

CURRICULUM VITAE

BRIAN E. TUCHOLKE

Marine Geologist
Scientist Emeritus
Woods Hole Oceanographic Institution
Woods Hole, MA 02543-1541 U.S.A.
Ph. (508) 289-2494, Fax (508) 457-2187
Email: btucholke@whoi.edu

Education

- Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program in Oceanography - Ph.D. in Oceanography (Marine Geology), 1973.
- South Dakota School of Mines and Technology - B.S., Geology, Magna Cum Laude, 1968
- Hot Springs Public Schools, Hot Springs, S.D. - Diploma, Summa Cum Laude, 1964

Professional Experience

- Scientist Emeritus, Woods Hole Oceanographic Institution, 2008 - Present
- Senior Scientist, Woods Hole Oceanographic Institution, 1987 - 2008
- Senior Scientist Fellow, IFREMER, Brest, France, 2006
- Consultant to Marine Geoscience Applications and U. S. Mineral Management Service, 1983 - 1984
- Consultant to EG&G Environmental Consultants and U. S. Environmental Protection Agency, 1981
- Associate Scientist, Woods Hole Oceanographic Institution, 1979 - 1987
- Adjunct Senior Research Scientist, Lamont-Doherty Geological Observatory, 1982 - 1991
- Visiting Senior Research Associate, Lamont-Doherty Geological Observatory, 1979 - 1982
- Senior Research Associate, Lamont-Doherty Geological Observatory, 1978 - 1979
- Research Associate, Lamont-Doherty Geological Observatory, 1974 - 1978
- Post-Doctoral Fellow, Lamont-Doherty Geological Observatory, Columbia University, 1973 - 1974
- Graduate Research Assistant, Woods Hole Oceanographic Institution, 1972 - 1973
- Full-Time Teaching Assistant (Academic Years), Woods Hole Oceanographic Institution, 1970 - 1972
- Full-Time Teaching Assistant (Academic Years), Massachusetts Institute of Technology, 1968 - 1970
- Geophysicist, Western Geophysical Corporation, 1968 (Summer)
- Professional Assistant in Geophysics, Pan American Petroleum Corporation, 1966 - 1967 (Summers)
- Field Geologist, South Dakota School of Mines & Technology, Summer 1965
- Museum Assistant and preparator in paleontology, South Dakota School of Mines and Technology, 1964 - 1968

Professional Memberships

- American Association for the Advancement of Science, 1989 - present; elected Fellow, 1992
- American Geophysical Union, 1969 - present
- Geological Society of America, 1971 - present; elected Fellow, 1979
- Theta Tau Professional Engineering Fraternity, 1965 - present

Professional Honors, Fellowships, Awards, etc.

- South Dakota School of Mines and Technology Distinguished Alumnus 2022.
- Robert E. Sheriff Distinguished Lecturer, Houston Geological Society and University of Houston, 2008
- National Science Foundation Accomplishment Based Renewal Grant, 2006
- Senior Scientist Fellowship, IFREMER, Brest, France, 2006
- Henry Bryant Bigelow Chair for Excellence in Oceanography, Woods Hole Oceanographic Institution, 1999 - 2003
- Elected Fellow, American Association for the Advancement of Science, 1992
- Woods Hole Oceanographic Institution Independent Study Awards, 1988, 1995
- Woods Hole Oceanographic Institution Mellon Study Awards, 1983, 1998, 2008
- Keynote speaker, Centennial lecture on Marine Geology and Geophysics, Geological Society of America Centennial Symposium, 1988
- Alan Berman Research Publication Award, Department of the Navy, Naval Research Laboratory, 1986
- Seward Johnson Chair in Oceanography, Woods Hole Oceanographic Institution, 1986 - 1988
- Elected Fellow, Geological Society of America, 1979
- Corporation Member, Woods Hole Oceanographic Institution, 1976-1979
- Lamont-Doherty Geological Observatory of Columbia University, Post-Doctoral Fellowship, 1973-1974
- National Science Foundation Graduate Fellowship award, 1968 (declined in favor of a Teaching Assistantship at MIT)
- Woods Hole Oceanographic Institution Summer Fellowship, 1969, 1970, 1971
- Elected to Sigma Xi, 1968
- Elected to Who's Who Among Students in American Universities & Colleges, 1968
- President of the Senior Class, S. D. School of Mines & Technology, 1968
- J.P. Connolly Prize in Geology, S.D. School of Mines and Technology, 1967
- Homestake Mining Company Scholarship in Geology, 1964 - 1968
- National Youth Science Camp, South Dakota State Representative, 1964
- Eagle Scout, Boy Scouts of America, 1962
- Biographee: Who's Who in the East, Who's Who in Science and Engineering, Who's Who in Frontier Science and Technology, Who's Who in Technology, Who's Who in Technology Today, Who's Who in the World, Men of Achievement, American Men & Women of Science, International Leaders in Achievement

Invited and Keynote Lectures (Post 2006)

- 'Plate Tectonics', 'Geologic Map of North America' and 'Geological Evolution of the North Atlantic Ocean'. National Youth Science Camp, Bartow, West Virginia, 6-7/2013 (Invited, Directed Study program).
- 'Plate Tectonics', 'Geological Evolution of the North Atlantic Ocean Basin', and 'Structure of the Mid-Atlantic Ridge'. National Youth Science Camp, Bartow, West Virginia, 6-7/2012 (Invited, Directed Study program).
- 'Detachment Faulting and Oceanic Core Complexes.' Department of Geophysics, Peking University, Beijing, China, 11/2011 (Invited).
- 'Evolution of the Newfoundland-Iberia Rift.' Conference on Conjugate Margin Structure and Evolution in the North Atlantic and Other Margins, South China Sea Institute of Oceanology CAS, Guangzhou, China, 11/2011 (Keynote).
- 'Transitional Crust in Magma-Limited Rifts.' Conference on Conjugate Margin Structure and Evolution in the North Atlantic and Other Margins, South China Sea Institute of Oceanology CAS, Guangzhou, China, 11/2011 (Keynote).
- 'Detachment Faulting and Oceanic Core Complexes.' Conference on Conjugate Margin Structure and Evolution in the North Atlantic and Other Margins, South China Sea Institute of Oceanology CAS, Guangzhou, China, 11/2011 (Keynote).

- 'Crustal Extension and Mantle Exhumation in Weakly Magmatic Rifts and Mid-Ocean Ridges.' Conference on Alpine Ophiolites and Modern Analogs, Parma, Italy, 10/2009 (Keynote).
- 'Crustal Extension and Mantle Exhumation in Weakly Magmatic Rifts and Mid-Ocean Ridges.' Houston Geological Society and University of Houston, Robert E. Sheriff Distinguished Lecturer, 11/2008 (Keynote), *cited in* Houston Geological Society Bulletin, 51(3), p. 17, 2008.
- 'The Crustal Section Exhumed by Oceanic Detachment Faults.' AGU Fall Meeting, Session T51F on 'Generation of Oceanic Lithospheric in Areas of Low Effusive Magmatism: Where Has All the Crust Gone?', 12/2007 (Invited).
- 'Crustal Extension and Mantle Exhumation in Weakly Magmatic Rifts and Mid-Ocean Ridges.' GSA Penrose Conference on 'Extending a Continent: Architecture, Rheological Coupling and Heat Budget', Naxos, Greece, 10/2007 (Invited).
- 'Newfoundland-Iberia Rift: From Continental Extension to Seafloor Spreading in a Magma-Limited Environment.' Académie des Sciences International Meeting on the Ocean Continent Transition, Paris, 9/2007 (Keynote).
- 'Evolution of the Newfoundland-Iberia Rift.' CMOS/CGU/AMS Congress, session on 'North Atlantic Rifted Margin: Geophysical Processes and Constraints', St. Johns, Newfoundland, 5/2007 (Keynote).

