

**CURRICULUM VITAE
JAMES L. SADD, PH.D.**

PERSONAL BRIEF:

Professor of Environmental Science
Occidental College, Los Angeles, California 90041
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EDUCATION

B.S. in Geology, 1977, University of Southern California, Los Angeles
USC Merit Scholar, graduated Magna Cum Laude, elected to Phi Beta Kappa.

M.A. in Geology, 1980, University of Texas, Austin
U.S. Dept. of Energy Graduate Fellowship

Ph.D. in Geology, 1986, University of South Carolina, Columbia

ACADEMIC APPOINTMENTS

1998- Professor of Environmental Science, Occidental College.
Chair of the Department of Geology 2002-2004

1995-97 Associate Professor of Environmental Science, Occidental College
Chair of Environmental Science and Studies Program 1995-1998

1992-94 Assistant Professor Geology Department, Occidental College.

1988-92 Adjunct Professor, Geology Department, Occidental College, Los Angeles, CA.

1991 Adjunct Professor, Geology Department, Pomona College, Claremont, CA.

1988-90 Adjunct Professor, Geology Department. California State Univ., Los Angeles.

1987-88 Adjunct Faculty, Dept. of Natural Sciences, University of South Carolina.

1986-87 Post Doctoral Research Fellow, Dept. of Geology, University of South Carolina.

RESEARCH INTERESTS AND EXPERIENCE

Spatial analysis and cartography using geographic information systems (GIS) and image analysis, quantitative analysis of environmental justice issues, regional land use change and its effects on coastal sedimentary geomorphology and trace element geochemistry, carbonate petrology and geochemistry, coastal and marine sedimentary processes, oil spills in coastal environments.

GRANTS

2009 The California Endowment “Building a Regional Voice for Environmental Health Research Component (with Manuel Pastor, UC Santa Cruz and Rachel Morello-Frosch, UC Berkeley) \$200,000

2008 California Environmental Protection Agency, “Building Interdisciplinary Infrastructure to Conduct Research on Environmental Justice and Climate Change in California, (with Rachel Morello-Frosch, UC Berkeley and Manuel Pastor, USC), \$186,837

2008 Hewlett, Annenberg, and Energy Foundations, “Environmental Justice and Climate Change: Understanding the Problem, Considering the Alternatives,” (with Manuel Pastor, USC, and Rachel Morello-Frosch, UC Berkeley), \$410,000

2008 US Environmental Protection Agency, Regional Applied Research Effort “Integrating Measures of Cumulative Impact and Community-level Vulnerability in a Study of the Association Between Adverse Birth Outcomes and Traffic Density in California” (with Manuel Pastor, USC, and Rachel Morello-Frosch, UC Berkeley), \$100,000

2007 Santa Monica Bay Restoration Commission, “Assessment of Subtidal Rocky Reef Resources in Santa Monica Bay”, (with Daniel Pondella and Craig Shuman, Occidental College, and Tom Ford, Santa Monica Baykeeper Foundation) \$219,977

2007 The California Endowment “Building a Regional Voice for Environmental Health – Research Component (with Manuel Pastor, UC Santa Cruz, and Rachel Morello-Frosch, UC Berkeley) \$250,000

2005 California Air Resources Board and California Energy Commission, "Air Pollution and Environmental Justice: Integrating Indicators of Cumulative Impact and Socioeconomic Vulnerability into Regulatory Decision-Making" (with Manuel Pastor, UC Santa Cruz, and Rachel Morello-Frosch, Brown University) \$691,922

2004 San Francisco Foundation, "Bay Area Environmental Health Collaborative: Research component," (with Manuel Pastor, UC Santa Cruz, and Rachel Morello-Frosch, Brown University) \$77,000

2001 The California Endowment “Building a Regional Voice for Environmental Health” – Research component (with Manuel Pastor, UC Santa Cruz, and Rachel Morello-Frosch, Brown University) \$997,000.

