

## Jerry M. Harris

### Education

1980 | Ph.D. Electrical Engineering California Institute of Technology

1974 | M.S. Electrical Engineering California Institute of Technology

1973 | B.S. Electrical Engineering University of Mississippi

### Professional Experience

2010-present | Associate Dean, Office of Multicultural Affairs, School of Earth Sciences

2007 - 2009 | Associate Dean for Academic Affairs, School of Earth Sciences

2005 - 2010 | Director, Center for Computational Earth & Environmental Science, Stanford University

2000 - 2005 | Chair, Department of Geophysics Stanford University

1998 - Present | Cecil and Ida Green Professor of Geophysics, Stanford University

1995 - 1996 | Petrobras Visiting Professor Universidade Federal Da Bahia, Brasil

1988 - 1998 | Associate Professor, Geophysics Department, Stanford University

1984 - 1988 | Research Geophysicist, Standard Oil Production Company, Dallas, Texas

1980 - 1984 | Senior Research Specialist, Exxon Production Research Company, Houston, Texas

1974 - 1977 | Staff Engineer, Communications Satellite Corporation, Clarksburg, Maryland

### Honors & Awards

2008 - Present | Cecil and Ida Green Professor of Geophysics

2002 - 2003 | Distinguished Lecturer, Society of Exploration Geophysicists and American Association of Petroleum Geologists

1998 - 2000 | University Fellow, Stanford

1995 - 1996 | Distinguished Lecturer, Society of Petroleum Engineers

1989 - 1994 | David and Lucille Packard Fellow

1978 - 1980 | Graduate Fellow, Hughes Aircraft Company

### University Service

2012-2013 | Leland Scholars Advisory Board

2011 - 2013 | VPUE Selection Committee for SU STEM Fellows

2011 - pres | DARE Mentor

2010 - 2011 | Member University Advisory Board

2007 - 2010 | Member, VPGE DARE Committee

2007 - 2008 | Member, Undergraduate Advisory Council

2007 - 2008 | Member, Committee on Academic Computing and Information Systems

2007 - 2008 | Member, University Committee on Committees

2007 - 2008 | Chair, PhD Oral Examinations: Energy Resources Engineering and Geological and Environmental Sciences

2006 - 2008 | Member, University Faculty Senate

2005 | Chair, PhD Committee, Management Science and Engineering

2003 - 2005 | Chair, SES Committee of Computational Geosciences

2002 - 2004 | Chair, SES Diversity Committee

2000 - 2002 | Member, Committee on Academic Appraisal and Achievement

2000 - 2005 | Chair, Department of Geophysics

2000 - 2001 | Member, Search Committee in Petroleum Engineering

2000 - 2001 | Member, University Search Committee, Director OCR

1999 - Present | Member, Earth Sciences Council

1999 - 2000 | Chair, Ph.D. Oral Examination, Chemistry Dept.

1999 - 2002 | Instructor, Stanford Summer Engineering Academy

1998 - 1999 | Member, Award Review Committee, Stanford Office of Technology and Licensing

1998 - 2000 | Co-Chair, Department Admissions Committee

1998 - 2000 | Member, Faculty Search Committee in Petroleum Engineering

1998 - 1999 | Member, Faculty Search Committee in Geophysics

1998 - 2000 | Freshman Advisor

1997 - 1998 | Coordinator, Department Ph.D. qualification exams

1997 - 1998 | Partners for Academic Excellence, Black Community Services Center

1996 - 2000 | Associate Chair, Department of Geophysics

1988 - Present | Director, Stanford Wave Physics Lab

## Professional Activities

2013 | Invited Speaker, AGU Meeting of the Americas, Cancun

2010 | Invited Speaker, NABGG, San Francisco

2011 | Invited Speaker, SIAM Conference on Mathematical and Computational Geosciences

2010 | Invited Speaker, AGU Meeting of the Americas, Iguassu Falls, Brazil

2006 - 2012 | Visiting Committee, Colorado School of Mines

2005 | Invited Speaker, SEG Development and Production Workshop on Seismic Attenuation, Austin, May 2005

