CURRICULUM VITAE

Rob. L. Evans

Marine Geophysicist
Department Chair and Senior Scientist
Department of Geology and Geophysics
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Education

1985-1988	B.Sc. (Hons) Physics	Bristol University
1988-1991	Ph.D. Marine Geophysics	Bullard Labs, Cambridge University
1991-1994	Post Doctoral Fellow	Dept. of Physics, University of Toronto.

Graduate Supervisor: Dr. Martin. C. Sinha (Cambridge)

Postdoctoral Sponsor: Prof. R. Nigel Edwards (Toronto)

Professional Experience

1994-1998	Assistant Scientist	Dept. Geology and Geophysics, W.H.O.I.
1998-2002	Associate Scientist	Dept. Geology and Geophysics, W.H.O.I.
2002-2011	Associate Scientist (Tenured)	Dept. Geology and Geophysics, W.H.O.I.
2009	Visiting Scientist	Institute de Physique du Globe de Paris
2011-	Senior Scientist	Dept. Geology and Geophysics, W.H.O.I.
2015	Visiting Scientist	Earthquake Research Institute, Tokyo, Japan.
2015	Visiting Professor	Kobe University, Japan
2017-	Department Chair	Dept. Geology and Geophysics, W.H.O.I.

Professional Societies

AGU; Society of Exploration Geophysicists (SEG), Active Member.

Research Interests

The use of controlled source electromagnetic (CSEM) methods to measure the electrical resistivity of the seafloor in deep water, continental shelf and coastal environments.

Natural source electromagnetic (EM) techniques (i.e., Magnetotellurics (MT)) in oceanic and continental environments to look deeper into the mantle.

Active areas of research include:

- Hydrothermal circulation at midocean ridges.
- Melting processes beneath midocean ridges and subduction zones.
- Structure of the continental and oceanic lithosphere.
- Structural controls on groundwater discharge to the continental shelf.
- Mapping locations of shallow gas hydrates.
- Processes involved in coastal change.

Professional Activities and Outside Committees

Convener of Special Sessions, Fall AGU, 2001(1); 2011(1); 2012(3)
Organized workshop on coastal change, WHOI, 2004.
Congressional Testimony, House Subcommittee on Fisheries and Oceans, 2005.
Emsoc Steering Committee Member 2005-2009
Earthscope EM working Group Member 2005-2010
Continental Dynamics Panel, NSF, 2009; 2012
Secretary of AGU Ocean Sciences Section (Marine Geology and Geophysics) 2010-2012
AGU Fall Meeting Planning Committee, 2010-2012
NERC Geophysical Equipment Facility Steering Committee Member 2010-2015
Science advisor to Mass. Coastal Zone Management on Beach Scraping at Plum Island 2010
Member of the Interagency Transportation, Land Use, and Climate Change Cape Cod Pilot Project (Mass. Department of Transport), 2010
GeoPRISMS Steering and Oversight Committee 2011-2014
Associate Editor, J. Geophys. Res., Nov 1. 2012 -
Editorial Board Member, Marine Geophysical Research, Jan 2013-
Technical Advisory Committee, MassDOT-FHWA pilot project: climate change and extreme weather vulnerability assessments and adaptation options for the central artery, Boston, MA, 2013-2015
Amphibious Array Steering Committee, 2014-2015
"Future of the Amphibious Array" meeting, co-convener, Snowbird, Utah, October, 2014.
IRIS Electromagnetic Advisory Committee (EMAC), Chair, 2014-

Awards

WHOI Coastal Ocean Institute Fellowship 2006-2009
SERDP Project of the Year, RC-1702 Shoreline Evolution and Coastal Resiliency at Two Military Installations: Investigating the Potential for the Loss of Protecting Barriers, 2014.

Journal Publications

(* Denotes Student Authored Publication
# Denotes Post-Doc Authored Publication)
Citation index at: http://scholar.google.com/citations?user=sMJFODAAAAAJ

1. **Evans, R.L**., S.C. Constable, M.C. Sinha, C.S. Cox and M.J. Unsworth, Upper-Crustal Resistivity Structure of the East Pacific Rise Near 13N, Geophys. Res. Letts., 18, 1917-1920, 1991.

2. **Evans, R.L**. and M. E. Everett, Magnetotellurics and Mid-Ocean Ridge Melt Transport: A 2-D Perspective. *in* Mantle Flow and Melt Generation at Mid-Ocean Ridges Geophysical Monograph 71, A.G.U., 353-361, 1992.

3. **Evans, R.L.**, M.C. Sinha, S.C. Constable and M.J. Unsworth, On the electrical nature of the axial melt zone on the East Pacific Rise near 13N, J. Geophys. Res., 99, 577-589, 1994.

4. **Evans, R.L.** and M. E. Everett, Discrimination of hydrothermal mound structures using transient EM methods, Geophys. Res. Letts., 21, 501-504, 1994.

5. **Evans, R.L**., Constraints on the large scale porosity of young oceanic crust from seismic and resistivity data. Geophys. J. Int., 119, 869-879, 1994.

6. **Evans, R.L**., A seafloor gravity profile across the TAG hydrothermal mound, Geophys. Res. Letts, 23, 3447-3450, 1996.

7*. Cairns G., **R.L. Evans** and R.N. Edwards, A time domain electromagnetic survey of the TAG hydrothermal mound, Geophys. Res. Letts, 23, 3455-3458, 1996.

8. Becker, K., R.P. Von Herzen, J. Kirklin, **R.L. Evans**, M. Kinoshita, O. Matsubayashi, D. Kadko, R. Mills., A. Schultz and P. Rona, Observations of conductive heatflow from submersible surveys at the TAG active hydrothermal mound, Geophys. Res. Letts., 23, 3463-3466, 1996.

9. Wannamaker, P.E., A.D. Chave, J.R. Booker, A.G. Jones, J.H. Filloux, Y. Ogawa, M. Unsworth, P. Tarits and **R.L. Evans**, Sutures and deep physical state of the SE US Atlantic Margin: The southern Appalachians magnetotelluric experiment, EOS, 77, 329-333, 1996.

10*. Liming Yu, **R.L. Evans** and R. N. Edwards, Transient electromagnetic responses in seafloor with tri-axial anisotropy, Geophys. Journal Int., 129, 292-304, 1997.

11. **Evans, R.L.,** S. C. Webb, M. Jegen and K. Sananikone, Hydrothermal circulation at the Cleft-Vance overlapping spreading center: results of a Magnetometric Resistivity Survey, J. Geophys. Res., 103, 12,321-12,338, 1998.

12. **Evans, R.L.**, L.K. Law, B. St Louis, S. Cheesman and K. Sananikone, The Shallow Porosity Structure of the Eel Shelf, Northern California: Results of a Towed Electromagnetic Survey, Marine Geology, 154, 211-226, 1999.

13. **Evans, R.L.**, P. Tarits, A.D. Chave, A. White, G. Heinson, J.H. Filloux, H. Toh, N. Seama, H. Utada, J.R. Booker and M. Unsworth, Asymmetric electrical structure in the mantle beneath the East Pacific Rise at 17S, Science, 286, 756-759, 1999.

14. **Evans, R.L**., L.K. Law, B. St Louis and S. Cheesman, Buried paleo-channels on the New Jersey continental margin: channel porosity structures from electromagnetic surveying, Marine Geology, 170, 381-394, 2000.

15. Hirth, G., **R.L. Evans** and A.D. Chave, Comparison of Continental and Oceanic Mantle Electrical Conductivity: Is the Archean Lithosphere Dry? Geochem. Geophys. Geosyst., 1, doi:10.1029/2000GC000048, 2000.