2000 California Wellness Foundation "Schools, Children’s Health, and Environmental Justice: a Research and Policy Initiative for California” (with Manuel Pastor, UC Santa Cruz, and Rachel Morello-Frosch, Brown University) \$100,000

1998 The California Endowment “Building a Regional Community-based Voice for Environmental Health” -- a collaborative partnership of Communities for a Better Environment,

Liberty Hill Foundation, Occidental College and University of California, Santa Cruz to combine quantitative GIS and environmental health research, community organizing, public education and technical assistance to improve public health in low-income communities of color in Los Angeles County by identifying and evaluating urban environmental hazards and developing strategies to reduce community exposure to toxic substances. (with Manuel Pastor, UC Santa Cruz, and Rachel Morello-Frosch, Brown University) \$1,700,000.

1997 National Science Foundation Instrumentation/Laboratory Improvement "Interactive Oceanography: Linking Shipboard and Classroom Learning Activities -- new instrumentation and software for automated data gathering, analysis, and integration into a GIS system and WWW server" \$42,000.

1996 Henry R. Luce Foundation: Henry R. Luce Professorship in Urban Environmental Studies - - new faculty position to establish a new Urban Environmental Studies Project, an interdisciplinary group of faculty and students, courses, research and public service programs focused on understanding urban environmental issues, and using metropolitan Southern California as a laboratory. \$780,000.

1996 US Army Corps of Engineers: Sediment Surveys of the Rancho Palos Verdes offshore area (Palos Verdes Peninsula, CA) Contract # DACA09-94-D-0004. Study to document current sedimentary conditions and toxic contaminant concentrations, and to predict the effects of cessation or curtailment of erosion associated with the Portuguese Bend landslide. \$65,000.

1994 Andrew W. Mellon Foundation: Mellon Resource Reclamation Program -- program in which students participate in the design of a municipal reclaimed water system on campus. Includes installation of a Geographic Information Systems computer facility, curriculum improvement and paid student internships. \$300,000.

1993 Mead Foundation, Inc. Environmental Analysis Laboratory instrumentation grant for Environmental Science and Policy Program, Occidental College \$50,000.

1992 American Chemical Society - Petroleum Research Fund "Holocene depositional history and sedimentary processes, measurement of historic rates of sediment accumulation in the Mugu Lagoon-barrier system, California" \$18,000.

1991 Pew Foundation Science Program "Curriculum improvement for science faculty from liberal arts colleges on incorporating global-scale environmental issues into the science curriculum" \$15,500.

1990 Pew Foundation Science Program "Environmental geology database for student writing assignments" \$8,000.

1986 South Carolina Coastal Council: University of South Carolina; curriculum design for residential coastal education center on Hilton Head Island, SC \$87,000.

GRANTS SUBMITTED PENDING SUPPORT

2009 National Institutes of Health, Geospatial Measures of Vulnerability to Climate Change Events and Mitigation Side-effects for Environmental Justice Communities (Co-Principal Investigator with Manuel Pastor, UC Santa and Rachel Morello-Frosch, UC Berkeley and Paul English, California Dept of Public Health) \$846,000.

2009 National Institute of Environmental Health Sciences, Geospatial Analysis of Climate Change Impacts and Health Literacy in San Diego County (Co-Principal Investigator with Manuel Pastor, UC Santa and Rachel Morello-Frosch, UC Berkeley and Joy Williams, Environmental Health Coalition), \$309,958

PUBLICATIONS

With Manuel Pastor, Jr. and Rachel Morello-Frosch, in press, Minding the Climate Gap: Implications of Environmental Health Inequities for Mitigation Policies in California: Environmental Justice.

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2007, LULUs of the Field: Research and Activism in Environmental Justice, Chapter 4 in Collaborations for Social Justice: Rowman and Littlefield Publishers, Plymouth, UK; Andrew L. Barlow, editor.

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2006, Breathless: Pollution, Schools, and Environmental Justice in California, Policy Studies Journal, vol. 34, no.3

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2005, The Air is Always Cleaner on the Other Side: Race, Space, and Air Toxics Exposures in California, Journal of Urban Affairs, vol. 27, no. 2. [Winner of the Best of Journal of Urban Affairs award for 2005].