2004 - 2006 | Member, DOE Merit Review Committee, NETL

2004 - 2005 | First Vice President, Society of Exploration Geophysicists†

2003 - 2007 | USNC/IUGG U.S. National Committee for Geodesy and Geophysics

2001 - 2003 | Member, National Research Council Committee on Staging Development of Nuclear Waste Repositories

1998 | Invited Speaker, SPE 1998 Archie Conference

1998 | Dept. of Energy Board on Carbon Sequestration

1995 - 2007 | Presidential nominee, MIT Visiting Committee for EAPS

## Courses Taught

2013 (Spring) | GP 385S Lectures of Waves (Enrolled 8)

2012 (Spring) | GP 240 Borehole Seismic Profiling (Enrolled 19)

2012 (A, W, S) | GP 185/385S Wave Physics (Enrolled 9)

2011 (Spring) | GP 240 Borehole Seismic Profiling (Enrolled 19)

2011 (A,W,S) | GP 185/385S Wave Physics (Enrolled 12)

2010 (A,W,S) | GP 185/385S Wave Physics (Enrolled 12)

2009 (A,W,S) | GP 185/385S Wave Physics (Enrolled 11)

2008 (A,W,S) | GP 185/385S Wave Physics (Enrolled 9)

2007 (A,W,S) | GP 185/385S Wave Physics (Enrolled 9)

2007 (Winter) | GP 240 Crosswell Seismic Profiling [Enrolled 6]

2006 (A,W,S) | GP 185/385S Wave Physics (Enrolled 12)

2006 (Winter) | GP157 Intro to Computational Earth Sciences [Enrolled 19]

2005 | GEOPHYS 185S/385S Sesmic Tomography` [Enrolled 3]

2005 | GEOPHYS 160 Wave w/Beroza & Claerbout [Enrolled 6]

2004 | GP 120 Frontiers in Geophysics Research [Enrolled 7]

2004 | GP 385S Seismic Tomography [Enrolled 2]

2004 | GP 385S Seismic Tomography [Enrolled 2]

2003 | GP120 Frontiers in Geophysics [Enrolled 0]

2003 | GP190 Applied and Environmental Geophysics [Enrolled 8]

2002 | GP400 Research in Geophysics [Enrolled 17]

2002 | GP240 Borehole Geophysics [Enrolled 9]  
2002 | GP385S Seismic Tomography [Enrolled 4]  
2002 | GP120 Frontiers in Geophysics (with Nur) [Enrolled 9]  
2002 | GP160 Waves (w Beroza and Claerbout) [Enrolled 5]  
2002 | GP399 Teaching Experience in Geophysics [Enrolled 1]  
2002 | GP255 Report on Energy Industry Training [Enrolled 1]  
2001 | GP399 Teaching Experience [Enrolled 2]  
2001 | GP190 Environmental and Applied Geophysics (w Fraser-Smith) [Enrolled 9]  
2001 | GP399 Teaching Experience [Enrolled 1]  
2001 | GP160 Waves-Waves Propagation (with Beroza, Claerbout) [Enrolled 10]  
2001 | GP400 Research 11 2001 GP185 Seismic Tomography [Enrolled 1]  
2001 | GP120 Frontiers of Geophysics [Enrolled 16]  
2000 | GP120 Frontiers of Geophysical Research (with Nur) [Enrolled 12]  
2000 | GP160 Waves-Waves Propagation (w/Claerbout, Beroza) [Enrolled 9]  
2000 | GP255 Energy Industrial Training [Enrolled 1]  
2000 | GP385 Seismic Tomography [Enrolled 4]  
2000 | GP4400 Research [Enrolled 6]  
1999 | GP120 Frontiers of Geophysics Research (with Nur) [Enrolled 13]  
1999 | GP160 Waves-Waves Propagation (w/Claerbout, Beroza) [Enrolled 9]  
1999 | GP190 Environmental and Applied Geophysics [Enrolled 12]  
1999 | GP385 Seismic Tomography [Enrolled 3]  
1999 | GP400 Research [Enrolled 5]  
1998 | GP400 Research [Enrolled 9]  
1998 | GP385 Seismic Tomography [Enrolled 6]  
1998 | GP251 Fundamentals of Linear Wave Phenomena [Enrolled 19]  
1998 | GP240 Borehole Seismic Tomography [Enrolled 12]  
1998 | GP220 Frontiers of Geophysics Research (with Nur) [Enrolled 14]