Other Honors & Awards

- Silver Trout Award from Massachusetts/Rhode Island Council of Trout Unlimited (for outstanding contributions to preservation of cold-water fisheries), 1988
- President of Cape Cod Chapter Trout Unlimited, 1987-88, selected by national office of Trout Unlimited for 1988 Gold Trout Award as outstanding chapter of 435 chapters in the nation

Professional Service Outside Woods Hole Oceanographic Institution

- National Youth Science Camp, Directed-Study Lecturer, 2012, 2013
- IODP-MI Ocean Drilling Consortium Steering Committee, Member, 2008
- Ad Hoc Committee on MCS Greatest Hits, Lamont-Doherty Earth Observatory, 2005-2007
- Co-Convener, Crustal Accretion and Tectonic Extension in Magma-Limited Environments, AGU Fall Meeting, San Francisco, 2005
- Co-Convener, Structure and Evolution of Non-Volcanic Rifted Margins, AGU Fall Meeting, San Francisco, 2003
- Convener-Host, ONR Acoustic Reverberation Special Research Program, 1995 Research Symposium, Woods Hole Oceanographic Institution, 1995
- Co-Convener, Geological, Geophysical, and Acoustics Studies in the ONR Atlantic Natural Laboratory, Mid-Atlantic Ridge 23°-27.5° North, AGU Fall Meeting, San Francisco, 1995
- Co-Convener, Fine-Scale Seafloor Investigations of Mid-Oceanic Ridges Using ROV and Deep-Towed Instruments, AGU Fall Meeting, San Francisco, 1993
- Convener-Host, ONR Acoustic Reverberation Special Research Program, 1992 Fall Research Symposium, Woods Hole Oceanographic Institution, 1992
- Editorial Board, *Geology*, 1991-1993
- Convener-Host, ONR Acoustic Reverberation Special Research Program, 1991 Fall Research Symposium, Woods Hole Oceanographic Institution, 1991
- JOIDES North Atlantic Rifted Margins Detailed Planning Group, PCOM Liaison, 1990- 1991
- Office of Naval Research Special Research Project on Bottom/Subbottom Acoustic Reverberation, Executive Committee Member, 1989-1995
- JOI/USSAC Workshop on the Role of ODP Drilling in the Investigation of Global Changes in Sea Level, Steering Committee Member; Chairman, Clastic Margins Working Group, 1988
- IUGS Circum-Atlantic Map Project, Western North Atlantic Working Group, Member, 1988-1991
- JOIDES Tectonics Panel, Planning Committee Liaison, 1988-1992
- American Geophysical Union Committee on Paleooceanography, Member, 1987-1988
- American Association of Petroleum Geologists Committee on Marine Geology, Member, 1987-1990

- JOIDES Planning Committee, Alternate Member, 1986-1987; Member 1987-1992
- Co-Convener, Symposium on Eustatics and Continental Margins: Second International Conference on Paleoceanography, Woods Hole, Sept. 1986
- Co-Convener, South Atlantic/Indian Ocean: Geology and Physical Oceanography: AGU-ASLO Ocean Science Meeting, New Orleans, January, 1986
- Associate Editor, *Geological Society of America Bulletin*, 1985-1988
- JOIDES Atlantic Regional Panel, Member, 1984-1987
- Interim U.S. Science Advisory Committee for the Advanced Ocean Drilling Program, Member, 1983
- IOC GAPA Project: North Atlantic Sediment Thickness, Compiler-Curator, 1982 -1990
- NECOR Sea Beam Committee, Member, 1982-1987
- North American Ocean-Continent Transects, Corridor E2 Team, 1982-1986
- Project Co-Leader: Geologic Map of North America, Decade of North American Geology, Geological Society of America, 1982-2005
- COSOD Working Group on Origin and Evolution of Marine Sedimentary Sequences, Member, 1981
- JOIDES Passive Margin Panel, Member, 1981-1983
- Project Co-Leader and Co-Editor: Decade of North American Geology - Western North Atlantic Region, Geological Society of America, 1980-1986.
- Sandia National Laboratories Sub-Seabed Site Assessment Committee, Member, 1979-1986
- U.R.I. Long-Coring Facility Program, Steering Committee, Member, 1979
- NSF Research Initiation and Support (RIAS) Panel, 1977
- Technical Session Chairman: GSA - Marine Geology, 1975; AGU - Abyssal Seafloor, 1978; AGU - Benthic Boundary Layer, 1980; GSA - Marine Geology, 1981; AGU/ASLO - South Atlantic/Indian Ocean: Geology and Physical Oceanography, 1986; AGU - Fine-Scale Seafloor Investigations, 1993; AGU - ONR Atlantic Natural Laboratory, 1995; AGU - Non-Volcanic Rifted Margins, 2003; AGU - Crustal Accretion and Tectonic Extension, 2005

Non-Professional Activities

- West Falmouth Library, President 2017-2019
- West Falmouth Library, Board of Directors 2014-2020
- Barnstable County Sheriff's Citizens Academy, 2009
- Massachusetts Hunter Education Program, Certified Instructor, 2007-present
- Falmouth Citizens Police Academy, 1996
- Trout Unlimited, National Embrace-A-Stream Committee, 1993-1995
- Trout Unlimited, National Resource Board, 1993-1996
- Trout Unlimited, National Board of Directors, 1992
- Citizens for Protection of Waquoit Bay, Board of Directors, 1986-1989; Vice President, 1986-1987
- Trout Unlimited, Board of Directors, Cape Cod Chapter, 1984-1989; Vice President, 1986; President, 1987-1988

Activities Within Woods Hole Oceanographic Institution

Education:

- Educational Council, 1986-88
- Ad Hoc Committee on JPMGG Guide, 1986-87
- Joint Committee Marine Geology and Geophysics, 1986-1988; Chairman, 1987
- J. Seward Johnson Chair in Oceanography, 1986-88
- Educational Council, 1982-84
- Joint Committee for Marine Geology and Geophysics, 1981-82
- Graduate Admissions Committee, 1980-81
- Ad Hoc Committee on Joint Program in Marine Geology and Geophysics Guide, 1979-81
- Courses taught: 12.798 Special Problems, 1979; 12.73 Marine Geology, 1979; 12.791 Marine Geology, 1982

- Member or chair of 43 examination committees (preliminary exam, oral exam, general exam, thesis proposal exam, thesis defense), member of 14 thesis committees, advisor (academic, thesis, and/or research project) for 27 students (Joint Program and external)

Summer Student Advisor:

- Amanda Babson - Summer Student Fellow, 1997
- Karen Worminghaus - Summer Student Fellow, 1995
- Ian Malin, ONR Summer High School Apprentice, 1995
- Elizabeth Tyndale, ONR Summer High School Apprentice, 1993
- Gary Jaroslow - Summer Student Fellow, 1989
- Ana Macario - Summer Student Fellow, 1984
- Barbara Wall - Summer Minority Trainee, 1980

Thesis Advisor or Co-Advisor:

- Tingting Zheng (Ph.D. 2019, Tongji University)
- Tingting Wang (Ph.D. 2015, Peking University)
- Amy R. McKnight (M.S. 2001, MIT/WHOI)
- Gary E. Jaroslow (Ph.D. 1997, MIT/WHOI)
- Mary L. Bremer (Ph.D. 1982, MIT/WHOI)
- Kenneth G. Miller (Ph.D. 1982, MIT/WHOI)
- Gregory S. Mountain (Ph.D. 1981, Columbia U.)

Postdoctoral Advisor:

- Dr. Gwenn Peron-Pinvidic, Postdoctoral Fellow, 2006-2008
- Dr. Alexei Milkov, Postdoctoral Scholar, 2002-2003
- Dr. Martin C. Kleinrock, Postdoctoral Investigator, 1988-1989
- Dr. Steve Swift, Postdoctoral Investigator, 1986
- Dr. R. Mark Leckie, Postdoctoral Scholar, 1984-1985

Scientific Sponsor:

- Dr. Kantaro Fujioka (JAMSTEC, Japan), Guest Investigator, 1998
- Dr. Gary Jaroslow, Guest Investigator, 1997
- Ms. Tamara Osychny, Guest Investigator, 1995
- Mr. Jens Grutzner (GEOMAR, Kiel), Guest Student Investigator, 1992
- Dr. Tom Reed (University of Hawaii), Guest Investigator, 1990-91
- Dr. John Jemsek (WHOI), Visiting Investigator, 1988
- Mr. Michael Fisk (University College, London), Guest Student Investigator, 1984
- Dr. S. P. Srivastava (Bedford Institute of Oceanography), Guest Investigator, 1984
- Dr. Tjeerd van Weering (Nederlands Instituut voor Onderzoek der Zee), Guest Investigator, 1983
- Dr. Michel Cousin (Université Pierre et Marie Curie), Guest Investigator, 1981

WHOI Committees:

- WHOI Ad Hoc Committee on Strategic Planning for Library Services, 2004-2005
- Chairman, G&G Ad Hoc Margins/Coastal Geology Search Committee, 2000-2001
- Senior Scientists Executive Committee Subcommittee on Alternative Funding, 2000
- MBL-WHOI Library Joint Users Committee, 1999-2005
- G&G Ad Hoc Selection Committee for Seward Johnson Chair, 1999
- Chairman, WHOI Ad Hoc Scientific Data Advisory Committee, 1997-1999
- G&G Ad Hoc Committee on Ocean Drilling Program, 1994
- Acting G&G Representative, WHOI Marine Operations Committee, 1994
- G&G Ad Hoc Committee on Space Needs, 1994
- G&G Shinkai 6500 Ad Hoc Working Group, 1993-1994, 1997-1998
- WHOI Sea Beam Committee, 1993-2003
- G&G Ad Hoc Committee on Marine Geology, 1993-1994
- G&G Ad Hoc Committee on Sea Beam 2100, 1994-1999
- G&G Digital Image Analysis Laboratory Committee, 1989-2003