With Manuel Pastor, Jr. Rachel Morello-Frosch, Carlos Porras, and Michele Prichard, 2005, Citizens, Science, and Data Judo: Leveraging Secondary Data Analysis to Build a Community-Academic Collaborative for Environmental Justice in Southern California, in Methods For Conducting Community-Based Participatory Research For Health, Jossey-Bass San Francisco, Barbara A. Israel, Eugenia Eng, Amy J. Schulz, and Edith A. Parker, Editors

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2005, Environmental Inequity in Metropolitan Los Angeles: in The Quest for Environmental Justice: Human Rights and the Politics of Pollution: Sierra Club Books, San Francisco; Robert D. Bullard, editor.

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2004, Waiting to Inhale: The Demographics of Toxic Air Release Facilities in 21st Century California: Social Science Quarterly, Volume 85, Number 2, June, 2004.

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2004, Reading, Writing and Toxics: Children's Health, Academic Performance, and Environmental Justice in Los Angeles: *Environment & Planning C: Government and Policy*, Volume 22, Number 2, p. 271 – 290.

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2002, Integrating Environmental Justice and the Precautionary in Research and Policy-Making: The Case of Ambient Air Toxics Exposures and Health Risks Among School Children in Los Angeles: *Annals of the American Academy of Political and Social Science*, v. 584, p. 47-68.

With Manuel Pastor, Jr. Rachel Morello-Frosch, and Carlos Porras, 2002, Environmental Justice in and Regional Equity in Southern California: Implications for Future Research: *Environmental Health Perspectives*, 110/2, 149-154

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2002, Who's Minding the Kids? Pollution, Public Schools, and Environmental Justice in Los Angeles: *Social Science Quarterly Special Issue: Social Science and the Environment*, 83/1, 263-280

With Caryl Becerra, 2001, Geochemical analysis of salt marsh restoration at Naval Air Weapons Station at Point Mugu, California - final report: UCLA Department of Organismic Biology, Ecology, and Evolution and the Naval Air Weapons Station at Point Mugu, California, for the Cal/EPA Regional Water Quality Control Board, Los Angeles Region (under 2001 Cleanup and Abatement Order number 98-017)

With Ronald Karpilo, 2001, Historic Shoreline Change and Sediment Supply in the Mugu Lagoon/Barrier System, California: in *Modern and Ancient Barrier, Lagoonal and Marine Environments, Ventura County, California*, Society of Economic Paleontologists and Mineralogists, Pacific Section, Book 90, D. Prothero editor, pp. 29-49.

With Manuel Pastor, Jr. and Rachel Morello-Frosch, 2001, Environmental Justice and Southern California's Riskscape: The Distribution of Air Toxics Exposures and Health Risks Among Diverse Communities: *Urban Affairs Review*, 36/4, 551-578.

With Manuel Pastor, Jr. and Hipp, John, 2001, Which Came First? Toxic Facilities, Minority Move-in, and Environmental Justice: *Journal of Urban Affairs* 23/1, 1-21.

With A. S. Alsharhan, 2000, Stylolites in Lower Cretaceous Carbonate Reservoirs. In: A.S. and R.W. Scott, editors, *Middle Eastern Models of Jurassic/Cretaceous Carbonate Systems SEPM Special Publication #69*, p.179-200.

With Manuel Pastor, Jr., J. Thomas Boer, and Lori. D. Snyder, 1999, Every Breath You Take ...: The Demographics of Toxic Air Releases in Southern California: *Economic Development Quarterly*, 13/2, May.

With Manuel Pastor, Jr., J. Thomas Boer, and Lori D. Snyder, 1997, Is There Environmental Racism? The Demographics of Hazardous Waste in Los Angeles County: *Social Science Quarterly*, v. 78/4 793 - 810. December 1997

With Boer, J. Thomas, 1996, In Whose Backyard? The Demography of Populations Proximate to Hazardous Waste Facilities in Los Angeles County: *Environmental Law News*, Environmental Law Section of the State Bar of California, v. 5/1, 10-16.