## Publications

2013\* | Zhu, T. and Harris J. M., Iterative joint inversion of P-wave and S-wave crosswell traveltimes data: 2013, *In preparation*

2013\* | Zhu, T., Harris J. M., and Quan Y., Data processing and estimation of pore pressure from time-lapse velocity data in McElroy, West Texas: 2013, *In preparation*

2013\* | Zhu, T., and Harris J. M., Delineating reservoir by boundary-preserving regularization

inversion: a case study: 2013, *To be submitted to Geophysics*

2013\* | Zhu, Tiejuan, J. M. Harris, A constant- $Q$  time-domain wave equation using the fractional Laplacian, Submitted for publication in *Geophysics*.

2013\* | Zhu, Tiejuan, J. M. Carcione, and J. M. Harris, Approximating constant- $Q$  seismic propagation in the time domain, In press, *Geophysical Prospecting*.

2012\* | Zhang, X, Zhang, Z, Xu, T., Bai, Z., and Harris, J.M., Phase shift approximation for the post-critical seismic wave: *J. of Geophysics and Engineering*, 9(5), 482-493

2012\* | Wang, S, J. Zhao, Z. Li, J. Harris, and Y. Quan, Differential Acoustic Resonance Spectroscopy for the acoustic measurement of small and irregular samples in the low frequency range, *J. of Geophysical Research*, Vol. 117, 13 pp.

2012\* | Um, E., D. Alumbaugh, J. Harris, and J. Chen, Numerical Modeling Analysis of Short-Offset Electric-Field Measurements with a Vertical Electric Dipole Source in Complex Offshore Environments, *Geophysics*, Vol. 77, No. 5, (September-October), P. E329-E341.

2012\* | Um, E., J. Harris, and D. Alumbaugh, An Iterative Finite-Element Time-Domain Method for Simulating 3D Electromagnetic Diffusion in Earth, *Geophysical Journal International*, Volume 190, issue 2 (August), p. 871-886.

2012 \* | Um, E., D. Alumbaugh, and J. Harris, A Lorenz-Gauge Finite-Element Formulation for Transient Controlled-Source Electromagnetic Modeling, Submitted to *JGR*.

2012 \* | Arogunmati, A. and M. J., Harris, An effective crosswell travelttime estimation approach for quasi-continuous reservoir monitoring, *Geophysics* **77**, 17-26

2011 | S. Zarantonello, B. Smithson, Y. Quan, and J. Harris, Super resolution of time-lapse seismic images, presented at the SPIE Conference of Defense, Security & Sensing, Baltimore.

2011 | T. Zhu and J. Harris, Iterative joint inversion of P-wave and S-wave crosswell travelttime data, Extended Abstract submitted to SEG Annual Meeting.

2011 | A. Arogunmati and J. Harris, Reservoir monitoring with True4D surface seismic data, Extended Abstract submitted to SEG Annual Meeting.

2011 | Y. Quan, Zhu, T., Harris, J., Burnstad, R., and Zarantonello, S., Image integration with learned dictionaries and application to seismic monitoring, Extended Abstract submitted to SEG Annual Meeting

2010 \* | Um E., J. Harris and D. Alumbaugh, 3-D time-domain simulation of electromagnetic diffusion phenomena: a finite-element electric-field approach, *Geophysics*, July/August, 2010

2010 | Arogunmati, A. and M. J., Harris, 2010, A data-estimation based approach for quasi-continuous reservoir monitoring using sparse surface seismic data: 72nd EAGE Conference & Exhibition, Extended Abstracts.

