

**Publications from Supported Research
1992-1993
ICS Contributions**

ARCHULETA, RALPH

"A Cooperative NRC/CEA Research Project on Earthquake Ground Motion on Soil Sites: Data and Preliminary Analysis." *Presented at the 10th International Conference on Structural Mechanics in Reactor Technology. (with Seale, Sandra H.).* (ICS Contribution #0110-20EQ)

"Garner Valley Downhole Array of Accelerometers: Instrumentation and Preliminary Data Analysis." *Bulletin of the Seismological Society of America. (with Seale, Sandra H., Sangas, Peter V., Baker, L. B., Swain, Scott T.).* (ICS Contribution #0118-28EQ)

CROWELL, JOHN C.

"The Significance of the Orocochia Mountains Region in the Displacement History of the San Andreas Fault System." *San Bernardino County Museum Association, Special Publication, 93-1.* (ICS Contribution #0140-34TC)

EVERETT, LORNE G.

"Vadose Zone Monitoring." *Geotechnical Practice for Waste Disposal, David E. Daniel, ed., Published by Chapman and Hall.* (ICS Contribution #0136-27HW)

"Innovative Solid Sampling Protocols and Its Affect on Remediation Strategies." *Presented at the European Communities' Joint Research Center in Ispra, Italy, September, 1992.* (ICS Contribution #0116-26HW)

"Direct and Indirect Pore-Liquid Monitoring in the Vadose Zone." *Presented at the European Communities' Joint Research Center, Ispra, Italy, September, 1992. (with Cullen, Stephen J., and Kramer, John.).* (ICS Contribution #0115-25HW)

GRATIER, JEAN-PIERRE

"Experimental Pressure Solution of Halite by an Indenter Technique." *Geophysical Research Letters.* (ICS Contribution #0147-32CM)

GRATIER, JEAN-PIERRE

"Pressure Solution as a Mechanism for Crack Sealing Around Faults: Natural and Experimental Evidence." *USGS: Involvement of Fluids in Faulting*. (with **Hellmann, R., and Chen, T.**). (ICS Contribution #0152-37TC)

KRAMER, JOHN

"Reply to 'Discussion of Vadose Zone Monitoring with the Neutron Moisture Probe by John Kramer, Stephen J. Cullen, and Lorne G. Everett, Ground Water Monitoring Review, v. 12, no. 3, pp. 177, Summer 1992' by Michael A. Williams." *Ground Water Monitoring & Remediation*. (ICS Contribution #0138-28HW)

"Review of Vadose Zone Flow and Transport Models." Submitted to: *L.G. Wilson, Editor, for inclusion in an upcoming book by Lewis Publ.* (with **Cullen, Stephen J.**). (ICS Contribution #0153-30HW)

"Vadose Zone Characterization and Monitoring Principles, Methods, and Case Studies; Book 2: Practical Handbook of Vadose Zone Monitoring." Submitted to: *L.G. Wilson, Editor, for inclusion in an upcoming book by Lewis Publ.* (with **Keller, Barry**). (ICS Contribution #0154-31HW)

LEES, JONATHAN

"Three-Dimensional Attenuation Tomography at Loma Prieta: Inverting t^* for Q ." Submitted to: *Journal of Geophysical Research*. (with **Lindley, Grant T.**). (ICS Contribution #0158-31EQ)

"Three-Dimensional Tomography of the 1992 Southern California Sequence: Constraints on Dynamic Earthquake Rupture?" *Geology*. (with **Nicholson, Craig**). (ICS Contribution #0167-38EQ)

LINDLEY, GRANT T.

"Source Parameters of the 23 April 1992, Joshua Tree, California, Earthquake, Its Largest Foreshock and Aftershocks." Submitted to: *Bulletin of the Seismological Society of America*. (ICS Contribution #0159-32EQ)

"Earthquake Source Parameters and the Frequency Dependence of Attenuation at Coalinga, Mammoth Lakes and the Santa Cruz Mountains, California." *Journal of Geophysical Research* (with **Archuleta, Ralph.**). (ICS Contribution #0117-27EQ)

"Variation of Seismic Site Effects in the Santa Cruz Mountains, California." *NEHRP Report to Congress, The 1989 Loma Prieta, California,*

Earthquake: Mainshock Characteristics, U.S. Geological Survey Professional Paper. (with Archuleta, Ralph). (ICS Contribution #0119-29EQ)

LUYENDYK, BRUCE P.

"Geological Expedition to King Edward VII Peninsula and the Ford Ranges, Marie Byrd Land." *Submitted to: Antarctic Journal of the United States. (with Smith, Christine).* (ICS Contribution #0149-36TC)

NICHOLSON, CRAIG

"Earthquakes Associated with Deep Well Injection Comments and Case Histories, Special Workshop on Induced Seismicity" *Proceedings of the 33rd U.S. Symposium on Rock Mechanics, J.R. Tillerson and W.R. Wawersik, eds., A.A. Balkema, Rotterdam.* (ICS Contribution #0166-37EQ)

"Triggered Earthquakes and Deep Well Activities" *Pure and Applied Geophysics. (with Wesson, R.L.).* (ICS Contribution #0168-39EQ)

OLDENBURG, CURTIS M.

