# Paul S. Hall

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#### Education Ph.D., Oceanography, University of Rhode Island Graduate School of Oceanography 2003 1995 B.A., Physics, The College of Wooster **Professional Appointments** Assistant Professor, Earth Sciences Department, Boston University 2007-present 2006-2007 Lecturer, Earth Sciences Department, Boston University Visiting Postdoctoral Fellow, Harvard University (Dr. Charles Langmuir, sponsor) 2005-2006 Postdoctoral Fellow, URI-GSO (Dr. Chris Kincaid, advisor) 2005-2006 2002-2005 Senior Scientist, Applied Science Associates, Inc., Narragansett, RI Visiting Instructor, United States Coast Guard Academy 2002 2001 Instructor, URI College of Continuing Education Visiting Scientist, Los Alamos National Laboratory (Dr. Carl Gable, sponsor) 1997 1995-2001 Graduate Research Assistant, URI-GSO Honors and Fellowships Templeton Award for Excellence in Student Advising (BU CAS) 2013 2000 Robert McMaster Award (URI-GSO) 1998 Outstanding Student Paper Award (AGU) 1995 Alumni Graduate Fellowship (URI-GSO) 1994 Summer Undergraduate Research Fellow in Oceanography (URI-GSO) Field Work and Shipboard Experience Hydrographic survey, Southport Harbor, Southport, CT 2004 2004 Hydrographic survey, Connecticut River, Vernon, VT 2003-2004 Hydrographic and bathymetric survey, Palmer River, Swansea, MA Hydrographic survey, Gooseneck Cove, Newport, RI 2003 Hydrographic survey, Thames River, New London, CT 2002 1998 Shipboard Scientist, R/V Nathaniel B. Palmer Cruise NBP-9806A. Geophysical survey of the western equatorial Pacific and Tonga-Kermadec trench **Professional Activities** 2012 Co-Convener, "Mantle Plumes: What Do We Really Know?" AGU Fall Meeting 2012 Panelist, NSF - OCE 2011 Co-Convener, "Mantle Plumes: Combining Perspectives ..." AGU Fall Meeting Panelist, NSF - OCE 2011 Participant, Earthscope Institute on the Lithosphere-Asthenosphere Boundary 2011 Participant, Goldschmidt 2011 Conference 2011 Participant, Gordon Research Conference "Interior of the Earth" 2011 2011 Participant, Adam Dziewonski Symposium, Harvard University 2011 Participant, GeoPRISMS Implementation Workshop: Subduction Cycles and Dynamics 2010 Participant, State of the Arc (SOTA) workshop 2010 Participant, Cooperative Institute for Dynamic Earth Research (CIDER) workshop 2010 - present Institutional Member Representative, Computational Infrastructure for Geodynamics 2008 Managing Guest Editor, Chemical Geology 2008 Participant, Rheology Grand Challenge Workshop Participant, On The Cutting Edge Early Career Geoscience Faculty Workshop 2008 2007 Co-Convener, "From the Arc to the Back-Arc...", AGU Fall Meeting 2007 Participant, Gordon Research Conference: Interior of the Earth 2005 Participant, CIG Workshop: Mantle Convection 2005 Presenter, QARTOD Workshop: Quality Assurance of Real-Time Ocean Data II 2005 Participant, First Annual Radiowave Operators Working Group Meeting: ROWG1