2010 \* | Bouko Vogelaar, David Smeulders, and Jerry Harris. Exact Expression for the Effective Acoustics of Patchy Saturated Rocks, *Geophysics*, July/August, 2010.

2009 | Youli Quan and Jerry Harris. Stochastic Seismic Inversion using both Waveform Data and Its Application to Time-Lapse Monitoring. Published 2009 SEG Las Vegas Annual Meeting.

2009 | Um E., J. Harris and D. Alumbaugh, a finite element algorithm for 3-D transient electromagnetic modeling, 2009, SEG Expanded Abstract.

2009 | Arogunmati, A. and M. J., Harris, 2009, An approach for quasi-continuous time-lapse seismic monitoring with sparse data: 79th Annual Meeting and International Exposition, SEG,

## Expanded Abstracts.

2009 | Bouko Vogelaar, David Smeulders, and Jerry Harris. Experimental evidence of the relation between the Biot-Gassmann modulus and the bulk modulus measured by DARS (Differential Acoustic Resonance Spectroscopy) of oil-saturated rocks, 2009, SEG International Exposition and Annual Meeting, 2189-2193

2008 | Santos, Eduardo T. F. and Jerry M. Harris, DynaSIRT: A Robust Dynamic Imaging Method Applied to CO2 Sequestration Monitoring, submitted to SEG Extended Abstracts 28 (2008).

2008 | Youli Quan and Jerry M. Harris. Stochastic Seismic Inversion using both Waveform and Traveltime Data and Its Application to Time-lapse Monitoring. SEG Expanded Abstracts 27, 1915. 2008 Differential Acoustic Resonance Spectroscopy (DARS) Measurements, 2008, Bouko Vogelaar, David Smeulders, and Jerry Harris, 70th EAGE Conference & Exhibition, I038.

2007 \* | Santos, E.T.F., Bassrei, A., Harris, J., The generalized cross validation method for the selection of regularization parameter in geophysical diffraction tomography, J. Acoustical Society of America, July 2007.

2007 \* | Hu, H., W. Guan, and J. M. Harris, Theoretical simulation of electroacoustic borehole logging in fluid-saturated porous formations, J. Acoustical Society of America, 122 (1), July, 135-145.

2007 \* | Ajo-Franklin, J. B., J. T. Geller, and J. M Harris (2007), Ultrasonic properties of granular media saturated with DNAPL/water mixtures, Geophys. Res. Lett., 34, L07404, doi:10.1029/2006GL029200.

2007 | Santos, Eduardo T. F. and Harris, Jerry M., Time-lapse diffraction tomography for trigonal meshes with temporal data Integration applied to CO2 sequestration monitoring, SEG Extended Abstracts 26, 2959 (2007).

2007 | Santos, E.T.F. Bassrei, A, and J. Harris. The generalized cross validation method for the selection of regularization parameter in geophysical diffraction tomography, JASA, July, 2007.

2007 | Santos, E.T.F., Harris, J., Bassrei, A., Costa, J.C.,. Regularized diffraction tomography for trigonal meshes applied to reservoir monitoring. Congresso Internacional da Sociedade Brasileira de Geofísica. Rio de Janeiro : Sociedade Brasileira de Geofísica, 2007. v. único.

2006 | Chuntang Xu, Jerry M. Harris, and Youli Quan, Estimating flow properties of porous media with a model for dynamic diffusion, 76th Annual Internat. Mtg: Soc. of Expl. Geophys, 2006

2006 \* | Ajo-Franklin, J.B., Urban, J.A., and Harris, J.M., Using resolution-constrained adaptive meshes for traveltome tomography, Journal of Seismic Exploration, 14: 371-392

2006 \* | Ajo-Franklin, Jonathan B., Jil T. Geller, Jerry M. Harris, A survey of the geophysical properties of chlorinated DNAPLS, J. of Applied Geophysics, Volume 59, Issue 3, July 2006, Pages 177-189.