- Deep Submergence Advisory Committee, 1993-2003
- Center for Marine Exploration Review Committee, 1992
- Geodynamics Committee, 1989-2000
- WHOI Senior Scientist Ad Hoc Committee on Restricted Research, 1990
- WHOI Ad Hoc Committee for Science Strategy, 1989-1990
- Chairman, Center for Marine Exploration Planning Committee, 1987-1989
- Chairman, Ad Hoc Committee for Center for Marine Exploration, 1986
- WHOI Promotion Review Committees (Member or Chair), 1985, 1988, 1990, 1991, 1992, 1993, 1995, 1996, 1997, 1998, 1999, 2001, 2002, 2007
- WHOI Ad Hoc Committee for Independent Study Awards, 1986, 1989
- WHOI Ad Hoc Committee for Mellon/Senior Study Awards, 1982
- WHOI 50th Anniversary Open House Committee, 1980

Research Interests

- Tectonic and magmatic development of oceanic crust
- Structure and evolution of rifted continental margins
- Seismic stratigraphy and rock stratigraphy, with applications to paleoceanography
- Sedimentary processes and benthic boundary layer processes
- Physical properties of sediments

Seagoing Experience

- 30 research cruises, including 19 as Chief Scientist/Co-Chief Scientist, two on Glomar Challenger for the Deep Sea Drilling Project, and one on JOIDES Resolution for the Ocean Drilling Program

- | | |
|------|---|
| 2004 | 30. Co-Chief Scientist, R/V KNORR 180-2. Jason II, ABE, and dredging study of Kane megamullion on the Mid-Atlantic Ridge, 14 November - 17 December 2004 |
| 2003 | 29. Co-Chief Scientist, JOIDES RESOLUTION, ODP Leg 210. Deep-sea drilling in the Newfoundland Basin. 6 July - 6 September 2003 |
| 2001 | 28. Co-Chief Scientist, R/V EWING 01-02. Multichannel seismic reflection/refraction and geophysical investigation of Atlantis, Dante's Domes, and Kane megamullions on the Mid-Atlantic Ridge. 10 March - 5 April 2001 |
| 2000 | 27. Co-Chief Scientist, R/V EWING 00-07 (two-ship operation with R/V OCEANUS). Multichannel seismic reflection, OBS/H and geophysical investigation of the rifted continental margin at the eastern edge of the Grand Banks. 15 July - 16 August 2000 |
| 1998 | 26. Scientist, R/V YOKOSUKA. Shinkai 6500 dives on Dante's Domes megamullion and Mid-Atlantic Ridge hydrothermal sites. SeaBeam, gravity, and magnetics surveys. July - August 1998 |
| 1997 | 25. Scientist, R/V ATLANTIS 1-3. SeaBeam and 3.5-kHz seismic reflection survey of Hudson Canyon, U.S. Atlantic margin. April 1997 |
| 1996 | 24. Chief Scientist, R/V EWING 96-06. Geological-geophysical survey of east flank of Mid-Atlantic Ridge near 26°N. Hydrosweep, HMR1 sidescan sonar, 3.5-kHz seismic reflection, gravity, magnetics. July - August 1996 |
| 1993 | 23. Chief Scientist, R/V KNORR 138-14. Near-bottom geological and geophysical surveys of the Mid-Atlantic Ridge flank using DSL-120 sidescan sonar and Jason ROV survey systems. May - June 1993 |
| 1992 | 22. Chief Scientist, R/V EWING 92-08. Geological-geophysical survey of ONR Acoustic Reverberation Corridor, west flank Mid-Atlantic Ridge near 26°N. Hydrosweep, HMR1 sidescan sonar, seismic reflection, gravity, magnetics. July - August 1992 |
| 1988 | 21. Chief Scientist, R/V CONRAD 29-08. SeaMARC II sidescan/bathymetry survey of fine-scale structure of Kane Fracture Zone, rock dredging, magnetics. |

- August - September 1988
- 1984 20. Co-Chief Scientist, R/V CONRAD 25-10. Multichannel seismic study of the continent-ocean boundary east of the Grand Banks (MCS, magnetics, gravity, sonobuoys, SeaBeam). August - September 1984
 - 1980 19. Scientist, R/V KNORR 80. Multichannel seismic profiling on the continental rise off Cape Hatteras (IPOD Site Surveys). July - August 1980
 - 1979 18. Chief Scientist, R/V CONRAD 22-09. Geological and geophysical studies of the Nova Scotian continental rise. July 1979
 - 1978 17. Chief Scientist, R/V CONRAD 21-10. Near-bottom process studies on Greater Antilles Outer Ridge and Western Bermuda Rise. June 1978
 16. Chief Scientist, R/V VEMA 34-11. OBH seismic refraction, current-meter, bottom photography, piston coring, dredging studies of Agulhas Plateau off South Africa. January 1978
 - 1977 15. Chief Scientist, R/V CONRAD 20-12. Acoustics and near-bottom process studies in the Western North Atlantic. April-May 1977
 - 1976 14. Co-Chief Scientist, R/V CONRAD 19-05. Acoustics and near-bottom process studies in the Western North Atlantic. January-February 1976
 - 1975 13. Co-Chief Scientist, GLOMAR CHALLENGER, DSDP Leg 43. Deep-sea drilling in western North Atlantic. June-August 1975
 - 1974 12. Sedimentologist, GLOMAR CHALLENGER, DSDP Leg 35. Deep-sea drilling in the Bellingshausen Basin off Antarctica. February-March 1974
 - 1972 11. Co-Chief Scientist, USS PETREL. Seismic profiling, bottom sampling, and XBT surveys over Hudson Canyon in conjunction with NR-1 submersible studies. October 1972
 10. Scientist, R/V KNORR. Bottom photography, coring, hydrostations on Caicos Outer Ridge. Biological investigations in Sargasso Sea. May 1972
 9. Co-chief Scientist, R/V KNORR. 3.5-kHz seismic profiling, bottom photography, hydrography, giant piston coring on Greater Antilles Outer Ridge. February 1972
 - 1971 8. Co-chief Scientist, R/V ATLANTIS II. Echo-sounding surveys, hydrography, coring, bottom photography on Greater Antilles Outer Ridge. August 1971
 7. Scientist, MSS MT. MITCHELL. Echo-sounding surveys, coring, bottom photography, mooring of current meters on the Greater Antilles Outer Ridge North of Puerto Rico. January 1971
 - 1970 6. Scientist, R/V KNORR. Giant piston coring in Gulf of Maine, testing of a 1.4-kHz seismic profiling system. November 1970
 5. Scientist, R/V KNORR. Giant piston coring in Gulf of Maine. September 1970
 4. Chief Scientist, CCGS JOHN CABOT. Testing of a new 3.5-kHz seismic profiling system on the continental shelf and slope between Newfoundland and Maryland. May 1970
 3. Scientist, R/V CHAIN. Seismic reflection profiling, magnetic and gravity measurements in the S.E. Bahamas. April 1970
 - 1969 2. Scientist, R/V DOLPHIN. 3.5-kHz seismic profiling, bottom sampling, bottom photography, and hydrocasts in the Gulf of Maine. July 1969
 - 1968 1. Geophysicist, WESTERN REEF and WESTERN GULF. Multichannel seismic reflection prospecting for petroleum resources in the Gulf of Mexico. June-August 1968

BRIAN E. TUCHOLKE PUBLICATIONS

• Author/editor of 8 books and special publications; author of 117 peer-reviewed research papers, 35 miscellaneous publications, 21 maps and charts, and more than 200 research abstracts and presentations in marine geology and geophysics.

Peer-Reviewed Papers in Journals and Books (excluding Ocean Drilling)