2000	Participant, RIDGE Workshop: Plume-Ridge Interaction			
Service to Boston University				
2013-present	Shared Computing Cluster Subcommitee (BU)			
2013	Graduate Admissions Committee (EE)			
2012-present	University Research Computing Governance Committee (BU)			
2012	Faculty Search Committee for Geophysics Position (EE)			
2012	Faculty chaperone, BU Geological Society trip (Berkshires, ~20 students, 28-30 Sep)			
2012	Graduate Admissions Committee (EE)			
2012	Department Website Committee (EE)			
2012	Group Leader, New Teaching Fellow Orientation (GRS)			
2011-2012	Space Committee (EE)			
2011-present	Client representative to BU IS&T for the GEO cluster			
2011	Breakout session leader, GFD session, BU Earth Systems Forum			
2011	Group Leader, New Teaching Fellow Orientation (GRS)			
2010	Graduate Admissions Committee (ES)			
2010	Faculty advisor, BU Near Space Program			
2010	Group Leader, New Teaching Fellow Orientation (GRS)			
2009	Faculty chaperone, BU Geological Society trip (Maine, ~20 students, 25-27 Sep)			
2008-present	Faculty Advisor, Geophysics & Planetary Sciences concentration (EE)			
2009	Coordinator, Graduate Student Seminars (ES)			
2008	Faculty chaperone, BU Geological Society trip (Berkshires, ~20 students, 20-21 Sep)			
2007-2008	Faculty Search Committee for Petrology Position (ES)			
2007-2012	Department Website Committee (ES)			
2007-present	Associated Faculty, BU Center for Computational Science			
2007	Faculty chaperone, BU Geological Society trip (Vermont, ~15 students, 15-16 Sep)			
Courses Taught				
Boston University				
2013 (Fall)	ES701: Quantitative Methods for Earth Sciences I 13 students enrolled			

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2013 (Fall)	ES701: Quantitative Methods for Earth Sciences I	13 students enrolled
2013 (Spring)	ES360: Geodynamics I	11 students enrolled
2013 (Spring)	ES660: Geodynamics I	2 students enrolled
2012 (Fall)	ES140: Natural Disasters	125 students enrolled
2012 (Spring)	ES581: Solid Earth Geophysics	10 student enrolled
2012 (Spring)	ES402: Senior Independent Work	1 student enrolled
2011 (Fall)	ES401: Senior Independent Work	1 student enrolled
2011 (Fall)	ES140: Natural Disasters	126 students enrolled
2011 (Spring)	ES492: Directed Study	1 students enrolled
2010 (Fall)	ES491: Directed Study	1 students enrolled
2010 (Fall)	ES140: Natural Disasters	133 students enrolled
2010 (Spring)	ES505: Tectonics and Kinematics	5 students enrolled
2009 (Fall)	ES581: Solid Earth Geophysics	6 students enrolled
2009 (Fall)	ES140: Natural Disasters	152 students enrolled
2009 (Spring)	ES701: Quantitative Methods for Earth Sciences I	11 students enrolled
2008 (Fall)	ES140: Natural Disasters	223 students enrolled
2008 (Spring)	ES360: Geodynamics I	18 students enrolled
2008 (Spring)	ES660: Geodynamics I	1 student enrolled
2007 (Fall)	ES140: Natural Disasters	225 students enrolled
2007 (Fall)	ES491: Directed Study (co-taught w/A. Kurtz)	1 student enrolled
2007 (Spring)	ES360: Geodynamics I	23 students enrolled
2007 (Spring)	ES492: Directed Study	1 student enrolled
2007 (Spring)	ES505: Plate Tectonics and Kinematics	6 students enrolled
2007 (Spring)	ES660: Geodynamics I	3 students enrolled
2006 (Fall)	ES140: Natural Disasters	222 students enrolled
2006 (Fall)	ES491: Directed Study	1 student enrolled
2006 (Summer)	ES101: The Dynamic Earth	10 students enrolled
2006 (Spring)	ES360: Geodynamics I	20 students enrolled

2006 (Spring)	ES660: Geodynamics I	2 students enrolled		
United States Coast Guard Academy				
2002 (Spring)	Marine Science 5238: Physical Oceanography	30 students enrolled		
2002 (Spring)	Marine Science 5442: Oceanography	24 students enrolled		
University of Rhode Island College of Continuing Education				
2001 (Fall)	OCG110: The Ocean Planet	20 students enrolled		
University of Rhode Island Graduate School of Oceanography Narragansett Bay Classroom				
1999 (Spring)	OCG930: Basic Web Page Design for Educators	~20 students enrolled		

## **Student Supervision and Advising**

#### Primary Advisor or Co-advisor

Rohan Kundargi (Ph.D., Boston University, in progress)

*Navah Farahat* (B.A., Boston University, senior thesis, 2012) "Plume capture by a migrating mid-ocean ridge: numerical experiments"

*Nathan Katsiaficas* (B.A., Colby College, honors thesis, 2012) "Geodynamic constraints on the flow of Samoan-plume mantle into the northern Lau Basin"

*Rohan Kundargi* (M.A., 2012) "Melting and dehydration within mantle plumes and the formation of subparallel volcanic trends at intra-plate hotspots"