2006 | Xu, Chuntang, Harris, Jerry M. and Youli Quan, Estimating flow properties of porous media with a model for dynamic diffusion, SEG Expanded Abstracts 25, 1831 (2006)

2005 \* | Wu, C., Harris, J.M., Nihei, K.T., Nakagawa, S., 2-D finite-difference seismic modeling of an open fluid-filled fracture: comparison of thin-layer and linear-slip models, Geophysics, Vol. 70, T57-T72.

2005 | Harris, J.M., Youli Quan and Chuntang Xu, Differential Acoustic Resonance Spectroscopy: An experimental method for estimating acoustic attenuation in porous media,

SEG Expanded Abstracts 24, 1569 (2005).

2005 | Ajo-Franklin, Jonathan B., Urban, Jaime and Jerry M. Harris, Temporal integration of seismic traveltimes tomography, SEG Expanded Abstracts 24, 2468 (2005).

2004 \* | Wu, Chunling and J.M. Harris, An optimized variable-grid finite-difference method for seismic forward modeling, Journal of Seismic Exploration, 12, 343-353.

2004 \* | Wu, C., Harris, J.M., 2004, Cross-well seismic modeling with inclusion of tube waves and tube-wave-related arrivals, Geophys. Res. Lett., Vol. 31, No. 11, L11606.

2004 \* | Ajo-Franklin, J.T. Geller, and J.M. Harris, The dielectric properties of granular media saturated with DNAPL/water mixtures, Geophysical Research Letters, 31, 2004.

2004 \* | Wu, C., Harris, J.M., An optimized variable-grid finite-difference method for seismic forward modeling, Journal of Seismic Exploration, Vol. 12, 343-353.

2004 | Wu, C., Harris, J.M., Daley, T.M., Majer, E.L., San Juan single-well seismic data analysis and modeling study, 74th Ann. Internat. Mtg., Soc. Expl. Geophys.

2004 | Wu, C., Harris, J.M., Daley, T.M., Majer, E.L., San Juan single-well seismic data analysis and modeling study, SEG Expanded Abstracts 23, 342 (2004).

2004 | Akintunde, Olusoga M., Harris, Jerry M. and Youli Quan. Cross-well seismic monitoring of Coal Bed Methane (CBM) production: A case study from the Powder River Basin of Wyoming, SEG Expanded Abstracts 23, 2307 (2004).

2004 \* | Pride, S. R., J. G. Berryman, and J. M. Harris, Seismic attenuation due to wave-induced flow: Journal of Geophysical Research, 109, B01201.01-B01201.19.

2003 \* | Day-Lewis, F, J.M. Harris, and S. Gorelick, Time-lapse inversion of crosswell radar data, Geophysics, Vol. 67, no. 6, November-December; p. 1740-1752.

2003 \* | Day-Lewis, J.W. Lane, J.M. Harris, and S.M. Gorelick, Time-lapse imaging of saline-tracer transport in fractured rock using difference-attenuation radar tomography, Water Resources Research, Vol. 39, No. 10, 1290

2003 \* | Pride, S.R., J.M. Harris, D. Johnson, A. Mateeva, K. Nehei, R. Nowack, J. Rector, H. Spetzler, R. Wu, T. Yamamoto, J. Berryman, M. Fehler, Permeability dependence of seismic amplitudes, The Leading Edge of Geophysics, p. 518-525, June 2003

2003 \* | Zhang, Z., G. Lin, J. Chen, J.M. Harris, and L. Han, Inversion for elliptically anisotropic velocity using VSP reflection traveltimes, Geophysical Prospecting, 2003, 51, 159-166

2003 | Ajo-Franklin, J.B., Geller, J.T., Majer, E.L., Peterson, J.E., Williams, K., Harris, J.M. Preliminary Characterization of a NAPL-Contaminated Site using Borehole Geophysical Techniques, 2003, Symp. App. Geop. Envi. Eng. Prob. (SAGEEP), EEGS

2003 | Wu, Chunling and Harris, Jerry M., Borehole seismic modeling with inclusion of tube waves and other tube-wave-related arrivals, SEG Expanded Abstracts 22, 2239 (2003).