- 2023 107) **Tucholke, B. E.**, R. Parnell-Turner, and D. K. Smith, The Global Spectrum of Seafloor Morphology on Mid-Ocean Ridge Flanks Related to Magma Supply, *J. Geophys. Res.: Solid Earth*, v. 128, e2023JB027367. <https://doi.org/10.1029/2023JB027367>, 2023.
- 2019 106) *Zheng, T., **B. E. Tucholke**, and J. Lin, Long-term evolution of nontransform discontinuities at the Mid-Atlantic Ridge, 24°N–27°30'N, *J. Geophys. Res.*, v. 124, <https://doi.org/10.1029/2019JB017648>, 2019.
- 2017 105) Gardner, W. D., **B. E. Tucholke**, M. J. Richardson, and P. E. Biscaye, Benthic storms, nepheloid layers, and linkage with upper ocean dynamics in the western North Atlantic, *Marine Geol.*, 385, 304–327, doi: 10.1016/j.margeo.2016.12.012, 2017.
- 2017 104) *Boyle, P. R., B. W. Romans, **B. E. Tucholke**, R. D. Norris, S. A. Swift, and P. F. Sexton, Cenozoic North Atlantic deep circulation history recorded in contourite drifts, offshore Newfoundland, Canada, *Marine Geol.*, 385, 185–203, doi: 10.1016/j.margeo.2016.12.014, 2017.
- 2015 103) *Wang, T., **B. E. Tucholke**, and J. Lin, Spatial and temporal variations in crustal production at the Mid-Atlantic Ridge, 25°N–27°30'N and 0–27 Ma, *J. Geophys. Res. Solid Earth*, 120, 2119–2142, doi: 10.1002/2014JB011501, 2015.
- 2013 102) **Tucholke, B. E.**, S. E. Humphris, and H. J. B. Dick, Cemented mounds and hydrothermal sediments on the detachment surface at Kane Megamullion: A new manifestation of hydrothermal venting, *Geochem. Geophys. Geosyst.*, 14, 3352–3378, doi: 10.1002/ggge.20186, 2013.
- 101) *Hansen L. N., M. J. Cheadle, B. E. John, S. M. Swapp, H. J. B. Dick, **B. E. Tucholke**, and M. A. Tivey, Mylonitic deformation at the Kane oceanic core complex: Implications for the rheological behavior of oceanic detachment faults, *Geochem. Geophys. Geosyst.*, 14, 3085–3108, doi:10.1002/ggge.20184, 2013.
- 2012 100) **Tucholke, B. E.**, and J.-C. Sibuet, Problematic plate reconstruction, *Nature Geoscience*, 5, 676–677, 2012.
- 99) Kaim, A., **B. E. Tucholke**, and A. Warén, A new Late Pliocene large provannid gastropod associated with hydrothermal venting at Kane Megamullion, Mid-Atlantic Ridge, *J. Systematic Paleontology*, 10, 423–433, 2012.
- 98) Sibuet, J.-C., and **B. E. Tucholke**, The geodynamic province of transitional lithosphere adjacent to magma-poor continental margins, in Mohriak, W. U., A. Danforth, P. J. Post, D. E. Brown, G. C. Tari, N. Nemcok, and S. T. Sinha, ed's., *Conjugate Divergent Margins*, Geological Society London Special Publication 369, p. 429–452, doi: 10.1144/SP369.15, 2012.

- 97) **Tucholke, B. E.**, and R. B. Whitmarsh, The Newfoundland-Iberia conjugate rifted margins, in Roberts, D. G., and A. W. Bally, eds., *Phanerozoic Passive Margins, Cratonic Basins and Global Tectonic Maps*, Elsevier, pp. 343-382, doi: 10.1016/B978-0-444-56357-6.00009-3, 2012.
- 2011 96) *Wang, T., J. Lin, **B. Tucholke**, and Y. J. Chen, Crustal thickness anomalies in the North Atlantic Ocean basin from gravity analysis, *Geochem. Geophys. Geosyst.*, 12, Q0AE02, doi:10.1029/2010GC003402, 2011.
- 2010 95) *Peron-Pinvidic, G., D. J. Shillington, and **B. E. Tucholke**, Characterization of sills associated with the U reflection on the Newfoundland margin: evidence for widespread early post-rift magmatism on a magma-poor rifted margin, *Geophys. J. International*, 182, 113-136, doi: 10.1111/j.1365-246X.2010.04635.x, 2010.
- 94) *Olive, J.-A., M. D. Behn, and **B. E. Tucholke**, The structure of oceanic core complexes controlled by the depth distribution of magma emplacement, *Nature Geoscience*, 3, 491-495, doi: 10.1038/NGEO888, 2010.
- 2009 93) *Xu, M., J. P. Canales, **B. E. Tucholke**, and D. L. DuBois, Heterogeneous seismic velocity structure of the upper lithosphere at Kane oceanic core complex, Mid-Atlantic Ridge, *Geochem. Geophys. Geosyst.*, 10, Q10001, doi:10.1029/2009GC002586, 2009.
- 2008 92) Hiscott, R.N., K.M. Marsaglia, R.C.L. Wilson, A.H.F. Robertson, G.D. Karner, **B.E. Tucholke**, T. Pletsch, and R. Petschick, Detrital sources and sediment delivery to the early post-rift (Albian–Cenomanian) Newfoundland Basin east of the Grand Banks: results from ODP Leg 210, *Bull. Can. Petrol. Geol.*, 56, 69-92, 2008.
- 91) Canales, J. P., **B. E. Tucholke**, M. Xu, J. A Collins, and D. L. DuBois, Seismic evidence for large-scale compositional heterogeneity of oceanic core complexes, *Geochem. Geophys. Geosyst.*, 9, Q08002, doi: 10.1029/2008GC002009, 2008.
- 90) **Tucholke, B.E.**, M.D. Behn, W.R. Buck, and J. Lin, Role of melt supply in oceanic detachment faulting and formation of megamullions, *Geology*, 36, 455–458; doi: 10.1130/G24639A.1, 2008.
- 89) Dick, H. J. B., M. A. Tivey, and **B. E. Tucholke**, Plutonic foundation of a slow-spreading ridge segment: Oceanic core complex at Kane Megamullion, 23°30'N, 45°20'W, *Geochem. Geophys. Geosyst.*, 9, Q05014, doi: 10.1029/2007GC001645, 2008.
- 2007 88) Hopper, J. R., T. Funck, and **B. E. Tucholke**, Structure of the Flemish Cap margin, Newfoundland: Insights into mantle and crustal processes during continental breakup, in Karner, G., G. Manatschal, and L. Pinheiro, eds., *Imaging, Mapping and Modelling Continental Lithosphere Extension and Breakup*, Geological Society, London, Special Publications, 282, 47-61, doi: 10.1144/SP282.3, 2007.
- 87) **Tucholke, B. E.**, D. S. Sawyer, and J.-C. Sibuet, Breakup of the Newfoundland-Iberia rift, in Karner, G., G. Manatschal, and L. Pinheiro, eds., *Imaging, Mapping and Modelling Continental Lithosphere Extension and Breakup*, Geological Society, London, Special Publications, 282, 9-46, doi: 10.1144/SP282.2, 2007.
- 2006 86) Van Avendonk, H. J. A., W. S. Holbrook, G. T. Nunes, D. J. Shillington, **B. E. Tucholke**, K. E. Loudon, H. C. Larsen, and J. R. Hopper, Seismic velocity structure of the rifted margin of the eastern Grand Banks of Newfoundland, Canada, *J. Geophys. Res.*, 111, B11404, doi:10.1029/2005JB004156, 2006.
- 85) *Lau, K. W. H., K. E. Loudon, S. Deemer, J. Hall, J. R. Hopper, **B. E. Tucholke**, W. S. Holbrook, and H. C. Larsen, Crustal structure across the Grand Banks-Newfoundland Basin

- continental margin - II. Results from a seismic reflection profile, *Geophys. J. Int.*, 167, 157-170, 2006.
- 84) *Lau, K. W. H., K. E. Loudon, T. Funck, **B. E. Tucholke**, W. S. Holbrook, J. R. Hopper, and H. C. Larsen, Crustal structure across the Grand Banks-Newfoundland Basin continental margin – I. Results from a seismic refraction profile, *Geophys. J. Int.*, 167, 127-156, 2006.
- 83) Butman, B., D. C. Twichell, P. Rona, **B. E. Tucholke**, T. J. Middleton, and J. Robb, Sea floor topography and backscatter intensity of the Hudson Canyon region offshore of New York and New Jersey, *US Geological Survey Open File Report OF 2004-1441*, Version 2.0. 1 CD-ROM. Online at <http://pubs.usgs.gov/of/2004/1441/index.html>, 2006.
- 82) Shillington, D. J., W. S. Holbrook, H. J. A Van Avendonk, **B. E. Tucholke**, J. R. Hopper, K. E. Loudon, H. C. Larsen, and G. T. Nunes, Evidence for asymmetric nonvolcanic rifting and slow incipient oceanic accretion from seismic reflection data on the Newfoundland margin, *J. Geophys. Res.*, 111, B09402, doi:10.1029/2005JB003981, 23pp., 2006.
- 81) Hopper, J. R., T. Funck, **B. E. Tucholke**, K. E. Loudon, W. S. Holbrook, and H. C. Larsen, A deep seismic investigation of the Flemish Cap margin: Implications for the origin of deep reflectivity and evidence for asymmetric break-up between Newfoundland and Iberia, *Geophys. J. Int.*, 164, 501-515, 2006.
- 2005 80) **Tucholke, B. E.**, Geology of the seafloor around North America, in Reed, J. C., Jr., J. O. Wheeler, and B. E. Tucholke, *Decade of North American Geology Geologic Map of North America – Perspectives and Explanation*, Geol. Soc. America, Boulder, p. 13-19, 2005.
- 79) Reed, J. C., Jr., J. O. Wheeler, and **B. E. Tucholke**, *Decade of North American Geology Geologic Map of North America – Perspectives and Explanation*, Geol. Soc. America, Boulder, 28 pp., 2005.
- 2004 78) Loudon, K. E., **B. E. Tucholke**, and G. N. Oakey, Regional anomalies of sediment thickness, basement depth and isostatic crustal thickness in the North Atlantic Ocean, *Earth Planet. Sci. Lett.*, 222, 193-211, 2004.
- 77) Canales, J. P., **B. E. Tucholke**, and J. A. Collins, Seismic reflection imaging of an oceanic detachment fault: Atlantis megamullion (Mid-Atlantic Ridge, 30°10'N), *Earth Planet. Sci. Lett.*, 222, 543-560, 2004.
- 76) Hopper, J. R., T. Funck, **B. E. Tucholke**, H. C. Larsen, W. S. Holbrook, K. E. Loudon, D. Shillington, and H. Lau, Continental breakup and the onset of ultra-slow seafloor spreading off Flemish Cap on the Newfoundland rifted margin, *Geology*, 32, p. 93-96, doi: 10.1130/G19694.1, 2004.
- 2003 75) Funck, T., J. R. Hopper, H. C. Larsen, K. E. Loudon, **B. E. Tucholke**, and W. S. Holbrook, Crustal structure of the ocean-continent transition at Flemish Cap: Seismic refraction results, *J. Geophys. Res.*, 108, 2531, doi:10.1029/2003JB002434, 20 pp., 2003.
- 74) Fujiwara, T., J. Lin, T. Matsumoto, P. B. Kelemen, **B. E. Tucholke**, and J. F. Casey, Crustal Evolution of the Mid-Atlantic Ridge near the Fifteen-Twenty Fracture Zone in the last 5 Ma, *Geochem. Geophys. Geosys.*, 4, doi: 10.1029/2002GC000364, 25 pp., 2003.
- 2002 73) McCave, I. N., R. C. Chandler, S. A. Swift, and **B. E. Tucholke**, Contourites of the Nova Scotian continental rise and the HEBBLE area, in D. A. V. Stow, C. J. Pudsey, J. A. Howe, J.-C. Faugeres, and A. R. Viana, eds., *Deep-Water Contourite Systems: Modern Drifts and Ancient Series, Seismic and Sedimentary Characteristics*, Geological Society London, *Memoirs*, 22, p. 21-38, 2002.