Ethan Fahy (M.A., 2011) "The nature of the asthenosphere"

#### **Undergraduate Research Advising**

Alyssa Crippen (BU, UROP, 2013), Evan Ramos (BU, UROP, 2013), Jasper Hobbs (BU, UROP, 2012), Jessica Stellman (BU, NSF, 2011), Joshua Gray (BU, UROP, 2011), Nathan Katsiaficas (Colby, NSF, 2011/2012), Navah Farahat (BU, UROP/NSF, 2010/2011), Joshua Mendez (BU, UROP/SURF, 2010), Nick Cohn (BU, UROP/NSF, 2008/2009), Karen Godfrey (BU, UROP, 2008, co-advised w/U. Faul and C. Dalton), Chris Havlin (BU, NSF, 2008)

#### **Undergraduate Work for Distinction Committees**

Navah Farahat (2012), Jarod Payne (2012), Paul Zablowski (2012), David Mayer (2007)

#### **Graduate Thesis Committees**

Kasey Aderhold (Ph.D., BU, in progress), Rita Cabral (Ph.D., BU, in progress), Elise Heiss (Ph.D., BU, in progress), Aaron Hirsch (M.A., in progress), Sean MacKay (Ph.D., BU, in progress), Allison Price (Ph.D., BU, in progress), Esther Raymond (Ph.D., BU, in progress), Rachel Scudder (Ph.D., BU, in progress), Nora Sullivan (Ph.D., BU, in progress), Besim Dragovic (Ph.D., BU, 2013), Gordana Garapic (Ph.D., BU, 2013), Giulio Mariotti (Ph.D., BU, 2012), Christopher Serino (Ph.D., BU-Physics, 2011), Amber Harris (M.S., URI-GSO, 2010), Lauren Cooper (Ph.D., BU, 2009), Christine Harrington (M.A., BU, 2009), Laura MacKenzie (Ph.D., BU, 2008), Nahysa Martinez (Ph.D., BU, 2008), J. Cory Pettijohn (Ph.D., BU, 2008), Anthony Pollington (M.A., BU, 2008), Kate Swanger (Ph.D., BU, 2008), Ellen Syracuse (Ph.D., BU, 2008)

#### **Grants and Projects**

Amount: \$261,402 Title: *Geodynamic modeling of plume capture and release by a migrating mid-ocean ridge* (OCE 1131446) Agency: National Science Foundation (OCE; Marine Geology and Geophysics) Period: 09/15/11 – 08/31/14 PI: **Hall** Amount: \$219,599 Title: *Constraining mantle flow between Samoa and the northern Lau and N. Fiji Basins with geochemistry and geodynamics* (OCE 1061134) Agency: National Science Foundation (OCE-MGG) Period: 04/01/11 – 03/31/13 PI: M. Jackson (BU); coPI: **Hall** Amount: \$178,548

Title: Geodynamic constraints on the nature of the asthenosphere (EAR-0911644)

Agency: National Science Foundation (EAR-Geophysics) Period: 09/01/09 – 08/31/11 PI: **Hall**; coPI: U. Faul (BU) Amount: \$141,121 (BU award) Title: *Collaborative Research: A Multidisciplinary Study of Hotspot-Ridge Interaction in the Easter Microplate – Salas y Gomez System* (OCE-0752478) Agency: National Science Foundation (OCE-MGG) Period: 03/01/08 – 02/28/10 PI: **Hall**; coPI: R. Kingsley (URI)

#### **Invited Talks**

2013	Rhode Island College	The origins of hotspot volcanism
2012	AGU Fall Meeting	Mantle flow, melting, and the thermochemical evolution
		of the mantle wedge due to back-arc spreading
2011	AGU Fall Meeting	Melting during lateral flow of plume material across
		lithospheric discontinuities
2011	GeoPRISMS Workshop	Mantle flow and melting at back-arc spreading centers
2010	CIDER Workshop, UCSB	Mantle flow and melting at back-arc spreading centers
2010	LDEO (SGT)	Mantle flow and melting beneath a migrating back-arc
		spreading center
2010	Harvard (EPS-CM Seminar)	Mantle diapirism at subduction zones
2009	UNLV (Geosciences)	Melting, dehydration and plume-ridge interaction
2009	Columbia (IGERT)	Melting, dehydration and plume-ridge interaction
2008	BC (Weston Observatory)	Computational Geodynamics
2008	BU (CCS)	Computational Geodynamics
2006	BU (ES Dept)	Melting, dehydration and plume-ridge interaction
2005	WHOI (Geochemistry)	Melting, dehydration and plume-ridge interaction