2002 \* | Day-Lewis, Harris, J.M. and Gorelick, S.M., Time-lapse inversion of crosswell radar data, Geophysics, Vol 67, No 6., p. 1740-1752

2002 | Harris, Jerry M., Technology is important, The Recorder, Canadian Society of Exploration Geophysicists, Vol 27, December, 2002, p. 12-18

2002 \* | Mo, L.W. and Harris, J.M., Finite-difference calculation of direct-arrival traveltimes using the eikonal equation, Geophysics, Vol. 67, No. 4, p. 1270-1274

2002 | Wu, C., Harris, J.M. and K. T. Nihei, 2D finite-difference seismic modeling for a single fluid-filled fracture: comparison of thin-layer and linear-slip models, SEG Expanded Abstracts 21, 1959 (2002).

2002 | Wu, C., Harris, J., and Franklin, J.B., Single-well seismic modeling in viscoelastic media using a variable-grid finite-difference method, 2001, 71 st Ann. Internat. Mtg: Soc. of Expl. Geophys. (SEG), pp. 1155-1158.

2001 \* | Franklin, J. and J. M. Harris, A high-order fast marching scheme for the linearized eikonal equation, J. of Computational Acoustics, Vol. 9, No. 3, pp. 1095-1109

2001 | Wu, C., Harris, J.M. and J. Franklin, Single-well seismic modeling in viscoelastic media using a variable-grid finite-difference method, SEG Expanded Abstracts 20, 1155 (2001)

2000 \* | Wawersik, W., J.W. Rudicki, P. Dove, J.M. Harris, J.M. Logan, L. Pyrak-Nolte, F.M. Orr, P.J. Ortoleva, F. Richter, N. Warpinski, J. Wilson, and T. Wong. Terrestrial sequestration of CO<sub>2</sub>: an assessment of research needs. Advances in Geophysics, v. 43, pp. 97-177.

2000 \* | Hyndman, D., Harris, J.M. and S.M. Gorelick, Inferring the relation between seismic slowness and hydraulic conductivity in heterogeneous aquifers. Water Resources Research, v. 36, no. 8, pp. 2121-2132.

2000 | Daley, Thomas M., Majer, Ernest L, Gritto, Roland and Jerry M. Harris, Progress and issues in single well seismic imaging, SEG Expanded Abstracts 19, 1552 (2000).

1999 \* | Zhang, Z., G. Wang, and J.M. Harris. Multi-component wavefield simulations in extensively dilatancy anisotropic media. Physics of the Earth and Planetary Interiors, v. 114, pp. 25-38.

1999 | Pal, Arpita, Phan, Vinh and Jerry M. Harris, A model study for the effects of flow on seismic signatures, SEG Expanded Abstracts 18, 1040 (1999)

1998 | deRoque, Fernando, Harris, Jerry M. and Marco A. Barsotelli Botelho, Amplitude vs. Angle — Influence of petrophysical parameters in porous media, SEG Expanded Abstracts 17, 898 (1998).

1998 | Wang, Guan Y., Harris, Jerry M., Magalhaes, Claudia G., Julander, Dale, and Mike Morea, Buena Vista Hills 3-D attenuation and velocity tomography, SEG Expanded Abstracts 17, 346 (1998).

1998 | Wu, Xianyun and Harris, Jerry M., Seismic wave modeling in Poroelastic media using the generalized reflection/transmission(R/T) coefficients method, SEG Expanded Abstracts 17, 1799 (1998).

1996 | Quan, Youli, Chen, Xiaofei and Jerry M. Harris, Elastic waves in complex radially symmetric media, SEG Expanded Abstracts 15, 1995 (1996).

1996 | Harris, Jerry M., Yin, Feng and Youli Quan, Enhanced oil recovery monitoring using P-wave attenuation, SEG Expanded Abstracts 15, 1882 (1996).