16*. Hoefel, F. and **R.L. Evans**, Impact of Low Salinity Porewater on Seafloor Electromagnetic Data: a Means of Detecting Submarine Groundwater Discharge? Estuarine, Coastal and Shelf Science, 52, 179-189, 2001.

17. Jones, A.G., I.J. Ferguson, A.D. Chave, **R.L. Evans** and G.W. McNeice, The electric lithosphere of the Slave craton, Geology, 29, 423-426, 2001.

18. **Evans, R.L**., Measuring the Shallow Porosity Structure of Sediments on the Continental Shelf: A comparison of an Electromagnetic Approach with Cores and Acoustic Backscatter, J. Geophys. Res., 106 (C11), 27047-27060, 2001.

19. **Evans, R.L**., A.D. Chave, J.R. Booker, On the Importance of Offshore Data for Magnetotelluric Studies of Ocean-Continent Subduction Systems, Geophys. Res. Letts., 29, 10.1029/2001GL013960, 2002.

20. **Evans, R.L**., S.C. Webb and the RIFT-UMC Team, Crustal Resistivity Structure at 9 50N on the East Pacific Rise: Results of an Electromagnetic Survey, Geophys. Res. Letts., 29, 10.1029/2001GL014106, 2002.

21. **Evans, R.L.** and D. Lizarralde, Geophysical Evidence for Karst Formation Associated with Offshore Groundwater Transport: An Example from North Carolina, Geochem. Geophys. Geosyst., 4(8), 10.1029/2003GC000510, 2003.

22. Jones, A.G., P. Lezaeta, I.J. Ferguson, A.D. Chave, **R.L. Evans**, X. Garcia and J. Spratt, The electrical stucture of the Slave Craton, Lithos, 71, 505-527, 2003.

23. Sinha, M.C. and **R.L**. **Evans**, Geophysical constraints upon the thermal regime of the oceanic crust, in Mid-Ocean Ridges; Hydrothermal Interactions Between the Lithosphere and Oceans, Geophys. Monogr. Ser. Vol 148, edited by C.R. German, J. Lin, and L.M. Parsons, pp19-62, AGU Washington, 2004.

24. Goff, J.A., L.A. Mayer, P. Traykovski, I.V. Buynevich, R. Wilkens, R. Raymond, G. Glang, **R.L. Evans**, H. Olsen, and C. Jenkins, Detailed investigation of sorted bedforms, or "rippled scour depressions", within the Martha's Vineyard Coastal Observatory, Massachusetts, Continental Shelf Res., 25, 461-484, 2005.

25. **Evans, R.L.**, G. Hirth, K. Baba, D. Forsyth, A. Chave and R. Mackie, Geophysical controls from the MELT area for compositional controls on oceanic plates, Nature, 437, 249-252, 2005.

26#. Lezaeta, P., A.D. Chave, **R.L. Evans**, Correction of shallow-water electromagnetic data for noise induced by instrument motion, Geophys., 70, 127-133, 2005.

27#. Baba, K. A.D. Chave, **R.L. Evans**, G. Hirth and R. Mackie. Mantle dynamics beneath the East Pacific Rise at 17 S: Insights from the Mantle Electromagnetic and Tomography (MELT) experiment, J. Geophys. Res., 111, B02101, doi:10.1029/2004JB003598, 2006.

28*. Hamilton, M.P., A.G. Jones. **R.L. Evans**, S. Evans, C.J.S. Fourie, X. Garcia, A. Mountford, J. Spratt and the SAMTEX Team, Electrical anisotropy of South African lithosphere compared with seismic anisotropy from shear-wave splitting analyses, Phys. Earth Planet. Ints, 158, 226-239, 2006.

29#. Baba, K., P. Tarits, A.D. Chave, **R.L. Evans**, G. Hirth, and R. L. Mackie, Electrical structure beneath the northern MELT area of the East Pacific Rise, 15°45'S, Geophys. Res. Letts, 33, L22301, 10.1029/2006GL027528, 2006.

30. Mulligan, A., **R.L. Evans**, D. Lizarralde, The role of paleochannels in groundwater/seawater exchange, J. of Hydrology, 335, 313-329, 2007.

31. **Evans, R.L**., Using controlled source electromagnetic techniques to map the shallow section of seafloor: From the coastline to the edges of the continental slope, Geophysics, 72, 105-116, 2007.

32#. Lezaeta, P., A.D. Chave, A. Jones, **R.L Evans**, Source field effects in the auroral zone: Evidence from the Slave craton (NW Canada), Phys. Earth Planet. Ints., 164, 21-35, 2007.

33. Ashton, A., J. Donnelly, **R.L. Evans**, A Discussion of the Potential Impacts of Climate Change on the Shorelines of the Northeastern USA, Mitigation and Adaptation of Strategies for Global Change, 13, 719-743, 2008.

34*. Ellis, M., **R.L. Evans**, D. Hutchinson, P. Hart, J. Gardner, R. Hagen, Electromagnetic Surveying of Seafloor Mounds in the Gulf of Mexico, Marine and Petroleum Geology, doi:10.1016/j.marpetgeo.2007.12.006, 2008.

35. Eaton, D.W., F. Darbyshire, **R.L. Evans**, H. Grütter, A. Jones, and X. Yuan, The elusive lithosphere-asthenosphere boundary (LAB) beneath cratons, doi: doi:10.1016/j.lithos.2008.05.009, Lithos, 109, 1-22, 2009.

36. Jones, A.G., **R.L. Evans**, and D.W. Eaton Velocity-conductivity relationships for mantle mineral assemblages in Archean cratonic lithosphere based on extremal bounds, doi: 10.1016/j.lithos.2008.10.014, Lithos, 109, 131-143, 2009.

37. Jones, A.G., **R. L. Evans**, M.R. Muller, M.P. Hamilton, M.P. Miensopust, X. Garcia, P. Cole, T. Ngwisanyi, D. Hutchins, C.J. S. Fourie, M. Doucoure, T. Aravanis, Wayne Pettit, Sue Webb, Jan Wasborg, and The SAMTEX Team, Area selection for diamonds using magnetotellurics: Examples from southern Africa, Lithos, 112, supplement 1, 83-92, 2009.

38. Muller, M.R., A.G. Jones, **R.L. Evans,** H.S. Grütter, C. Hatton, X. Garcia, M.P. Hamilton, M.P. Miensopust, P. Cole, T. Ngwisanyi, D. Hutchins, C.J. Fourie, H.A. Jelsma, T. Aravanis, W. Pettit, S.J. Webb, J. Wasborg, and The SAMTEX Team, Lithospheric structure, evolution and diamond prospectivity of the Rehoboth Terrane and western Kaapvaal Craton, southern Africa: constraints from broadband magnetotellurics, Lithos, 112, supplement 1, 93-105, 2009.

39*. Chen, C.-W., S. Rondenay, **R.L. Evans** and D.B. Snyder, Geophysical detection of relict metasomatism from an Archaean subduction zone, Science, 326, 1089-1091, 2009.

40. Cohen, D., M. Person, P. Wang, C.W. Gable, D. Hutchinson, A. Marksamer, B. Dugan, H. Kooi, K. Groen, D. Lizarralde, **R.L. Evans**, F.D. Day-Lewis, and J.W. Lane, Origin and Extent of Fresh Paleowaters on the Atlantic Continental Shelf, Groundwater, 48, 143-158, 2010.

41. **Evans**, **R.L**., J. Escartin and M. Cannat, A Short Electromagnetic Profile Across the Kane Megamullion, Geophysical. Res. Letts., 37, doi:10.1029/2010GL043813, 2010.