With Kendall, C.G.St.C., and Alsharhan, A.S., 1994, Holocene marine cement coatings on beachrock of the Abu Dhabi coastline (U.A.E.), an analog for cement fabrics in ancient limestone. *Carbonates and Evaporites*, v.9, n.2, pp. 119-131, U.S.A.

Sadd, J.L., 1991, Tectonic influences on carbonate deposition and diagenesis - Buckhorn Asphalt (Desmoinsian), Arbuckle Mtns, OK.: *Journal of Sedimentary Petrology*, v. 61, 28-42.

With Carson, R. J., 1991, An environmental geology database for use in writing assignments for teaching geology: *Journal of Geologic Education*, v39, 206-212.

With Kendall, C.G.St.C., and A.S Alsharhan, 1987, Holocene marine travertine of the Abu Dhabi coastline (U.A.E.) compared to Permian and Triassic marine travertine of the United States and Italy. *Proceedings for Conference on Quaternary Sediments in the Arabian Gulf and Mesopotamian Region, Kuwait*, 7-12.

Sadd, J.L., 1984, Carbonate sediment production and transport on a fringing reef, St. Croix, U.S. Virgin Islands: *Bull. Marine Science*, v. 34, 221-238.

With Hubbard, D.K., and H. H. Roberts, 1981, The role of physical processes in controlling sediment transport on the insular shelf of St. Croix, U.S. Virgin Islands: *Proc. Third Intl. Coral Reef Symp.* v. 1, , 145 p. 399-404.

With Hubbard, D.K, J.L. Miller, I. Gill, and R. Dill, 1981, The production, transportation, and deposition of carbonate sediments on the insular shelf of St. Croix, U.S. Virgin Islands: *West Indies Lab Technical Report MG-1*, 145 p.

With Gundlach, E.R., and K.J. Finkelstein, 1981, Impact and persistence of IXTOC I oil on the south Texas coast: U.S. Coast Guard, *Proceedings of Environmental Protection Agency/Am. Petroleum Institute Joint Conference on Prevention and Control of Oil Spills*, Atlanta, Georgia.

With Gundlach, E.R., G.I. Scott, L.C. Thebeau and D. Maiero, 1981. Oil spill sensitivity of coastal environments and wildlife, Norton Sound and the Pribilof Islands, Alaska. *NOAA Outer Continental Shelf Assessment Program*, 191 pp + 65 maps.

Author or co-author of thirty two proprietary consulting reports.

OTHER PROFESSIONAL ACTIVITIES

Independent geologic and GIS consulting: trace metal contaminant and geochemical analysis; petroleum reservoir studies; groundwater contamination/flow modeling (California); GIS/GPS data collection, spatial analysis and cartography.

Co-investigator, National Oceanic and Atmospheric Administration contract to the U.S. Geologic Survey Marine Geology Branch to search for offshore sources of building aggregate in the U.S. Virgin Islands and evaluate environmental impacts of the development plan. Included shipboard seismic profiling and field study of submarine canyon sedimentology conducted during two 7-day periods in NULS-1 (Hydrolab) underwater saturation research habitat.

Certified Open Water SCUBA Instructor by Professional Association of Diving Instructors

Co-investigator of atoll reef development in western Caribbean with the Smithsonian Institution Marine Systems Laboratory, Washington, D.C. Included wildlife capture for habitat displays in Smithsonian facility.

Invited author of three chapters on marine terraces, petroleum chemistry, marine pollution, geology and environmental health in 1989 McGill's Survey of Science Earth Science Series, Salem Press, Pasadena, CA.

Host for Earth Revealed, a 26-part television series produced by the Annenberg/CPB Project and designed as a college telecourse in introductory geology. National Academic Advisory Panel member for Project Discovery, a project to integrate video, experiential learning, and teacher training to support teaching of the National Standards for Science Education in public schools nationwide. Lead academic consultant for production of new version of Earth Revealed designed for pre-college classrooms.