1996 | Harris, Jerry M., Langan, Robert T., Fasnacht, Timothy, Melton, Danny, Smith, Bracken Sinton, John, and Henry Tan, Experimental verification of seismic monitoring of CO<sub>2</sub> injection in carbonate reservoirs, SEG Expanded Abstracts 15, 1870 (1996).

(Submitted) \* | Wang, Shangxu, Y. Quan and J. Harris, DARS based acoustic properties measurements of small and irregular samples at low frequencies, submitted to the J. Acoustical Society of America.

1969 | Um, Evan, J. Harris and D. Alumbaugh. A finite element algorithm for 3D transient electromagnetic modeling, 2009. Submitted to International Association of Mathematical



Geology Annual meeting, August.

## Advisee Degrees

2011 | Adeyemi Arogunmati, A Data-Estimation-Based Approach for Quasi-Continuous Seismic Reservoir Monitoring (British Petroleum)

2011 | Evan S. Um, Three-Dimensional Finite-Element Time-domain Modeling of the Marine Controlled Source Electromagnetics Method (Lawrence National Laboratory)

2008 | Tope Akinbehinje: Influence of Cleat Porosity and Water on Injectivity and Storage of CO<sub>2</sub> in Coal of the PRB, M.S. (Schlumberger)

2007 | Chuntang Xu: Estimation of Effective Compressibility and Permeability of Porous Materials with Differential Acoustic Resonance Spectroscopy, Ph.D. (Schlumberger)

2005 | Chunling Wu: Numerical modeling in complex media, Ph.D. (Chevron)

2005 | Jonathan Ajo-Franklin: The evaluation of seismic and radar methods for the detection of DNAPLS, Ph.D. (LBNL)

2005 | Olusoga Martins Akintude: Seismic monitoring of CBM production, M.S. (WesternGeco, Schlumberger)

2003 | David Wynn: Subsurface Monitoring for Carbon Sequestration, M.S. (Newmont Mining)

2001 | Ricardo Castellani: Incorporation of Seismic Intermediate Scale Data for Improving Reservoir Modeling, Ph.D. (Petrobras, Brazil)

2001 | Erminia Mallia-Zarb: Simulation of seismic attenuation in porous media, M.S. (GeoTrace Corp., England)

2000 | Erminia Mallia-Zarb: Attenuation anisotropy in layered media, M.S. (Geoquest Corp., Houston, Texas)

2000 | Arpita Pal: Flow and time-lapse seismic modeling, M.S. (Geographic Information Technology, Inc., Denver, Colorado)

1998 | Nicholas Smalley: A new CDP coordinate system for the sorting, velocity analysis, and imaging of crosswell reflection data, Ph.D. (Lockheed Systems, Mountain View, California)

1998 | Le-Wei Mo: Migration of cross-well seismic and VSP data, Ph.D. (Fairfield Industries, Houston, Texas)

## Advisee Publications

2004 | Coates, R.T., Wu, C., Eisner, L., 2004, Including tubewave effects in seismic wave simulations, 66th Mtg.: Eur. Assn. Geosci. Eng., 311.

2003 | Geller, J.T., Ajo-Franklin, J.B., and Majer, E.L. Effect of Immiscible Liquids on P-wave Transmission Through Natural Aquifer Samples, 2003, Symp. App. Geop. Envi. Eng. Prob. (SAGEEP), EEGS

2002 | Geller, J.T., Peterson, J.E., Williams, K.H., Ajo-Franklin, J.B., and Majer, E.L. First Field Test of NAPL Detection with High Resolution Borehole Seismic Imaging, 9th Biennial Intl. Conf. on Nuclear and Haz. Waste Management

2000 \* | Cruz, J.C.R, Urban, J., Garabito, G., 2000, Numerical analysis of 2.5-D true-amplitude diffraction stack migration. *Journal of Applied Geophysics*, 45, 83-96

1997 | Franklin, J.B. Minimum travelttime calculations in anisotropic media using graph theory, 67 th Ann. Internat. Mtg: Soc. of Expl. Geophys (SEG), pp. 1517-1520

## News & Media