- 72) **Tucholke, B. E.**, The Greater Antilles Outer Ridge: Development of a distal sedimentary drift by deposition of fine-grained contourites, in D. A. V. Stow, C. J. Pudsey, J. A. Howe, J.-C. Faugeres, and A. R. Viana, eds., *Deep-Water Contourite Systems: Modern Drifts and Ancient Series, Seismic and Sedimentary Characteristics*, Geological Society London, *Memoirs*, 22, p. 39-55, 2002.
- 2001 71) **Tucholke, B. E.**, K. Fujioka, T. Ishihara, G. Hirth, and M. Kinoshita, Submersible study of an oceanic megamullion in the central North Atlantic, *J. Geophys. Res.*, 106, 16,145-16,161, 2001.
- 2000 70) Jaroslow, G. E., Smith, D. K., and **B. E. Tucholke**, Record of seamount production and off-axis evolution in the North Atlantic Ocean, 25°25'-27°10'N, *J. Geophys. Res.*, 105, 2721-2736, 2000.
- 1998 69) Tivey, M. A., and **B. E. Tucholke**, Magnetization of 0 to 29 Ma ocean crust on the Mid-Atlantic Ridge at 25°30' to 27°10'N, *J. Geophys. Res.*, 103, 17,807-17,826, 1998.
- 68) **Tucholke, B. E.**, J. Lin and M. C. Kleinrock, Megamullions and mullion structure defining oceanic metamorphic core complexes on the Mid-Atlantic Ridge, *J. Geophys. Res.*, 103, 9857-9866, 1998.
- 1997 67) Kleinrock, M. C., **B. E. Tucholke**, J. Lin, and M. A. Tivey, Fast rift propagation at a slow-spreading ridge, *Geology*, 25, 639-642, 1997.
- 66) Goff, J. A., and **B. E. Tucholke**, Multiscale spectral analysis of bathymetry on the flank of the Mid-Atlantic Ridge: Modification of the seafloor by mass wasting and sedimentation, *J. Geophys. Res.*, 102, 15,447-15,462, 1997.
- 65) **Tucholke, B. E.**, J. Lin, M. C. Kleinrock, M. Tivey, T. B. Reed, J. Goff, and G. Jaroslow, Segmentation and crustal structure of the western Mid-Atlantic Ridge flank, 25°25' - 27°10'N and 0 - 29 m.y., *J. Geophys. Res.*, 102, 10,203-10,223, 1997.
- 64) **Tucholke, B. E.**, W. K. Stewart, and M. C. Kleinrock, Long-term denudation of ocean crust in the central North Atlantic Ocean, *Geology*, 25, 171-174, 1997.
- 1995 63) Goff, J. A., **B. E. Tucholke**, J. Lin, G. E. Jaroslow, and M. C. Kleinrock, Quantitative analysis of abyssal hills in the Atlantic Ocean: A correlation between crustal thickness and extensional faulting, *J. Geophys. Res.*, 100, 22,509-22,522, 1995.
- 1994 62) **Tucholke, B. E.**, and J. Lin, A geological model for the structure of ridge segments in slow-spreading ocean crust, *J. Geophys. Res.*, 99, 11,937-11,958, 1994.
- 61) *Jaroslow, G. E., and **B. E. Tucholke**, Mesozoic-Cenozoic sedimentation in the Kane Fracture Zone, Western North Atlantic, and uplift history of the Bermuda Rise, *Geol. Soc. America Bull.*, 106, 319-337, 1994.
- 1992 60) **Tucholke, B. E.**, Massive submarine rockslide on the rift valley wall of the Mid-Atlantic Ridge, *Geology*, 20, 129-132, 1992.
- 1991 58) *Müller, R. D., D. T. Sandwell, **B. E. Tucholke**, J. G. Sclater, and P. R. Shaw, Depth to basement and geoid expression of the Kane Fracture Zone: a comparison, *Marine Geophys. Res.*, 13, 105-129, 1991.
- 59) **Tucholke, B. E.**, K. C. Macdonald, and P. J. Fox, ONR seafloor natural laboratories on slow- and fast-spreading mid-ocean ridges, *EOS Trans. Am. Geophys. Union*, 72, 268-270, 1991.

- 1990 57) **Tucholke, B. E.**, and E. Uchupi, Thickness of sedimentary cover, North Atlantic, in G. B. Udintsev, *ed.*, *International Geological-Geophysical Atlas of the Atlantic Ocean*, Intergovernmental Oceanographic Commission, Acad. Sci. of the USSR, Sheets 1 and 2, p. 122-125, 1990.
- 56) **Tucholke, B. E.**, and N. C. Smoot, Evidence for age and evolution of Corner Seamounts and Great Meteor seamount chain from multibeam bathymetry, *J. Geophys. Res.*, 95, 17,555-17,569, 1990.
- 55) **Tucholke, B. E.**, Comment on "North Atlantic fracture-zone distribution and patterns shown by multibeam sonar", *Geology*, 18, 911-912, 1990.
- 1989 54) Cura, J., R. Gilmor, G. Mariani, C. Menzie, E. Burke, W. Curtis, C. Ketchum, and **B. E. Tucholke**, Site-selection criteria for the disposal of low-level radioactive wastes off the east coast of North America, in M. A. Champ and R. K. Park, *eds.*, *Oceanic Processes in Marine Pollution, Vol. 3, Marine Waste Management: Science Policy*, Kreiger Publ. Co., p. 177-185, 1989.
- 53) Vogt, P. R., and **B. E. Tucholke**, North Atlantic Ocean basin; aspects of geologic structure and evolution, in A. W. Bally and A. R. Palmer, *eds.*, *The Geology of North America, Vol. A, An Overview*, Geol. Soc. America, p. 53-80, 1989.
- 52) **Tucholke, B. E.**, Sediment distribution, in S. P. Srivastava, D. Voppel, and B. E. Tucholke, *Geophysical Atlas of the North Atlantic Between 50° to 72°N and 0° to 65°W*, Deutsches Hydrographisches Institut, Hamburg, p. 9-12 + 7 maps, 1989.
- 51) **Tucholke, B. E.**, J. A. Austin, Jr., and E. Uchupi, Crustal structure and rift-drift evolution of the Newfoundland Basin, in A. J. Tankard and H. Balkwill, *eds.*, *Extensional Tectonics and Stratigraphy of the North Atlantic Margins*, *Am. Assoc. Petrol. Geol. Memoir* 46, p. 247-263, 1989.
- 50) Austin, J. A., Jr., **B. E. Tucholke** and E. Uchupi, Upper Triassic-Lower Jurassic salt basin southeast of the Grand Banks, *Earth Planet. Sci. Lett.*, 92, 357-370, 1989.
- 1988 49) *Ebinger, C. J., and **B. E. Tucholke**, Marine geology of Sohm Basin, Canadian Atlantic margin, *Am. Assoc. Petrol. Geol. Bulletin*, 72, 1450-1468, 1988.
- 48) **Tucholke, B. E.**, and H. Schouten, Kane Fracture Zone, *Marine Geophys. Res.*, 10, 1-39 + 10 maps, 1988.
- 1986 47) **Tucholke, B. E.**, Submarine geology, in J. D. Milliman and W. R. Wright, *eds.*, *The Marine Environment of the U.S. Atlantic Continental Slope and Rise*, Jones and Bartlett, Boston, p. 56-113, 1986.
- 46) Dillon, W. P., F. T. Manheim, L. F. Jansa, G. Palmason, **B. E. Tucholke**, and R. S. Landrum, Resource potential of the western North Atlantic basin, in P. R. Vogt and B. E. Tucholke, *eds.*, *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, p. 661-676, 1986.
- 45) **Tucholke, B. E.**, and G. S. Mountain, Tertiary paleoceanography of the western North Atlantic Ocean, in P. R. Vogt and B. E. Tucholke, *eds.*, *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, p. 631-650, 1986.
- 44) **Tucholke, B. E.**, and F. W. McCoy, Paleogeographic and paleobathymetric evolution of the North Atlantic Ocean, in P. R. Vogt and B. E. Tucholke, *eds.*, *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, p. 589-602, 1986.