42.# Matsuno T., N. Seama, **R.L. Evans**, A.D. Chave, K. Baba, A. White, T.-N. Goto, G. Heinson, G. Boren, A. Yoneda, and H. Utada, Mantle electrical resistivity structure beneath the central Mariana subduction system, Geochem., Geophys., Geosyst., 11, Q09003, doi:10.1029/2010GC003101**,** 2010.

43.* Miensopust, M.P., A.G. Jones, M R. Muller, X. Garcia, and **R.L. Evans**, Lithospheric structures and geometries in northeastern Botswana revealed through SAMTEX magnetotelluric profiling, J. Geophys. Res., 116, B02401, doi:10.1029/2010JB007740, 2011.

44. **Evans**, **R.L**., A. Jones, X. Garcia, M. Muller, M. Hamilton, S. Evans, S. Fourie, J. Spratt, S. Webb, H. Jelsma, D. Hutchins, The Electrical Lithosphere beneath the Kaapvaal Craton, Southern Africa, J. Geophys. Res., 116, doi:10.129/2010JB007883, 2011.

45. **Evans, R.L.** and D. Lizarralde, The Competing Impacts of Geology and Groundwater on Electrical Resistivity Around Wrightsville Beach, N.C., Continental Shelf Research, 31, 841-848 , 2011.

46. Szpak, M. T., X. Monteys, S. O'Reilly, A.J. Simpson, X. Garcia, **R.L. Evans**, C.C.R. Allen, D.J. McNally, D. Courtier-Murias, B.P. Kelleher, Geophysical and geochemical survey of a large marine pockmark on the Malin Shelf, Ireland, Geochem., Geophys., Geosyst., 13, Q01011, doi:10.1029/2011GC003787, 2012.

47. Jones, A.G., J. Fullea, **R. L. Evans** and M.M. Muller**,** Water in cratonic lithosphere: Calibrating laboratory-determined models of electrical conductivity of mantle minerals using geophysical observations, Geochem., Geophys., Geosyst., doi:10.1029/2012GC004055, 2012.

48. Key, K., S. Constable, T. Matsuno, **R.L. Evans**, D. Myer, Electromagnetic evidence for plate hydration due to bending faults at the Middle America Trench, Earth and Planet. Sci. Letts., 351-352, 45-53, 2012.

49.# Matsuno, T., **R.L. Evans**, N. Seama, A.D. Chave, Electromagnetic constraints on a melting region beneath the central Mariana back-arc spreading ridge, Geochem., Geophys., Geosyst., 13, Q10017, doi:10.1029/2012GC004326, 16pp, 2012.

50.* Naif, S., K. Key, S. Constable, **R.L. Evans**, Melt-rich channel observed at the lithosphere-asthenosphere boundary, Nature, 495, 356-359, doi:10.1038/nature11939, 2013.

51.* Khoza, D., A.G. Jones, M.R. Muller, **R.L. Evans**, S.J. Webb, M.P. Miensopust and the SAMTEX Team, Tectonic model of the Limpopo belt: constraints from magnetotelluric data, Precambrian Research, 226, 143-156, 2013.

52. Jones, A.G., S. Fishwick, **R.L. Evans**, M. M. Muller, and J. Fullea, Velocity-conductivity relations for cratonic lithosphere and their application: Example of Southern Africa, Geochem., Geophys., Geosyst., doi:10.1002/ggge.20075, 2013.

53. Pommier, A., **R.L. Evans**, K. Key, J. A. Tyburczy, S. Mackwell and J. Elsenbeck, Prediction of Silicate Melts Viscosity from Electrical Conductivity: A Model and its Geophysical Implications, Geochem., Geophys., Geosyst., doi:10.1002/ggge.20103, 2013.

54.* Carruthers, E.A., D.P. Lane, **R.L. Evans**, J.P. Donnelly, A.D. Ashton, Quantifying Overwash Flux in Barrier Systems: An Example from Martha's Vineyard, Massachusetts, USA., Marine Geology, 343, 15-28, doi:10.1016/j.margeo.2013.05.013, 2013.

55.* Khoza, D., A.G. Jones, M. Muller, **R.L. Evans**, M. Miensopust, S. Webb, Lithospheric structure of an Archean craton and adjacent mobile belt revealed from 2D and 3D inversion of magnetotelluric data: example from southern Congo craton in northern Namibia, J. Geophys. Res., 118, 4378-4397, doi:10.1002/jgrb.50258, 2013.

56.# Matsuno, T., A.D. Chave, A.G. Jones, M.M. Muller, **R.L. Evans**, Robust magnetotelluric inversion, Geophys. J. Int., doi:10.1093/gji/ggt484, 196, 1365-1374, 2014.

57. Hsu, S.K. C.-W. Chiang, **R. L. Evans**, C.-S. Chen, S.-D. Chiu,Y.-F. Ma, S.-C. Chen, C.-H. Tsai, S.-S. Lin, and Y. Wang, Marine controlled source EM method used for the gas-hydrate investigation in the area off SW Taiwan, J. Asian Earth Sciences, doi:10.1016/j.jseaes.2013.12.001, 92, 224-232, 2014.

58. Garcia, X., X. Monteys, **R.L. Evans**, M.T. Szpak, Constraints on a shallow offshore gas environment determined by a multidisciplinary geophysical approach: The Malin Sea, NW Ireland, Geochem., Geophys., Geosyst., 15, 867-885, doi:10.1002/2013GC005108, 2014.

59. **Evans, R.L.**, P.E. Wannamaker, R.S. McGary, J. Elsenbeck, Electrical Structure of the Central Cascadia Subduction Zone: The EMSLAB Lincoln Line Revisited, Earth and Planetary Sci. Letts., doi:10.1016/j.epsl.2013.04.021, 402, 265-274, 2014.

60.* McGary, R.S., **R. L. Evans**, P.E. Wannamaker, J. Elsenbeck, S. Rondenay, From slab to surface: Imaging the complete pathway for melt and fluids beneath Mount Rainier in the Cascadia subduction system, Nature, doi:10.1038/nature13493, 511, 338-341, 2014.

61. Wannamaker, P.E., **R.L. Evans**, P. Bedrosian, M.J. Unsworth, V. Maris, and R.S. McGary, Segmentation of Plate Coupling, Fate of Subduction Fluids, And Modes of Arc Magmatism in Cascadia, USA, Inferred from Magnetotelluric Resistivity, Geochem., Geophys., Geosyst., doi:10.1002/2014GC005509, 2014.

62.* Sarafian, E., **R.L. Evans**, J. Collins, J. Elsenbeck, G. Gaetani, J. Gaherty, G. Hirth, D. Lizarralde, The Electrical Structure of the Central Pacific Upper Mantle Constrained by the NoMelt Experiment, Geochem, Geophys. Geosyst. DOI:10.1002/2014GC005709, 2015.

63.* Naif, S., K. Key, S.C. Constable, **R.L. Evans**, Water-rich bending faults at the Middle America Trench, Geochem, Geophys., Geosyst., DOI:10.1002/2015GC005927, 2015.

64. Garcia, X., H. Seille, J. Elsenbeck, **R.L. Evans**, M. Jegen., J. Ledo, A. Lovatini, A. Marti, A. Marcuello, P. Queralt, C. Ranero and C. Ungarelli, Structure of the mantle beneath the Alboran Basin from Magnetotelluric Soundings, Geochem, Geophys., Geosyst, DOI:10.1002/2015GC006100, 2015.

