 2008.

International Advisory Board: TAO Journal (Terrestrial, Atmospheric, and Oceanic Sciences). Taiwan (Chinese Geoscience Union), 2007-present.

Co-convenor for Session 60: The Enigmatic Younger Dryas Climate Episode. INQUA, Bern, 2011.