- 43) McCave, I. N., and **B. E. Tucholke**, Deep current-controlled sedimentation in the western North Atlantic, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, p. 451-468, 1986.
- 42) **Tucholke, B. E.**, Structure of basement and distribution of sediments in the western North Atlantic Ocean, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, p. 331-340, 1986.
- 41) Vogt, P. R., and **B. E. Tucholke**, Imaging the ocean floor: History and state of the art, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, p. 19-44, 1986.
- 40) **Tucholke, B. E.**, and P. R. Vogt, Perspectives on the geology of the North Atlantic Ocean, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, p. 1-18, 1986.
- 39) **Tucholke, B. E.**, Analysis of a longitudinal ripple from the Nova Scotian continental rise: Comment, *Marine Geol.*, 72, 371-373, 1986.
- 38) *Swift, S. A., C. J. Ebinger, and **B. E. Tucholke**, Seismic stratigraphic correlation across the New England Seamounts, western North Atlantic, *Geology*, 14, 346-349, 1986.
- 1985 37) Miller, K. G., G. S. Mountain, and **B. E. Tucholke**, Oligocene glacio-eustasy and erosion on the margins of the North Atlantic, *Geology*, 13, 10-13, 1985.
- 36) Mountain, G. S., and **B. E. Tucholke**, Mesozoic and Cenozoic geology of the U.S. Atlantic continental slope and rise, in C. W. Poag, ed., *Geologic Evolution of the United States Atlantic Margin*, Van Nostrand Reinhold, New York, p. 293-341, 1985.
- 35) **Tucholke, B. E.**, C. D. Hollister, P. E. Biscaye, and W. D. Gardner, Abyssal current character determined from sediment bedforms on the Nova Scotian continental rise, *Marine Geol.*, 66, 43-57, 1985.
- 34) *Driscoll, M. L., **B. E. Tucholke**, and I. N. McCave, Seafloor zonation in sediment texture on the Nova Scotian lower continental rise, *Marine Geol.*, 66, 25-41, 1985.
- 33) **Tucholke, B. E.**, and V. A. Fry, Basement structure and sediment distribution in the northwest Atlantic Ocean, *Am. Assoc. Petrol. Geol. Bull.*, 69, 2077-2097, 1985.
- 32) **Tucholke, B. E.**, and V. A. Fry, Maps of basement structure and sediment distribution in the northwest Atlantic Ocean, *Am. Assoc. Petrol. Geol., Map Series*, Scale 1:4.383 million, 2 sheets and text, 1985.
- 1984 31) **Tucholke, B. E.**, and R. W. Embley, Regional erosion of the abyssal seafloor off South Africa, in J. S. Schlee, ed., *Interregional Unconformities and Hydrocarbon Accumulation*, *Am. Assoc. Petrol. Geol. Mem.* 36, 145-164, 1984.
- 30) **Tucholke, B. E.**, and C. D. Hollister, Current zonation and bedforms on Nova Scotian continental rise determined from bottom photography, in P. F. Smith, ed., *Underwater Photography, Scientific and Engineering Applications*, Van Nostrand Reinhold, New York, p. 137-140, 1984.
- 1983 29) Mountain, G. S., and **B. E. Tucholke**, Abyssal sediment waves, in A. W. Bally, ed., *Seismic Expression of Structural Styles*, *Am. Assoc. Petrol. Geol. Studies in Geology Series*, No. 15, v. 1, 22-24, 1983.

- 28) Miller, K. G., and **B. E. Tucholke**, Development of Cenozoic abyssal circulation south of the Greenland-Scotland Ridge, in M.H.P. Bott, S. Saxov, M. Talwani, and J. Thiede, eds., *Structure and Development of the Greenland-Scotland Ridge*, Plenum Publ., 549-589, 1983.
- 1982 27) **Tucholke, B. E.**, and E. P. Laine, Neogene and Quaternary development of the lower continental rise off the central U.S. east coast, in J. S. Watkins and C. L. Drake, eds., *Studies in Continental Margin Geology*, Am. Assoc. Petrol. Geol. Mem. 34, 295-305, 1982.
- 26) **Tucholke, B. E.**, R. E. Houtz, and W. J. Ludwig, Maps of Sediment Thickness and Depth to Basement in the Western North Atlantic Ocean Basin, *Am. Assoc. Petrol. Geol., Map Series*, Scale 1:4.383 million, 2 sheets and text, 1982.
- 25) **Tucholke, B. E.**, R. E. Houtz, and W. J. Ludwig, Sediment thickness and depth to basement in western North Atlantic Ocean basin, *Am. Assoc. Petrol. Geol. Bull.*, 66, 1384-1395, 1982.
- 24) **Tucholke, B. E.**, and W. J. Ludwig, Structure and origin of the J-Anomaly Ridge, western North Atlantic Ocean, *J. Geophys. Res.*, 87, 9389-9407, 1982.
- 23) Vogt, P. R. and **B. E. Tucholke**, The western North Atlantic, in A. R. Palmer, ed., *Perspectives in Regional Geological Synthesis*, Geol. Soc. Am. DNAG Spec. Publ. 1, 117-132, 1982.
- 22) **Tucholke, B. E.**, Origin of longitudinal triangular ripples on the Nova Scotian continental rise, *Nature*, 296, 735-737, 1982.
- 1981 21) **Tucholke, B. E.**, Geologic significance of seismic reflectors in the deep western North Atlantic basin, in J. E. Warme, R. G. Douglas, and E. L. Winterer, eds., *The Deep Sea Drilling Project: A Decade of Progress*, Soc. Econ. Paleo. Mineral. Spec. Publ. 32, 23-37, 1981.
- 20) *Allen, R. B., and **B. E. Tucholke**, Petrography and implications of continental rocks from the Agulhas Plateau, southwest Indian Ocean, *Geology*, 9, 463-468, 1981.
- 19) **Tucholke, B. E.**, R. E. Houtz, and D. M. Barrett, Continental crust beneath the Agulhas Plateau, southwest Indian Ocean, *J. Geophys. Res.*, 86, 3791-3806, 1981.
- 18) Rothe, P., and **B. E. Tucholke**, Mineralogy of sedimentary formations in the western North Atlantic Ocean: preliminary results, *Geol. Rundschau*, 70, 327-343, 1981.
- 1980 17) †Embley, R. W., P. J. Hoose, P. Lonsdale, L. Mayer, and **B. E. Tucholke**, Furrowed mud waves on the southwestern Bermuda Rise, *Geol. Soc. Am. Bull.*, 91, 731-740, 1980.
- 16) **Tucholke, B. E.**, Acoustic environment of the Hatteras and Nares Abyssal Plains, western North Atlantic, determined from velocities and physical properties of sediment cores, *J. Acoust. Soc. America*, 68, 1376-1390, 1980.
- 1979 15) **Tucholke, B. E.**, and G. S. Mountain, Seismic stratigraphy, lithostratigraphy and paleosedimentation patterns in the North American Basin, in M. Talwani, W. Hay, and W. B. F. Ryan, eds., *Deep Drilling in the Atlantic Ocean: Continental Margins and Paleoenvironment*, Am. Geophys. Union Maurice Ewing Series 3, 58-86, 1979.
- 14) Jansa, L. F., P. Enos, **B. E. Tucholke**, F. Gradstein, and R. E. Sheridan, Mesozoic-Cenozoic sedimentary formations of the North American Basin, western North Atlantic, in M. Talwani, W. Hay, and W. B. F. Ryan, eds., *Deep Drilling in the Atlantic Ocean: Continental Margins and Paleoenvironment*, Am. Geophys. Union Maurice Ewing Series 3, 1-57, 1979.