64. Lin, P.-Y. P., J.B. Gaherty, G. Jin. J. Collins, D. Lizarralde, **R.L. Evans**, G. Hirth, Constraints on flow dynamics within the oceanic asthenosphere from a high resolution analysis of seismic anisotropy, doi:10.1038/nature18012, Nature, 535, 538-541, 2016.

65. Monteys, X. Hung P., Scott G., Garcia X., **Evans R.L.** , Kelleher, B., The use of multibeam backscatter angular response for marine sediment characterisation by comparison with shallow electromagnetic data, Applied Acoustics, 112, 181-191, 2016.

66. Naif, S., K. Key, S. Constable, **R.L. Evans**, Porosity and fluid budget of a water-rich megathrust revealed with electromagnetic data, Geochem, Geophys., Geosyst., doi:10.1002/2016GC006556, 2016.

67. Attias, E., **R.L. Evans**, J. Elsenbeck, S. Naif, K. Key, Conductivity Structure of the Lithosphere-Asthenosphere Boundary Beneath the Eastern North American Margin, Geochem, Geophys., Geosyst. doi:10.1002/2016GC006667, 2017.

68. Pommier, A. and R.L. Evans, Constraints on fluids in subduction zones from electromagnetic data, in press, Geosphere, 2017.

Book Chapters

Evans, R.L., Chapter 3: Earth's Electromagnetic Environment. Part 1. Conductivity of Earth Materials, in Chave, A.D., and A.G. Jones (eds.), The Magnetotelluric Method: Theory and Practice, Cambridge University Press, ISBN 9780521819275, 2012.

Non-Reviewed or Non-Journal Articles and Reports

1. Sohn, R., **Evans, R.L**., S.C. Webb, R. N. Edwards, J. Hildebrand, W. Crawford, E. Canuteson and M. Zumberge, Geophysical experiments during the MUSE experiment, InterRidge News, vol 4., 24-28, 1995.

2**. Evans, R.L**., A current affair, Oceanus, 41, 32-33, 1998.

3. **Evans, R.L.**, A new geophysical tool for shallow-water surveying, Annual Report of the Woods Hole Oceanographic Institution, p. 15-17, 2000.

4. **Evans, R.L.** (Editor) Report on Workshop and Shortcourse on Coastal Change, WHOI, 2004.

5. **Evans, Rob**, Just add more water, Nature, News and Views, 429, 356-357, 2004.

6. **Evans, Rob**, Rising sealevels and moving shorelines, Oceanus, 43, 2005. Also reprinted in "Management of Coastal Resources", ICFAI Press, 2007; and in "Climate Change in Context", GALE Publishing, 2007.

7. **Evans, Rob. L.**, Carbon in Charge, Science, Perspective, 322, 1338-1340, 2008.

8. **Evans, Rob. L**., MT and the Subduction Factory, Margins Newsletter, December, 2010.

9. **Evans, Rob. L.,** Making the Earth Move, Nature, News and Views, 509, 40-41, 2014

10. **Evans, Rob. L.,** J. Donnelly, A. Ashton, K.F. Cheung, V. Roeber, Shoreline Evolution and Coastal Resiliency at Two Military Installations: Investigating the Potential for the Loss of Protecting Barriers, SERDP Project RC-1702, Final Report, http://www.serdp.org/Program-Areas/Resource-Conservation-and-Climate-Change/Climate-Change/Vulnerability-and-Impact-Assessment/RC-1702/RC-1702-FR, 2014.

Selected Invited Talks and Conference Proceedings

1999 The MELT Experiment: Results of the MT Transect, European Geophysical Society.
2000 Melt Generation and Transport, RIDGE Integrated Studies Planning Meeting, DeKalb, Il.
2002 Geophysical Constraints upon the Thermal Regime of the Oceanic Crust, Interridge Theoretical Workshop (with Martin Sinha), Pavia Italy.
2007 Electrical Conductivity of the Oceanic Mantle: Constraints on Composition, Temperature and Melting Processes, Gordon Conference, Interior of the Earth, Mount Holyoke College, Mass.
2009 Structure of the Oceanic Mantle: Geophysical Constraints on Lithosphere Evolution, European Science Foundation Exploratory Workshop: Defining the Lithosphere-Asthenosphere Boundary, Dublin, June 2009.
2014 Shoreline Evolution and Coastal Resiliency at Two Military Installations: Investigating the Potential for and Impacts of Loss of Protecting Barriers, Eastern Coastal Infrastructure and Climate Change Workshop, Washington DC, Feb. 2014.
2014 MT and Subduction Zones: Improving Models and Interpretations Through Use of Independent Constraints, Integrated Electromagnetics Event, Schlumberger, Milan Italy, September, 2014.

Sea-Going Experience

1. 1988 RRS Discovery Josephine Seamount, offshore Portugal.
Seismic refraction survey.

2. 1989 RRS Charles Darwin East Pacific Rise, 13 N.
Controlled source EM (CSEM) across the ridge crest.
3. 1992 R/V Endeavour Juan de Fuca Ridge, Endeavour segment and Explorer Ridge.
Passive EM, towed EM, camera tows, CTD tow-yos.
4. 1993 R/V Atlantis II TAG, Mid-Atlantic Ridge
Alvin dive program using time domain EM to survey the TAG hydrothermal mound.
5. 1993 R/V Melville Juan de Fuca Ridge, Middle Valley and Axial seamount.
Towed EM, Passive EM, Micro-seismicity and refraction, seafloor gravity survey.
6. 1994 R/V New Horizon Juan de Fuca Ridge, Cleft Segment.
An MMR survey of the Cleft-Vance OSC.
7. 1994 R/V Yokosuka Mid-Atlantic Ridge, TAG.
Shinkai Dive program at the TAG hydrothermal mound. Seafloor gravity, deployment of thermistor arrays, regional geology and chemistry.
8. 1996 R/V Thompson Southern East Pacific Rise. MELT II.
MT instrument deployment and OBS recovery.
9. 1996 R/V W. McGaw Eel River Shelf.
(Chief Scientist) Towed EM survey within the ONR strataform area.
10. 1997 R/V Melville Southern East Pacific Rise. MELT III.
Magnetotelluric array recovery.
11. 1997 R/V Atlantis East Pacific Rise, 9N.
Tilt meter deployment.
12. 1998 R/V Oceanus New Jersey Margin
(Co-Chief Scientist) Towed EM survey.
13. 1998 R/V Atlantis East Pacific Rise, 9N.
Tilt meter Recovery
14. 2000 R/V Melville East Pacific Rise, 9N.
(Co-Chief Scientist) MMR experiment
15. 2000 R/V Cape Hatteras Wrightsville Beach, NC.
(Chief Scientist) Towed EM survey
16. 2002 R/V Cape Henlopen Martha's Vineyard, MA.
(Chief Scientist) Seismic survey
17. 2003 R/V Connecticut Martha's Vineyard, MA.
(Chief Scientist) Towed EM survey
18. 2003 R/V Gyre, Gulf of Mexico
Gas hydrates survey
19. 2004 R/V Pelican, Gulf of Mexico
(Chief Scientist) Towed EM and deep tow camera survey of hydrate mounds
20. 2005 R/V Magnus Heinason, Faroe Islands
(Chief Scientist) MT instrument recovery
21. 2006 MMV Atlantic Guardian
Client representative for industry marine CSEM survey.
22. 2006 R/V Kairei, Mariana Subduction System
Recovery of seafloor MT instruments
23. 2007 MMV REM Angler
Client representative for industry marine CSEM survey.
24. 2007 MMV Siem Mollie
Client representative for industry marine CSEM survey.
25. 2009 R/V Endeavor

(Chief Scientist) Towed EM survey at Kane Megamullion.