## Invited Talks for the General Public

2011	Natural Disasters: What are the risks in Boston?	Boston University Trustees Scholars
2011	Understanding the Disaster in Japan (panel)	Boston University
2009	The Restless Earth	Science for the Public

# Publications (\* = graduate student, \*\* = undergraduate student)

- Farahat, N.X.\*\* and **P.S. Hall** (*submitted*). Transient hotspot motion caused by plume-ridge interaction, *Earth Planet. Sci. Lett.*
- Katisiaficas, N.J.\*\*, **P.S. Hall** and M.G. Jackson (*submitted*). Modeling flow of Samoan-plume mantle into the Northern Lau Basin, to be submitted to *Phys. Earth Planet. Int.*
- Kundargi, R.K.\*, J.L. Stellman\*\* and **P.S. Hall** (*submitted*). Geographic patterns of volcanism at intraplate hotspots, *Geology*.
- Price, A.A.\*, M.G. Jackson, J. Blichert-Toft, P.S. Hall, J.M. Sinton, M.D. Kurz and J. Blusztajn (submitted), Pandora's Box Opened: Implications for a Samoan Plume signature in Pandora Ridge lavas, North Fiji Basin, to be submitted to Geochem. Geophys. Geosys.
- Harpp, K.S., P.S. Hall and M.G. Jackson (*in press*). *The Galápagos and Easter: A Tale of Two Hotspots*, in The Galápagos: A Natural Laboratory for the Earth Sciences. Editors: K. Harpp, E. Mittelstaedt, D. Graham, N. d'Ozouville, American Geophysical Union, Washington, DC.
- Payne, J.A.\*\*, M.G. Jackson and P.S. Hall (2013). Parallel volcano trends and geochemical asymmetry of the Society Islands hotspot track, *Geology*, 41, 19-22, doi:10.1130/G33273.1.
- Hall, P.S. (2012). On the thermal evolution of mantle flow at subduction zones, *Phys. Earth Planet. Int.*, 198-199, doi:10.1016/j.pepi.2012.03.004.
- Hall, P.S., L.B. Cooper and T. Plank (2012). Thermochemical evolution of the sub-arc mantle due to backarc spreading, J. Geophys. Res., 117, B02201, doi:10.1029/2011JB008507.
- Huang, S., P.S. Hall, and M.G. Jackson (2011). Geochemical zoning of volcanic chains associated with Pacific hotspots, *Nature Geoscience*, 4, doi: 10.1038/NGEO1263.
- Cooper, L.\*, T. Plank, R. Arculus, E. Hauri, **P. Hall** and S. Parman (2010). Boninites from the modern Tonga arc, J. Geophys. Res., 115, B10206, doi:10.1029/2009JB006367.
- Spaulding, M.L., T. Isaji, P. Hall and A.A. Allen (2006). A hierarchy of stochastic particle models for

search and rescue (SAR): Application to predict surface drifter trajectories using HF radar current facing, *Journal of Marine Environmental Engineering*, 8(3), 181-214.

- Swanson, C. and P. Hall (2006). Application of a Lagrangian-based transport model to estimate pollutant source locations at Southport Harbor, Connecticut in *Estuarine and Coastal Modeling -Proceedings of the Ninth International Conference*, M. Spaulding, ed. ASCE, Reston, VA, 864pp.
- Hall, P.S. and C. Kincaid (2004). Melting, dehydration and the geochemistry of off-axis plume-ridge interaction, *Geochem. Geophys. Geosys.*, 5, Q12E18, doi:10.1029/2003GC000667.
- Hall, P.S. and C. Kincaid (2003). Melting, dehydration and the dynamics of off-axis plume-ridge interaction, *Geochem. Geophys. Geosys.*, 4, 8510, doi:10.1029/2003GC000567.
- Kincaid, C. and **P.S. Hall** (2003). Role of back-arc spreading in circulation and melting at subduction zones, *J. Geophys. Res.*, 108(B5), doi:10.1029/2001JB001174.
- Hall, P.S. and C. Kincaid (2001). Diapiric flow at subduction zones: A recipe for rapid transport, *Science*, 292, 2472-2475.