- 13) **Tucholke, B. E.**, Furrows and focussed echoes on the Blake Outer Ridge, *Marine Geol.*, 31, M13-M20, 1979.
- 12) **Tucholke, B. E.**, and D. J. Shirley, Comparison of laboratory and in situ compressional-wave velocity measurements on sediment cores from the western North Atlantic, *J. Geophys. Res.*, 84, 687-695, 1979.
- 1977 11) **Tucholke, B. E.**, Sedimentation processes and acoustic stratigraphy in the Bellingshausen Basin, *Marine Geol.*, 25, 209-230, 1977.
- 10) **Tucholke, B. E.**, and G. Carpenter, Sediment distribution and Cenozoic sedimentation patterns on the Agulhas Plateau, *Geol. Soc. America Bull.*, 88, 1337- 1346, 1977.
- 9) **Tucholke, B. E.**, G. M. Bryan and J. I. Ewing, Gas-hydrate horizons detected in seismic profiler data from the western North Atlantic, *Am. Assoc. Petrol. Geol. Bull.*, 61, 698-707, 1977.
- 1976 8) **Tucholke, B. E.**, and J. I. Ewing, Bathymetry and sediment geometry of the Greater Antilles Outer Ridge and vicinity: Reply, *Geol. Soc. America Bull.*, 87, 1371-1374, 1976.
- 1975 7) **Tucholke, B. E.**, Sediment distribution and deposition by the western Boundary Undercurrent: The Greater Antilles Outer Ridge, *J. Geology*, 83, 177-207, 1975.
- 1974 6) **Tucholke, B. E.**, and J. I. Ewing, Bathymetry and sediment geometry of the Greater Antilles Outer Ridge and vicinity, *Geol. Soc. Amer. Bull.*, 85, 1789-1802, 1974.
- 5) **Tucholke, B. E.**, and S. Eittreim, The Western Boundary Undercurrent as a turbidity maximum over the Puerto Rico Trench, *J. Geophys. Res.*, 79, 4115-4118, 1974.
- 4) **Tucholke, B. E.**, Determination of montmorillonite in small samples and implications for suspended-matter studies, *J. Sed. Petrology*, 44, 254-258, 1974.
- 1973 3) **Tucholke, B. E.**, W. R. Wright, and C. D. Hollister, Abyssal circulation over the Greater Antilles Outer Ridge, *Deep-Sea Res.*, 20, 973-995, 1973.
- 2) **Tucholke, B. E.**, and C. D. Hollister, Late Wisconsin glaciation of the southwestern Gulf of Maine: New evidence from the marine environment, *Geol. Soc. Amer. Bull.*, 84, 3279-3296, 1973.
- 1972 1) **Tucholke, B. E.**, R. N. Oldale, and C. D. Hollister, Acoustic survey of Massachusetts and Cape Cod Bays, Western Gulf of Maine, *U. S. Geol. Survey Misc. Investigations Map I-716*, 1972.

*Graduate student or Post-doc lead author

† Alphabetical authorship

Corrections to Peer-Reviewed Journal Articles

- 2006 1) Shillington, D. J., W. S. Holbrook, H. J. A. Van Avendonk, **B. E. Tucholke**, J. R. Hopper, K. E. Loudon, H. C. Larsen, and G. T. Nunes, Correction to "Evidence for asymmetric nonvolcanic rifting and slow incipient oceanic accretion from seismic reflection data on the Newfoundland margin," *J. Geophys. Res.*, 111, B12403, doi:10.1029/2006JB004769, 2006.

Spotlights on My Research

- 2023 2) Seafloor Shapes on Mid-Ocean Ridge Flanks Are Linked to Magma Supply. EOS, 105 (3), p. 26. (Rebecca Owen, Science Writer)
- 2023 1) Seafloor Shapes on Mid-Ocean Ridge Flanks Linked to Magma Supply.
<https://eos.org/research-spotlights/seafloor-shapes-on-the-flanks-of-mid-ocean-ridges-linked-to-magma-supply> (Rebecca Owen, Science Writer)

Peer-Reviewed Papers in Ocean Drilling Publications

- 2007 10) **Tucholke, B. E.**, and J.-C. Sibuet, Leg 210 Synthesis: Tectonic, Magmatic, and Sedimentary Evolution of the Newfoundland-Iberia Rift, in Tucholke, B. E., J.-C. Sibuet, and A. Klaus, eds., *Proceedings of the Ocean Drilling Program, Scientific Results*, v. 210, Ocean Drilling Program, College Station, TX, p. 1-56, doi: 10.2973/odp.proc.sr.210.101.2007, 2007.
- 9) Shillington, D. J., **B. E. Tucholke**, G. D. Karner, D. S. Sawyer, W. S. Holbrook, H. Delius, Linking core and seismic data without logs: Core-seismic correlation at Site 1276, in Tucholke, B. E., J.-C. Sibuet, and A. Klaus, eds., *Proceedings of the Ocean Drilling Program, Scientific Results*, v. 210, Ocean Drilling Program, College Station, TX, p. 1-33 (CD-ROM), doi: 10.2973/odp.proc.sr.210.110.2007, 2007.
- 2004 8) Shillington, D. J., W. S. Holbrook, **B. E. Tucholke**, J. R. Hopper, K. E. Loudon, H. C. Larsen, and H. Van Avendonk, Data Report: Marine geophysical data on the Newfoundland non-volcanic rifted margin along SCREECH Transect 2, in B. E. Tucholke, J.-C. Sibuet, and A. Klaus, eds., *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 210, Ocean Drilling Program, College Station, p. 1-36 (CD-ROM), 2004.
- 1979 7) Vogt, P. R. and **B. E. Tucholke**, The New England Seamounts: Testing origins, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 847-856, 1979.
- 6) **Tucholke, B. E.**, and P. R. Vogt, Western North Atlantic: sedimentary evolution and aspects of tectonic history, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 791-825, 1979.
- 5) **Tucholke, B. E.**, Relationships between acoustic stratigraphy and lithostratigraphy in the western North Atlantic Basin, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 827-846, 1979.
- 1976 4) **Tucholke, B. E.**, C. D. Hollister, F. M. Weaver, and W. Vennum, Continental rise and abyssal plain sedimentation - Leg 35, Deep Sea Drilling Project, in Hollister, C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 359-400, 1976.
- 3) Herron, E. M. and **B. E. Tucholke**, Sea floor magnetic patterns and basement structure in the southeastern Pacific, in Hollister, C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 263-278, 1976.
- 2) **Tucholke, B. E.**, and R. Houtz, Sedimentary framework of the Bellingshausen Basin from seismic profiler data, in Hollister, C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 197-227, 1976.

1) **Tucholke, B. E.**, N. T. Edgar, and R. E. Boyce, Physical properties of sediments and correlations with acoustic stratigraphy: Leg 35, Deep Sea Drilling Project, in Hollister, C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 229-249, 1976.

Site Reports in Ocean Drilling Publications

2004 12) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, et al., Site 1276, in Tucholke, B. E., J.-C. Sibuet, and A. Klaus, eds., *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 210, Ocean Drilling Program, College Station, p. 1-358 (CD-ROM), 2004.

11) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, et al., Site 1277, in Tucholke, B. E., J.-C. Sibuet, and A. Klaus, eds., *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 210, Ocean Drilling Program, College Station, p. 1-39 (CD-ROM), 2004.

1979 10) **Tucholke, B. E.**, P. R. Vogt, et al., Site 387: Cretaceous to Recent sedimentary evolution of the western Bermuda Rise, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U.S. Government Printing Office, p. 323-391, 1979.

9) **Tucholke, B. E.**, P. R. Vogt, et al., Site 386: Fracture-valley sedimentation on the central Bermuda Rise, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 195-321, 1979.

8) **Tucholke, B. E.**, P. R. Vogt, et al., Site 385: Volcanism at Vogel Seamount in the central New England Seamount Chain, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 155-194, 1979.

7) **Tucholke, B. E.**, P. R. Vogt, et al., Site 384: The Cretaceous-Tertiary boundary, Aptian reefs, and the J-Anomaly Ridge, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 107-154, 1979.

6) **Tucholke, B. E.**, P. R. Vogt, et al., Site 383: Drilling above the J-Anomaly Ridge in the Sohm Abyssal Plain, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 95-105, 1979.

5) **Tucholke, B. E.**, P. R. Vogt, et al., Site 382: Nashville Seamount - Volcanism along the eastern New England Seamount Chain, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 31-93, 1979.

1976 4) Hollister, C. D., C. Craddock, J. Bogdanov, N. T. Edgar, J. Gieskes, B. Haq, J. Lawrence, F. Rogl, H. Schrader, **B. Tucholke**, W. Vennum, F. Weaver, and V. Zhivago, Site 325, in Hollister, C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 157-193, 1976.

3) Hollister, C. D., C. Craddock, J. Bogdanov, N. T. Edgar, J. Gieskes, B. Haq, J. Lawrence, F. Rogl, H. Schrader, **B. Tucholke**, W. Vennum, F. Weaver, and V. Zhivago, Site 324, in Hollister, C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 127-156, 1976.

2) Hollister, C. D., C. Craddock, J. Bogdanov, N. T. Edgar, J. Gieskes, B. Haq, J. Lawrence, F. Rogl, H. Schrader, **B. Tucholke**, W. Vennum, F. Weaver, and V. Zhivago, Site 323, in Hollister,

C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 63-125, 1976.