26. 2010 R/V OR1
Towed EM survey of gas seeps off Taiwan

27. 2010 Isla de Alboran
Seafloor MT deployment in the Alboran Sea.

28. 2013 R/V Connecticut
(Chief Scientist) Deployment of seafloor instruments off Martha's Vineyard

29. 2015 R/V Marcus Langseth
(Co-Chief Scientist) Marine CSEM Survey for freshwater offshore New Jersey and Martha's Vineyard.

30. 2016 R/V Neil Armstrong
(Chief Scientist) Science verification cruise and testing of ship operations.

Field-Work

1997, 1998 Glenn Canyon	EM measurements of eolian sandstone
1998, 1999 Yellowknife, NWT Canada	Lakebottom MT deployment
2000, 2001 Wrightsville Beach, North Carolina	Resistivity Profiles
2003 -2005 Southern Africa	SAMTEX -MT profile across the Kaapvaal craton and its surrounding terranes
2009 Massachusetts (various)	Beach Studies
2010 Destin, Florida	Barrier Beach Studies
2011 Destin, Florida	Barrier Beach Studies
2011 Zambia	MT studies of the East African Rift
2012 Zambia	MT studies of the East African Rift

WHOI Committees

Assistant Scientist Advisory Committees

2007-2011	Andrew Ashton
2003-2007	Ilya Buynevich
2002-2006	Jeff Donnelly
2002-2006	Liviu Giosan

Associate Scientist Advisory Committees

2011-2015	Andrew Ashton
2006-2013	Liviu Giosan
2008-2012	Pablo Canales
2006-2010	Dan Lizarralde
2006-2009	Jeff Donnelly
2000-2004	Wenlu Zhu

Ad-Hoc Promotion Committees:

2013	James Kinsey (Chair)
2011	Andrew Ashton
2009	Sarah Das
2007	Ilya Buynevich
2007	Liviu Giosan

2006 Jeff Donnelly
2006 Ann Mulligan
2004 Wenlu Zhu
2004 Peter Traykovski (Chair)

COI Science Advisory Committee: 2002-2009
Staff Committee Co-Chair, 2006-2008
SciSec, 2012-2014
Deep Submergence Advisory Committee, 2015-
Marine Operations Committee, 2015-2017
Institution Staff Council, 2017-

Role in WHOI Education Program

Classes Taught:

1996, 1998, 2002, 2008 Advanced Marine Geophysics, Marine Electromagnetic Methods.

Post-Doctoral Fellows and Investigators:

2001-2002 Ilya Buynevich
2001-2003 Pamela Lezaeta
2006-2007 Andrew Ashton
2008-2010 Tetsuo Matsuno
2013 Shane McGary

Students Advised:

1999-2000 Fernanda Hoefel (Pre-General's Academic Advisor)
2003-2004 Lisa Lassner (Master's student)
2008-2010 Emily Carruthers (Master's Student)
2007-2012 Shane McGary
2012-2017 Emily Sarafian

Student Committees:

2000 Carolyn Gramling (Generals Exam Committee)
2000 Fernanda Hoefel (Generals Exam Committee)
2002 Brian de Martin (Generals Exam Chair)
2003 Fernanda Hoefel (Chair Thesis defense)
2003 Amy Draut (Chair Thesis defense)
2007 Fern Gibbons (JCMGG representative on Generals committee)
2008 Jon Woodruff (Chair Thesis defense)
2008 Andrea Burke (JCMGG representative on Generals committee)
2010 Michael Toomey (JCMGG representative on Generals committee)
2010 Arthur Olive (JCMGG representative on Generals committee)
2011 Min Ding (JCMGG representative on Generals committee)
2012 Claire Bucholz (JCMGG representative on Generals committee)
2012 Min Ding (Chair Thesis Proposal Presentation)
2012 Alejandra Ortiz (Chair/JCMGG representative on Generals committee)
2013 Helen Feng (Chair/JCMGG representative on Generals committee)
2013 Jaap Nienhuis (Chair/JCMGG representative on Generals committee)
2013 Michael Toomey (Chair Thesis defense)
2014 Alejandra Ortiz (Committee member Thesis Proposal Presentation)

2014 Min Ding (Chair Thesis defense)
2015 Alejandra Ortiz (Chair Thesis defense)
2016 Helen Feng (Chair Thesis defense)
2016 Katie Castagno (Chair Generals Exam Committee)

Summer Student Fellows:
1995 Margaret Edie
1998 Patty Hines (Minority Trainee)
2001 Takako Noda
2007 Caroline Martin

Guest Students:
2000 David Robinson (Flinders University, Australia)
2006 Michelle Ellis (Southampton, UK)
2006 Mark Hamilton (DIAS, Ireland)
2007 Patricia Bowie (Duke University)
2009 Holly Taylor (Northeastern University);
2011 Matthew Chamberlain; David Margolius; Colin Skinner (Northeastern University);

Student committees at external universities:
2002 Greg Schultz, Georgia Tech.
2003 Juan Yuan, Dept of Physics, University of Toronto
2014 Maik Neukirch, University of Barcelona
2015 Duygu Kiyan, National University of Ireland, Galway.

Summer Student Fellowship admissions committee 2002, 2003
G&G Post-Doc selection and mentoring Committee (Chair) 2006-2009
JCMGG Member 2006-2009
JCMGG Chair August 2010-2013

Active Collaborators in Last 2 years:

WHOI – Alan Chave, Jeff Donnelly, Porter Hoagland, Dan Lizarralde, Andrew Ashton.

External – Estella Atekwana, Kiyoshi Baba, Steve Constable, Dave Eaton, Xavi Garcia, Greg Hirth, Marion Jegen, Alan Jones, Kerry Key, Alan Levander, Tetsuo Matsuno, Mark Muller, Anne Pommier, Stephane Rondenay, Nobukazu Seama, Mark Person, Phil Wannamaker.

Abstracts

1990

1. **Evans, R.L**., M.C. Sinha, S.C. Constable, C.S. Cox, M. Unsworth, Crustal resistivity structure of the East Pacific Rise near 13N, EM Induction Workshop, Ensenada, 1990.

1991

2. **Evans, R.L.**, M.C. Sinha, S.C. Constable, C.S. Cox, M. Unsworth, Crustal resistivity structure of the East Pacific Rise near 13N, EGS, Wiesbaden, 1991.

3. **Evans, R.L**., S.C. Constable, M.C. Sinha, C.S. Cox, M. Unsworth, Upper-crustal resistivity Structure of the East Pacific Rise Near 13N, Eos Trans. AGU, 72, 1991.

1993

4. Jegen, M., R.N. Edwards, **R.L. Evans**, A vertical gradient magnetic sounding of the Juan de Fuca ridge, CGU, Banff, 1993.

5. **Evans, R.L.**, G. Cairns, R.N. Edwards, A transient electromagnetic investigation of the TAG hydrothermal mound, Eos Trans. AGU, 74, 1993.

1994

6. Edwards, R.N., **R.L. Evans**, M. Jegen, K. Sananikone and S.C. Webb, Magnetometric resistivity sounding of the Juan de Fuca Ridge, Eos Trans. AGU, 75, 1994.

7. Ortega-Osorio, A., S.D. Scott, R. Binns and **R.L. Evans**, Physical characteristics of hydrothermal buoyant plumes at the eastern Manus basin, Papua New Guinea, Eos Trans. AGU, 75, 1994.

8. **Evans, R.L.** and H.O. Seigel, A seafloor gravity survey across the TAG hydrothermal mound, Eos Trans. AGU, 75, 1994.