# Publications in preparation (\* = graduate student, \*\* = undergraduate student)

- Fahy, E.H.\*, **P.S. Hall**, U. Faul and C.A. Dalton (*in prep*). Small-scale convection and the thermal and seismic structure of the oceanic upper mantle, to be submitted to *Geochem. Geophys. Geosys.*
- Kingsley, R.H. and **P.S. Hall** (*in prep*). Stochastic modeling of trace elements and isotope ratios in basalts from the Easter Salas y Gomez Seamount Chain Easter Microplate System, to be submitted to *Geochem. Geophys. Geosys.*
- Kundargi, R.K.\* and **P.S. Hall** (*in revision*). Untangling the dual chain of hotspot volcanism, submitted to Nature, in revision for Earth and Planetary Science Letters.

# Abstracts (\* = graduate student, \*\* = undergraduate student)

- Hall, P.S. (2012). Mantle flow, melting, and the thermochemical evolution of the mantle wedge due to back-arc spreading, Abstract T53E-01, presented at 2012 Fall Meeting, AGU, San Francisco, Calif, 3-7 Dec.
- Hall, P.S. (2012). Mantle plume-migrating mid-ocean ridge interaction and the bend in the Hawai'i-Emperor Seamount Chain, presented at AGU Chapman Conference on Hawaiian Volcanoes: From Source to Surface, Waikoloa, Hawai'i, 20-24 Aug.
- Farahat, N.X.\*\* and **P.S. Hall** (2012). Transient hotspot motion due to interaction between a mantle plume and a migrating mid-ocean ridge, Abstract DI53A-23654, presented at 2012 Fall Meeting, AGU, San Francisco, Calif, 3-7 Dec.
- Harpp, K., P.S. Hall and M.G. Jackson (2012). Galapagos and Easter: A Tale of Two Hotspots, Abstract DI41B-05, presented at 2012 Fall Meeting, AGU, San Francisco, Calif, 3-7 Dec.
- Kundargi, R.\* and P.S. Hall (2012). Melting and dehydration within mantle plumes and the formation of sub-parallel volcanic trends at intra-plate hotspots: Analysis of physical properties on spatial and temporal evolution of viscous plug formation, Abstract DI43A-07, presented at 2012 Fall Meeting, AGU, San Francisco, Calif, 3-7 Dec.
- Fahy, E.H.\*, P.S. Hall, C.A. Dalton and U. Faul (2011). Geodynamic and seismic constraints on the evolution of the oceanic lithosphere and asthenosphere, Abstract T31A-2331, presented at 2011 Fall Meeting, AGU, San Francisco, Calif, 5-9 Dec.
- Hall, P.S. (2011). Melting during lateral flow of plume material across lithospheric discontinuities, Abstract T44D-03, presented at 2011 Fall Meeting, AGU, San Francisco, Calif, 5-9 Dec.
- Hall, P.S. (2011). Geodynamic modeling of the capture and release of a plume conduit by a migrating midocean ridge, Abstract DI13A-2150, presented at 2011 Fall Meeting, AGU, San Francisco, Calif, 5-9 Dec.
- Katsiaficas, N. J.\*\*, **P.S. Hall** and M.G. Jackson (2011). Geodynamic constraints on flow of Samoanplume mantle into the northern Lau Basin, Abstract DI13A-2145, presented at 2011 Fall Meeting, AGU, San Francisco, Calif, 5-9 Dec.
- Kundargi, R.\*\* and **P.S. Hall** (2011). Melting induced dehydration and plume-lithosphere interaction at intra-plate hotspots, Abstract DI13A-2142, presented at 2011 Fall Meeting, AGU, San Francisco, Calif, 5-9 Dec.
- Price, A.\*, M.G. Jackson, P.S. Hall J.M. Sinton and M.A. Kurz (2011). Using <sup>3</sup>He/<sup>4</sup>He to map the flow of Samoan-plume into the Lau Basin, Abstract DI13A-2146, presented at 2011 Fall Meeting, AGU, San Francisco, Calif, 5-9 Dec.
- Katsiaficas, N. J.\*\* and P.S. Hall (2011). Geodynamic constraints on flow of Samoan-plume mantle into

the northern Lau Basin, GSA Annual Meeting, Minneapolis, MN, 9-12 Oct.