"Modeling Transport Processes in Nonlinear Systems: The Example of Solidification and Convection." *Chaotic Processes in the Geological Sciences. D. Yuen, ed. IMA Volume in Mathematics and its Applications. (with Spera, Frank J.).* (ICS Contribution #0131-26CM)

RICHARD, STEPHEN

"Cooling History of the Northern Ford Ranges, Marie Byrd Land, West Antarctica." *Submitted to: Tectonics. (with Smith, Christine, Kimbrough, David, Fitzgerald, P.G., Luyendyk, Bruce, and McWilliams, M.O.).* (ICS Contribution #0146-35TC)

RODGERS, PETER W.

"Self-Noise Spectra for 34 Common Electromagnetic Seismometer/Preamplifier Pairs." *Lawrence Livermore National Laboratory.* (ICS Contribution #0148-30EQ)

ROSENBERG, NINA D.

"Convection in Porous Media With Thermal and Chemical Buoyancy: A Comparison of Two Models for Solute Dispersion." *Chaotic Processes in the Geological Sciences, D. A. Yuen, ed., IMA Volume in Mathematics and*

its Applications, Springer Verlag. (with **Spera, Frank J.**). (ICS Contribution #0132-27CM)

SPERA, FRANK J.

"Comment on 'Historical Review of a Long-Overlooked Paper by R. A. Daly Concerning the Origin and the Early History of the Moon' by Ralph B. Baldwin and Don Wilhelms." *Journal of Geophysical Research* (with **Stark, Lynne E.**). (ICS Contribution #0145-31CM)

"Verification of Onsager's Reciprocal Relations in a Molten Silicate Solution." *Science*. (with **Trial, Alain F.**). (ICS Contribution #0137-30CM)

STEIDL, JAMISON H.

"Variation of Site Response at the UCSB Dense Array of Portable Accelerometers." *Earthquake Spectra*. (ICS Contribution #0144-29EQ)

"The 1989 Loma Prieta, California, Earthquake: Are Geodetic Measurements and Rupture Models consistent?" *NEHRP Report to Congress, the 1989 Loma Prieta, California, Earthquake: Mainshock Characteristics*, U.S. Geological Survey Professional Paper. (with **Archuleta, Ralph J.**). (ICS Contribution #0120-30EQ)

STEIN, DANIEL J.

"Experimental Rheometry of Melts and Supercooled liquids in the System $\text{NaAlSiO}_4\text{-SiO}_2$: Implications for Structure and Dynamics." *American Mineralogist*. (with **Spera, Frank J.**). (ICS Contribution #0135-29CM)

SYLVESTER, ARTHUR G.

"Investigation of Nearfield Postseismic Slip Following the M_w 7.5 Landers Earthquake Sequence of 28, June 1992, California." *Geophysical Research Letters*. (ICS Contribution #0141-27EQ)

"Aseismic Growth of Durmid Hill, Southeasternmost San Andreas Fault, California." *Journal of Geophysical Research*. (with **Bilham, R., Jackson, M., Barrientos, S.**). (ICS Contribution #0142-28EQ)

TANIMOTO, TOSHIRO

"Seismic Constraints on Partial Melts Under Ridge Axes." *Submitted to: Journal of Geophysical Research. (with Stevenson, David J.).* (ICS Contribution #0143-24CS)

TRIAL, ALAIN

"Measuring the Multicomponent Diffusion Matrix: Experimental Design and Data Analysis for Silicate Melts. *Geochimica et Cosmochimica Acta. (with Spera, Frank J.).* (ICS Contribution #0151-34CM)

ULLOM, WILLIAM L.

"Standard Guide for Soil Gas Monitoring in the Vadose Zone." *National ASTM Book of Standards, vol. 4.08, Soil and Rock; Standard #D5314. (with Everett, Lorne G., and Cullen, Stephen J.).* (ICS Contribution #0134-25HW)

ZACHARY, SCOTT P.

"In-Situ Active/Passive Bioreclamation of Vadose Zone Soils Contaminated with Gasoline and Waste Oil Using Soil Vapor Extraction/Bioventing: Designing a Full Scale Remediation System from Laboratory Biotreatability Test Results." *Presented at the Second International Symposium and Conference for the Bioreclamation of Soils and Ground Water. (with Everett, Lorne G.).* (ICS Contribution #0139-29HW)

ZHANG, YU-SHEN

"S-wave Velocity, Basalt Chemistry and Bathymetry Along the Mid-Atlantic Ridge." *Submitted to: Physics of the Earth's Interior. (with Tanimoto, Toshiro, and Stolper, E.).* (ICS Contribution #0156-25CS)