9. Fujioka, K., R. Von Herzen, T. Gamo, H. Chiba, H. Masuda, M. Kinoshita, O. Matsubayashi, A. Nishizawa, N. Seama, **R.L. Evans**, H. Edmonds, J. Kirklin, and M. Aoki, Geology, Geophysics and fluid chemistry of the TAG hydrothermal mound, Mid-Atlantic Ridge: Preliminary results of the MODE 94 cruise, Eos Trans. AGU, 75, 1994.

1995

10. **Evans, R.L.**, R.N. Edwards, M. Jegen, S.C. Webb and K. Sananikone, An MMR survey of the overlapping spreading centre, northern Cleft Segment, Juan de Fuca Ridge, Eos Trans. AGU, 76, 1995.

11. **Evans, R.L.**, A seafloor gravity survey across the TAG hydrothermal mound, Eos Trans. AGU, 76, 1995 (Invited).

1996

12. **Evans, R.L**., L.K. Law, B. St Louis, S. Cheesman and K. Sananikone, The porosity structure of the northern Californian shelf off Humboldt Bay: Results of a shallow electromagnetic survey, Eos Trans AGU, 77, 1996 (Invited).

13. Hirth, G., **R.L. Evans** and A.D. Chave, Constraints on the temperature and water content of oceanic and cratonic mantle from electrical conductivity profiles, Eos Trans. AGU, 77, 1996.

14. Wannamaker, P.E. A.D. Chave, J.R. Booker, A.G. Jones, J.H. Filloux, Y. Ogawa, M. Unsworth, P. Tarits, and **R.L. Evans**, Magnetotelluric experiment probes deep physical state of Southeastern U.S., Eos Trans. AGU, 77, 1996.

1997

15. **Evans, R.L.**, L.K. Law, B. St Louis, S. Cheesman and K. Sananikone, The sedimentary structure of the Californian shelf off Humboldt bay determined by a towed electromagnetic system. Proc. Symp. on the Application of Geophysics to Eng. and Environ. Problems, Vol II 937-946, SAGEEP, Reno, 1997.

1998

16. Heinson, G., A. White, **R.L. Evans**, A.D. Chave, P. Tarits, H. Toh, T. Goto, H. Utada, N. Seama, K. Baba, J.H. Filloux, J.R. Booker and M. Unsworth, The MELT experiment: Magnetotelluric data, Eos Trans AGU, 79, 1998.

17. **Evans, R.L.**, A.D. Chave, G. Heinson, A. White, H. Toh, T. Goto, H. Utada, P. Tarits, N. Seama, K. Baba, J.H. Filloux, M. Unsworth and J.R. Booker, The MELT experiment: Preliminary inversion and modeling results, Eos Trans. AGU, 79, 1998.

18. Tarits, P., A.D. Chave, **R.L. Evans**, J.H. Filloux, G. Heinson, K. Baba, N. Goto, Along axis mantle electrical conductivity heterogeneities, Eos, Trans. AGU, 79, 1998.

19. Chave, A.D., **R.L. Evans**, G. Heinson, A. White, H. Toh, T. Goto, H. Utada, P. Tarits, N. Seama, K. Baba, M. Unsworth, J.R. Booker, and J.H. Filloux, The MELT experiment: Inversion of MT responses, Proc. 14th Workshop on Electromagnetic Induction in the Earth, Sinaia, Romania, August 16-23, 1998.

20. Heinson, G., A. White, **R.L. Evans**, A.D. Chave, P. Tarits, H. Toh, T. Goto, H. Utada, N. Seama, K. Baba, J.H. Filloux, M. Unsworth, and J.R. Booker, The MELT experiment: Magnetotelluric data, Proc. 14th Workshop on Electromagnetic Induction in the Earth, Sinaia, Romania, August 16-23, 1998.

1999

21. **Evans, R.L.**, A.G. Jones and A.D. Chave, Deep EM studies of the Slave craton, in LITHOPROBE report 69, SNORCLE and Cordilleran tectonics workshop, 1999.

22. Jones, A.G., I.J. Ferguson, G. McNeice, **R.L. Evans** and A.D. Chave, Electromagnetic studies of the slave craton: preliminary results and ongoing experiments in LITHOPROBE report 69, SNORCLE and Cordilleran tectonics workshop, 1999.

23. **Evans, R.L.**, A.D. Chave, G. Heinson, A. White, P. Tarits, H. Toh, M.J. Unsworth, J.R. Booker, T. Goto, H. Utada, N. Seama, K. Baba, J.H. Filloux, The MELT Experiment: Results of the MT Transect, European Geophysical Society, 1999.

24. **Evans, R.L.**, A.D. Chave, G. Heinson, A. White, P. Tarits, H. Toh, M.J. Unsworth, J.R. Booker, T. Goto, H. Utada, N. Seama, K. Baba, J.H. Filloux, Results of the MT Transect of the MELT experiment, Eos Trans. AGU, 80, 1999.

25. **Evans, R.L.,** A. Jones, A.D. Chave and I. Ferguson, Electromagnetic studies of the mantle beneath the World's oldest craton, Eos Trans. AGU, 80, 1999.

26. Hoefel, F., and **R.L. Evans**, Impact of low salinity porewater on seafloor electromagnetic data: a means of detecting submarine groundwater discharge? Eos Trans. AGU, 80, 1999 (Invited).

2000

27. Chave, A.D., **R.L. Evans**, P. Tarits, and MELT Team Asymmetric mantle electrical structure beneath the East Pacific Rise at 17S, 15th Workshop on EM Induction in the Earth, Brazil, 2000.

28. **Evans, R.L.**, L. Law, and B. St Louis, The resistivity structure of continental shelf sediments: Surveys on the East and West Coast U.S. margins, 15th Workshop on EM Induction in the Earth, Brazil, 2000.

29. **Evans, R.L.**, A.D. Chave, and J.R. Booker, Electrical connection of the ocean and mantle at a subduction zone: Model study for the Andes at 21S, 15th Workshop on EM Induction in the Earth, Brazil, 2000.

30. Tarits, P., A.D. Chave, and **R.L. Evans**, Along ridge changes in the mantle electrical conductivity structure beneath the EPR between 17 and 15 South, 15th Workshop on EM Induction in the Earth, Brazil, 2000.

31. Jones, A.G., I.J. Ferguson, A.D. Chave, **R.L. Evans**, and G.W. McNeice, The electric lithosphere of the Slave Craton, 15th Workshop on EM Induction in the Earth, Brazil, 2000.

32. Chave, A.D., **R.L. Evans**, A.G. Jones, and J.H. Filloux, Deep lake bottom magnetotelluric sounding in the Slave Craton, 15th Workshop on EM Induction in the Earth, Brazil, 2000.

2001

33. **Evans, R.L**. and D. Lizarralde, A Combined EM and Chirp Seismic Survey Offshore North Carolina. Eos Trans AGU, 82, 2001.

34. Jones, A.D., I.J. Ferguson, A.D. Chave, **R.L. Evans** and J. Spratt, Slave Electromagnetic Studies, Slave-Kaapvaal workshop, Merrickville, Ontario, 2001.

35. **Evans, R.L.**, A.D. Chave, A. Jones and J. Filloux, Deep Lake-Bottom Magnetotelluric Sounding in the Slave Craton, Slave-Kaapvaal workshop, Merrickville, Ontario, 2001.

36. Mulligan A., **R.L. Evans**, D. Lizarralde, Fluvial channels offshore North Carolina: a route for groundwater discharge ? Geol. Soc. Am. meeting, Boston, Nov. 2001.