- Hall, P., S. Huang and M. Jackson (2011). En echelon volcanic chains at hotspots as probes of the deep mantle, Goldschmidt 2011 Conference, Prague.
- Hall, P. (2011). Evolution of the sub-arc mantle at back-arc spreading centers, Adam Dziewonski Symposium, Harvard University, 4-5 June.
- Hall, P., L.B. Cooper and T. Plank (2010). Mantle flow, melting, and the evolution of the sub-arc mantle in the Lau Basin - Tonga Arc system, Abstract V11F-04 presented at 2010 Fall Meeting, AGU, San Fancisco, Calif., 13-17 Dec.
- Cooper, L.B., T. Plank, R.J. Arculus, E.H. Hauri and P. Hall (2010). Wet melting along the Tonga Volcanic Arc, Abstract V11F-05 presented at 2010 Fall Meeting, AGU, San Fancisco, Calif., 13-17 Dec.
- Fahy, E.H.\*, **P. Hall** and U.H. Faul (2010). Constraining the nature of the asthenosphere, Abstract T21C-2171 presented at 2010 Fall Meeting, AGU, San Fancisco, Calif., 13-17 Dec.
- Farahat, N.X.\*\*, **P. Hall** and R.H. Kingsley (2010). Plume capture by a migrating mid-ocean ridge, Abstract U51A-0015 presented at 2010 Fall Meeting, AGU, San Fancisco, Calif., 13-17 Dec.
- Kingsley, R.H. and P. Hall (2010). Stochastic Modeling of Trace Elements and Isotope Ratios in Basalts from the Easter Salas y Gomez Seamount Chain - Easter Microplate System, Abstract U51A-0018 presented at 2010 Fall Meeting, AGU, San Fancisco, Calif., 13-17 Dec.
- Mendez, J.S.\*\*, **P. Hall** (2010). Plume capture by a migrating ridge: Analog geodynamic experiments, Abstract U51A-0016 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.
- Hall, P.S., L.B. Cooper and T. Plank (2009). Evolution of mantle flow and melting beneath a migrating back-arc spreading center, *EOS Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract T31D-05.
- Fahy, E.H.\*, P. Hall and U.H. Faul (2009). Exploring the asthenosphere via geodynamic modeling, EOS Trans. AGU, 90(52), Fall Meet. Suppl., Abstract T13B-1870.
- Kingsley, R. and P. Hall (2008). Modeling Trace Element Concentrations in Basalt Glasses from the Easter – Salas y Gomez Seamount Chain – Easter Microplate System, EOS Trans. AGU, 89(53), Fall Meet. Suppl., Abstract V43B-2156.
- Hall, P.S. (2007). Mantle Flow and Melting Processes Beneath Back-Arc Basins, *EOS Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract V51G-03.
- Hall, P.S. and C. Kincaid (2006). Mantle Diapirism and the Arc Component in Back-Arc Basin Basalts, *EOS Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V34C-05.
- Hall, P.S., C. Kincaid and C.H. Langmuir (2005). Examining models of melt transport at subduction zones, *EOS Trans. AGU*, *86*(52), Fall Meet. Suppl., Abstract V33C-08.
- Hall, P.S., D. Ullman and J. Kohut (2005). Coastal HF radar and operational search and rescue modeling, *Quality Assurance for Real-Time Oceanographic Data II (QARTOD2)*, Norfolk, VA.
- Harris, A.C., C. Kincaid and P. Hall (2005). Laboratory experiments concerning upwellings from the slabgraveyard: implications for geochemical and seismic models, *EOS Trans. AGU*, 86(52), Fall Meet Suppl., Abstract V41E-1516.
- Hall, P.S., C. Kincaid and R.F. Viso (2004). On melting, dehydration and the geochemistry of off-axis plume-ridge interaction, *EOS Trans. AGU*, *85*(47), Fall Meet. Suppl., Abstract V34B-06.
- Hall, P.S. and C.R. Kincaid (1999). The dispersion of plumes in the upper mantle: Assessing thermal and chemical buoyancy and the role of melting, *EOS Trans. AGU*, 80(46), Fall Meet. Suppl., 948.
- Kincaid, C., P.S. Hall and P.G. Silver (1999). The evolution and stability of subcontinental lithosphere during orogeny, EOS Trans. AGU, 80(46), Fall Meet. Suppl., 940.
- Hall, P.S. and C. Kincaid (1998). Plume-ridge interaction and the geometry of melting, *EOS Trans. AGU*, 79(45), Fall Meet. Suppl., 1006.
- Hall, P.S. and C. Kincaid (1998), Melt transport at subduction zones by diapiric flow, *EOS Trans. AGU*, 79(17), Spring Meet. Suppl., 348.
- Kincaid, C., P.S. Hall and D. Coleman (1998). On melting, back-arc spreading and mantle dynamics in subduction zones, EOS Trans. AGU, 79(45), Fall Meet. Suppl., 991.
- Kincaid, C. and **P.S. Hall** (1998). The consequences of melting on off-axis plume-ridge interaction models, *EOS Trans. AGU*, *79*(17), Spring Meet. Suppl., 335.
- Hall, P.S. and C. Kincaid (1997). An experimental investigation of plate- and buoyancy-driven flow at subduction zones, *EOS Trans. AGU*, 78(17), Spring Meet. Suppl., 323.