37. Mulligan, A., **R.L. Evans**, D. Lizarralde, Fluvial channels on the continental shelf: Using EM to understand their role in hydrology, Eos Trans AGU, 82, 2001.

38. **Evans, R.L.**, S.C. Webb and the RIFT-UMC Team, Crustal resistivity structure at 9 50 N on the East Pacific Rise: Preliminary results of an MMR survey, Eos Trans AGU, 82, 2001.

39. Wannamaker, P E, A.D. Chave, J.R. Booker, A.G. Jones, M.J. Unsworth, **R.L. Evans**, Y. Ogawa, Lithospheric Architecture And Anisotropy Below The Southern Appalachians Compressional Orogen From Electrical Conductivity Structure, Eos Trans AGU, 82, 2001.

2002

40. **R.L. Evans**, S.C. Webb and the RIFT-UMC Team, 16th workshop on EM induction in the Earth, Santa Fe, 2002.

41. **R.L. Evans**, D. Lizarralde, A. Mulligan, Using EM to Understand Groundwater Processes on the Continental Shelf, 16th workshop on EM induction in the Earth, Santa Fe, 2002.

42. P. Lezaeta, A. Chave, **R.L. Evans** and A. Jones, Study of Auroral soruce field effects on the Slave Craton, NW Canada, 16th workshop on EM induction in the Earth, Santa Fe, 2002.

43. A. Jones, P. Lezaeta, A. Chave, **R.L. Evans**, X. Garcia, I. Ferguson, Lithospheric mantle Structure of the Slave Craton, 16th workshop on EM induction in the Earth, Santa Fe, 2002.

44. M. Sinha and **R.L. Evans**, Geophysical constraints upon the thermal regime of the oceanic crust, Interridge Theoretical Workshop, Pavia Italy, 2002 (invited).

45. Baba, K., A.D. Chave, A.D., **R.L. Evans,** R.L. Mackie, Conductivity Structure of the Upper Mantle Beneath the Southern East Pacific Rise Obtained by Topographic Correction and Anisotropic Inversion of the MELT EM Data, Eos Trans AGU, 83, 2002

46. Buynevich, I.V., **R.L. Evans**, S.G. Schock, R.H. Wilkens, J.A. Goff, P. Traykovski, C. Jenkins, G. Quentin, J. Wulf, C. Vaczo, H. Nieto, H. Gittings Geometry and Sedimentary Characteristics of a Submerged Proglacial Spring-Sapping Valley, Offshore Martha's Vineyard, Massachusetts, Eos Trans AGU, 83, 2002

47. Goff, J.A., L. Mayer, B. Schwab, P. Traykovski, R. Wilkens, C. Jenkins, B. Kraft, **R.L. Evans**, I. Buynevich, Site Survey of the Martha's Vineyard Coastal Observatory: Backscatter, Grain Size and Temporal Evolution of Rippled Scour Depressions, Eos Trans AGU, 83, 2002.

48. Lezaeta, P., A.D. Chave, **R.L. Evans** and A.G. Jones, Three-dimensional electrical conductivity structure beneath the Slave Craton NW Canada in: SNORCLE transect group workshop, Sidney BC, Canada, 2002.

2003

49. Buynevich, I.V., **R.L. Evans** and D.M. Fitzgerald, High-resolution geophysical imaging of buried inlets, Proc. Int. Conf. on Coastal Sediments, 2003.

50. Buynevich, I.V. and **R.L. Evans**, Geological evidence for storm breaching of microtidal baymouth barriers, upper Cape Cod, Massachusetts. GSA Northeastern Section and Atlantic Geoscience Society Abstracts with Programs, Halifax, Nova Scotia, v. 35, p. 82. 2003.

51. **Evans, R.L.**, G. Hirth, D. Forsyth, K. Baba and A. Chave, Comparison of seismic and EM structures of the MELT area, EOS Trans AGU, spring meeting, 2003.

52. **Evans, R.L.**, and I.V. Buynevich, Bridging the gap: electromagnetic techniques for nearshore-onshore surveying, Deltech Meeting, Venice, 2003.

53. Wood, W.T., D. Hutchinson, P. Hart, F. Snyder, C. Voss, N. Dutta, L. Muller, M. Lee, J. Gardner, B. Dugan, C. Ruppel, R. Coffin, **R.L. Evans**, E. Jones, Constraints on Subsurface gas and gas Hydrate Distribution in a Gulf of Mexico Mound, Eos Trans. AGU, 84(46), 2003.

54. D. Hutchinson, P. Hart, F. Snyder, M.W. Lee, N. Dutta, L. Muller, B. Dugan, C. Ruppel, W. Wood, R. Coffin, **R.L. Evans**, E. Jones, Evidence of subsurface gas hydrate in the northern Gulf of Mexico, Eos Trans. AGU, 84(46), 2003.

55. Baba, K., A.D. Chave, **R.L. Evans**, G. Hirth, R.L. Mackie, Melt Generation and Mantle Dynamics Beneath the Southern East Pacific Rise: Insights From the Mantle ELectromagnetic and Tomography (MELT) Experiment EM Data, Eos Trans. AGU, 84(46), 2003.

2004

56. Jones, A.G., R.L. Mackie, A.D. Chave, **R.L. Evans**, Three-Dimensional Inversion of Regional-Scale Magnetotelluric Data from the Slave Craton, Canada, EGU, 2004.

57. **Evans, R.L.**, Mapping below the seafloor: electromagnetic methods for measuring seafloor physical properties, Geol Soc, London, (Key Note) February 2004.

58. **Evans, R.L.**, A towed magnetic dipole system for measuring porosity in the uppermost seafloor, Marelec, (Invited) March 2004.

59. **Evans, R.L.**, Mapping below the seafloor: electromagnetic methods for measuring physical properties, NEGSA meeting, Washington DC, (Invited), March 2004.

60. Chave, A.D., A.G. Jones, R. Mackie, **R.L. Evans**, Three Dimensional Deep Electrical Structure of the Slave Craton, Canada, Eos Trans AGU, Spring meeting, 2004.

61. Evans, S.F., R. van Buren, A.G. Jones, **R.L. Evans**, X. Garcia, A.D. Chave, W. Soyer, M. Hamilton, J. Cole, and the SAMTEX MT Team. Investigating the relationship between the occurrence of diamond mines and the electrical structure of the lithosphere, Geoscience Africa, Johannesburg, South Africa, July, 2004.

62. Jones, A.G., J. Spratt, C. Horan, G. Wallace, M. Hamilton, **R.L. Evans**, X. Garcia, A.D. Chave, E. Stettler, M. Adlem, R. Stettler, K. Raath, S. Evans and the SAMTEX MT Team. The electrical lithosphere of the Kaapvaal Craton: project SAMTEX overview and first results, Geoscience Africa, Johannesburg, South Africa, July, 2004.

63. Muller, M.R., S.J. Webb, W.H.B. Steenkamp, A.G. Jones, **R.L. Evans**, X. Garcia, A.D. Chave, W. Soyer, S. Evans, M. Hamilton, C.J.S. Fourie & the SAMTEX team. Crustal imaging of the Witwatersrand Basin, South Africa: Preliminary results from a broad-band magnetotelluric survey, Geoscience Africa, Johannesburg, South Africa, July, 2004.

64. Jones, A.G., J. Spratt, C. Horan, G. Wallace, M. Hamilton, **R.L. Evans**, X. Garcia, A.D. Chave, E. Stettler, M. Adlem, R. Stettler, K. Raath, S. Evans and the SAMTEX MT Team, The electrical lithosphere of the Kaapvaal Craton: project SAMTEX overview and first results, 17th EM Induction Workshop, Hyderabad, India, October, 2004.