#### **Technical Reports**

- O'Donnell, J., D. Ullman, M.L. Spaulding, E. Howlett, T. Fake, **P. Hall**, T. Isaji, E. Anderson and T, McClay (2005). Integration of Coastal Ocean Dynamics Application Radar (CODAR) and Short-Term Predictive Application (STPS): Surface Current Estimates into the Search and Rescue Optimal Planning System (SAROPS), Ft. Belvoir Defense Technical Defense Information Center, 163pp.
- Hall, P., S. Subbayya, C. Galagan and K. Knee (2004). Buzzards Bay Disposal Site Analysis, Prepared for Maguire Group, Foxborough, MA, ASA Report 03-089.
- Hall, P., T. Isaji and K. Knee (2004). Gooseneck Cove Tidal Restoration: Hydrologic and Hydraulic Assessment, Prepared for Save The Bay, Providence, RI, ASA Report 03-169.
- Swanson, C., P. Hall, S. Subbayya, N. Whittier and K. Knee (2005). Southport Harbor Pollutant Transport Modeling Study, Prepared for the Connecticut Department of Environmental Protection, Hartford, CT, ASA Report 03-103.
- Swanson, C., P. Hall, S. Subbayya, M. Ward, T. Isaji, M. Spaulding and T. Opishinski (2004). Circulation at Quonset Point, Prepared for Berger Maguire, Providence, RI, ASA Report 01-234.
- Swanson, C., P. Hall, S. Subbayya and K. Knee (2004). Palmer River Field and Modeling Study for the Swansea Desalination Project, prepared for Epsilon Associates, Inc., Maynard, MA, ASA Report 03-150.
- Swanson, C., T. Isaji, P. Hall, C. Webb and S. Whitin (2004). Water Quality Assessment of Sconticut Neck, Fairhaven, Massachusetts and Outer New Bedford Harbor, Prepared for National Marine Fisheries Service, Habitat Conservation Division, Gloucester, MA, ASA Report 01-023.
- O'Donnell, J., D. Ullman, M.L. Spaulding, E. Howlett, T. Fake, P. Hall, T. Isaji, E. Anderson and T, McClay (2005). Integration of Coastal Ocean Dynamics Application Radar (CODAR) and Short-Term Predictive Application (STPS): Surface Current Estimates into the Search and Rescue Optimal Planning System (SAROPS), Ft. Belvoir Defense Technical Defense Information Center, 163pp.
- Hall, P., S. Subbayya, C. Galagan and K. Knee (2004). Buzzards Bay Disposal Site Analysis, Prepared for Maguire Group, Foxborough, MA, ASA Report 03-089.
- Hall, P., T. Isaji and K. Knee (2004). Gooseneck Cove Tidal Restoration: Hydrologic and Hydraulic Assessment, Prepared for Save The Bay, Providence, RI, ASA Report 03-169.