65. Muller, M.R., S.J. Webb, W.H.B. Steenkamp, A.G. Jones, **R.L. Evans**, X. Garcia, A.D. Chave, W. Soyer, S. Evans, M. Hamilton, C.J.S. Fourie and the SAMTEX team. Upper-crustal imaging of the Archaean Witwatersrand Basin, South Africa, using broadband magnetotellurics: Preliminary results, 17th EM Induction Workshop, Hyderabad, India, October, 2004.

2005.

66. Jones, A.G., **R.L. Evans**, S. Fourie, S. Evans, A. Mountford, X. Garcia, J. Spratt, A.D. Chave, and the SAMTEX Team. Comparison of the electromagnetic structure of Archaean cratons: Project SAMTEX. South African Geophysical Association (SAGA) meeting, Cape Town, South Africa, September, 2005

67. Hamilton, M., A.G. Jones, **R.L. Evans**, X. Garcia, C.J.S. Fourie, S.F. Evans, S.J. Webb, and the SAMTEX MT Team. Electrical anisotropy across southern Africa from MT studies. South African Geophysical Association (SAGA) meeting, Cape Town, South Africa, September, 2005.

68. Cole, J., P. Cole, A. G. Jones, **R.L. Evans**, X. Garcia, C.J.S. Fourie, C. Smith, A. Mountford, S. J. Webb, and the SAMTEX MT team. Application of wavelet transform de-noising techniques to geophysical data. South African Geophysical Association (SAGA) meeting, Cape Town, South Africa, September, 2005.

69. Muller, M.R., S.J. Webb, A.G. Jones, W.H.B. Steenkamp, P. Kowalczyk, **R.L. Evans**, C.J.S. Fourie, C. Smith, A. Mountford, and the SAMTEX team. Deep-crustal electrical imaging beneath the Vredefort impact structure, South Africa, using broadband magnetotellurics. South African Geophysical Association (SAGA) meeting, Cape Town, South Africa, September, 2005.

70. Garcia, X., A.G. Jones, **R.L. Evans**, S. Evans, S. Fourie, A. Mountford and the SAMTEX Team, The Electrical Lithosphere of the Archean: Insights from the Kaapvaal craton and elsewhere. Eos Trans AGU 86(52), T13A-0427, 2005.

71. Ellis, M., **R.L. Evans**, D. Hutchinson, P. Hart, An Electromagnetic Survey of the JIP Drill Sites in Atwater Valley, Eos Trans AGU 86(52), OS31D-07, 2005.

72. Jones, A.G, **R.L. Evans**, X. Garcia, M. Hamilton, S. Evans, S. Fourie, A. Mountford, J. Spratt, A.D. Chave, and the SAMTEX Team A Magnetotelluric Survey of the Kaapvaal Craton and its surroundings: The SAMTEX Experiment, Eos Trans AGU 86(52), GP34A-03. 2005.

73. **Evans, R.L.**, G. Hirth, K. Baba, D. Forsyth, A. Chave, R. Mackie, Compositional Controls on Oceanic Mantle: Geophysical Evidence from the MELT Area, Eos Trans AGU 86(52), T34A-06, 2005.

74. Hamilton, M., A.G. Jones, **R.L. Evans**, S. Evans, S. Fourie, A. Mountford, X. Garcia, J. Spratt and the SAMTEX Team, Electrical Anisotropy Across the Kaapvaal Craton Derived From SAMTEX MT Studies Compared With SASE SKS Seismic Anisotropy Results, Eos Trans AGU 86(52), T13A-0426, 2005.

2006

75. Hamilton, M., A.G. Jones, **R.L. Evans**, S.F. Evans, C.J.S. Fourie, A. Mountford, X. Garcia, J. Spratt, and the SAMTEX MT team. Magnetotelluric studies across the Kaapvaal craton in southern Africa. Contributed paper at: 49th Annual Irish Geological Research Meeting, University College Cork, Cork, Ireland, February, 2006.

76. **Evans, R.L.**, Imaging the Upper Mantle, Margins Meeting, Invited Speaker, WHOI May, 2006.

77. Evans S.F., A.G. Jones, **R.L. Evans**, X. Garcia, S. Fourie, and A. Mountford, 2006. The Southern African Magnetotelluric Experiment (SAMTEX): Progress and preliminary interpretations. Contributed paper at: Australian Society of Exploration Geophysicists Annual General Meeting, Melbourne, Australia, July, 2006.

78. Hamilton, M., Jones, A., **Evans, R.L**, Evans, S., Fourie, C.J.S., Garcia, X., Mountford A., Spratt, J., and the SAMTEX MT team. A comparison of seismic and electrical anisotropy over the southern African region, British Geophysical Association Postgraduate Meeting, Edinburgh, Scotland, August-September, 2006.

79. Miensopust, M., A.G. Jones, M. Muller, M. Hamilton, X. Garcia, J. Spratt, **R.L. Evans**, S. Evans, A. Mountford, C. Fourie, D. Hutchins, H. Ngwisanyi and the SAMTEX team. Lithospheric studies of major Archaean cratons and their Proterozoic bounding belts in southern Africa using MT. British Geophysical Association Postgraduate Meeting, Edinburgh, Scotland, August-September, 2006.

80. **Evans, R.L.**, A.G. Jones, X. Garcia, M. Hamilton, S. Evans, S. Fourie, J. Spratt and the SAMTEX Team. The electrical lithosphere beneath the Kaapvaal Craton: Links to kimberlites. Contributed paper at: 18th EM Induction Workshop, El Vendrell, Spain, September, 2006.

81. Hamilton, M.P, A.G. Jones, **R.L. Evans**, S.F. Evans, C.J.S. Fourie, A. Mountford, X. Garcia, J.E. Spratt, and the SAMTEX team. A Comparison of Electrical and Seismic Anisotropy Across the Southern African Region. Contributed paper at: 18th EM Induction Workshop, El Vendrell, Spain, September, 2006.

82. Jones, A.G., X. Garcia, M. Hamilton, M. Miensopust, M. Muller, J. Spratt, **R.L. Evans**, A. Chave, C. Fourie, E. Stettler, R. Stettler, J. Cole, H. Ngwisanyi, D. Hutchins, S. Evans, D. Hatch, A. Mountford, E. Cunion, and the SAMTEX team, 2006. SAMTEX (Southern African Magnetotelluric Experiment): Overview and First Results. Contributed paper at: 18th EM Induction Workshop, El Vendrell, Spain, September, 2006.

83. Muller, M.R., Webb, S., Jones, A., Hough, T., Kowalczyk, P., **Evans, R.L.**, Fourie, C., Hatch, D., Mountford, A. and the SAMTEX team. Crustal imaging of the Archaean Witwatersrand Basin and Vredefort Dome, South Africa, using broadband magnetotellurics. 18th Electromagnetic Induction Workshop, El Vendrell, Spain, September, 2006.

84. **Evans, R.L.**, B. Kraft, L. Mayer, Use of Seafloor Electromagnetic and Acoustic Backscatter Data for Seafloor Classification: An Example From Martha's Vineyard, Massachusetts, Eos Trans AGU, NS24A-03, Invited. 2006.

85. Hamilton, M.P., A.G. Jones, **R.L. Evans**, S.F. Evans, C.J.S. Fourie, A. Mountford, T. Ngwisanyi, D. Hutchins, X. Garcia, M.R. Muller, J. Spratt, M. Miensopust, and the SAMTEX MT Team. A comparison of electrical and seismic anisotropy across the southern African region, Eos Trans AGU, 87(52), V11D-0622, 2006

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