1) Hollister, C. D., C. Craddock, J. Bogdanov, N. T. Edgar, J. Gieskes, B. Haq, J. Lawrence, F. Rogl, H. Schrader, **B. Tucholke**, W. Vennum, F. Weaver, and V. Zhivago, Site 322, in Hollister, C.D., and C. Craddock, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, p. 25-61, 1976.

Other Reports in Ocean Drilling Publications

2004 5) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, et al., Leg Summary, in Tucholke, B. E., J.-C. Sibuet, and A. Klaus, eds., *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 210, Ocean Drilling Program, College Station, p. 1-78 (CD-ROM), 2004.

4) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, et al., Explanatory Notes, in Tucholke, B. E., J.-C. Sibuet, and A. Klaus, eds., *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 210, Ocean Drilling Program, College Station, p. 1-358 (CD-ROM), 2004.

2003 3) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, and Shipboard Scientific Party, Leg 210 Preliminary Report. *ODP Prelim. Rpt., 210 [Online]*. Available on World Wide Web: http://www-odp.tamu.edu/publications/prelim/210_prel/210PREL.PDF, 2003.

1979 2) **Tucholke, B. E.**, Underway geophysical data: GLOMAR CHALLENGER Leg 43, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 889-1012, 1979.

1) **Tucholke, B. E.**, and P. R. Vogt, Introduction and explanatory notes: Deep Sea Drilling Project, Leg 43, in Tucholke, B. E., and P.R. Vogt, eds., *Initial Reports of the Deep Sea Drilling Project*, v. 43, Washington, D. C., U. S. Government Printing Office, p. 5-27, 1979.

Books and Special Publications - Professional

2007 7) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, et al., *Proceedings of the Ocean Drilling Program, Scientific Results*, v. 210, Ocean Drilling Program, College Station, TX, 84 pp. + CD-ROM, 2007.

2005 6) Reed, J. C., Jr., J. O. Wheeler, and **B. E. Tucholke**, *Geologic Map of North America with Explanatory Notes, Decade of North American Geology Continental Scale Map 001*, Geol. Soc. America, Boulder, scale 1:5,000,000, Transverse Mercator projection; 2 map sheets, explanation sheet, and booklet (28 pp.), 2005.

2004 5) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, et al., *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 210, Ocean Drilling Program, College Station, 78 pp. + CD-ROM, 2004.

1989 4) Srivastava, S. P., D. Voppel, and **B. E. Tucholke**, *Geophysical Atlas of the North Atlantic between 50° to 72°N and 0° to 65°W*, Deutsches Hydrographisches Institut, Hamburg, DHI Publ. NR 2302, 12 pp. + 21 maps, 1989.

1986 3) Vogt, P. R., and **B. E. Tucholke**, eds., *The Geology of North America, Volume M, The Western North Atlantic Region*, Geol. Soc. America, Boulder, 696 p. + 11 plates, 1986.

1979 2) **Tucholke, B. E.**, P. R. Vogt, K. Demars, J. Galehouse, R. L. Houghton, A. G. Kaneps, J. Kendrick, I. N. McCave, C. L. McNulty, I. O. Murdmaa, H. Okada, and P. Rothe, *Initial Reports*

of the Deep Sea Drilling Project, v. 43, Washington, D. C., U. S. Government Printing Office, 1115 pp., 1979.

- 1976 1) Hollister, C. D., C. Craddock, J. A. Bogdanov, N. T. Edgar, J. Gieskes, B. U. Haq, J. Lawrence, F. Rogl, H. Schrader, **B. E. Tucholke**, W. Vennum, F. M. Weaver, and V. N. Zhivago, *Initial Reports of the Deep Sea Drilling Project*, v. 35, Washington, D. C., U. S. Government Printing Office, 929 pp., 1976.

Books - Other

- 1988 1) **Tucholke, B. E.**, ed., *An Angler's Guide to Trout Fishing in Massachusetts*, Massachusetts/Rhode Island Council Trout Unlimited, Boston, 272 pp., 1988.

Maps and Charts - Decade of North American Geology

- 2005 9) **Tucholke, B. E.**, Geology of the seafloor, Geologic Map of North America, in Reed, J. C., Jr., J. O. Wheeler, and B. E. Tucholke, *Geologic Map of North America, Decade of North American Geology Continental Scale Map 001*, Geol. Soc. America, Boulder, Transverse Mercator projection, 2 sheets, scale 1:5,000,000, 2005.
- 1989 8) Vogt, P. R., and **B. E. Tucholke**, Evolution of the North Atlantic, in A. W. Bally and A. R. Palmer, eds., *The Geology of North America, Vol. A, The Geology of North America - An Overview*, Geol. Soc. America, Plate 2, 1989.
- 7) Vogt, P. R., and **B. E. Tucholke**, North Atlantic basement topography along and across the Mid-Atlantic Ridge, in A. W. Bally and A. R. Palmer, eds., *The Geology of North America, Vol. A, The Geology of North America - An Overview*, Geol. Soc. America, Plate 3, 1989.
- 1986 6) **Tucholke, B. E.**, L. F. Jansa, D. V. Kent, and F. Gradstein, Decade of North American Geology time scale with biostratigraphic correlations and correlative geologic events in the North Atlantic Ocean basin, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, Plate 1, 1986.
- 5) **Tucholke, B. E.**, L. A. Raymond, P. R. Vogt, and N. C. Smoot, Bathymetry of the North Atlantic Ocean, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, Plate 2, 1986.
- 4) **Tucholke, B. E.**, Depth to basement in the Western North Atlantic Ocean, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, Plate 5, 1986.
- 3) **Tucholke, B. E.**, Sediment thickness in the western North Atlantic Ocean, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, Plate 6, 1986.
- 2) **Tucholke, B. E.**, and L. F. Jansa, Reconstructions of the North Atlantic Ocean basin from Late Triassic to Late Cretaceous time, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, Plate 9, 1986.
- 1) **Tucholke, B. E.**, and F. W. McCoy, Reconstructions of the North Atlantic Ocean basin from Late Cretaceous to Holocene time, in P. R. Vogt and B. E. Tucholke, eds., *The Geology of North America, Vol. M, The Western North Atlantic Region*, Geol. Soc. America, Plate 10, 1986.

Maps - Ocean Margin Drilling Project Map Series

- 1983 12) Ewing, J. I., S. T. Bolmer, Jr., J. D. Eusden, Jr., R. Gleason, P. D. Rabinowitz, P. Naumoff and **B. E. Tucholke**, Depth to Basement, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 9, 1983.
- 11) Ewing, J. I., E. Uchupi, **B. E. Tucholke**, S. T. Bolmer, Jr., R. L. McConnell, P. D. Rabinowitz, P. Naumoff, and J. D. Eusden, Jr., Depth to Seismic Reflectors J and J₁, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 12, 1983.
- 10) Uchupi, E., S. T. Bolmer, Jr., J. D. Eusden, Jr., P. Naumoff, P. D. Rabinowitz, R. L. McConnell, and **B. E. Tucholke**, Depth to Top of Neocomian and Seismic Reflector Beta, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 13, 1983.
- 9) Uchupi, E., S. T. Bolmer, Jr., J. D. Eusden, Jr., P. Naumoff, P. D. Rabinowitz, R. L. McConnell, D. Wu, and **B. E. Tucholke**, Depth to top of Maestrichtian and Seismic Reflector A*, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 14, 1983.
- 8) Uchupi, E., J. D. Eusden, Jr., S. T. Bolmer, Jr., P. D. Rabinowitz, P. Naumoff, R. L. McConnell, and **B. E. Tucholke**, Depth to Seismic Reflector A^U, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 15, 1983.
- 7) Ewing, J. I., E. Uchupi, **B. E. Tucholke**, S. T. Bolmer, Jr., J. D. Eusden, Jr., R. L. McConnell, P. D. Rabinowitz, and P. Naumoff, Thickness of J_S/J₂ to J/J₁ Sequence, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 19, 1983.
- 6) Ewing, J. I., S. T. Bolmer, Jr., J. D. Eusden, Jr., R. Gleason, P. D. Rabinowitz, P. Naumoff, **B. E. Tucholke**, and R. L. McConnell, Thickness of Basement to J/J₁ Sequence, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 20, 1983.
- 5) Uchupi, E., P. Naumoff, P. D. Rabinowitz, S. T. Bolmer, Jr., J. D. Eusden, Jr., J. I. Ewing, **B. E. Tucholke**, and R. L. McConnell, Thickness of J/J₁ to Beta Sequence, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 34° to 41°N and 68° to 78°W*, Marine Science International, Woods Hole, MA, p. 21, 1983.
- 4) Crosby, J. T., E. Uchupi, P. L. Manley, S. T. Bolmer, Jr., J. D. Eusden, Jr., J. I. Ewing, **B. E. Tucholke**, and R. L. McConnell, Depth to Seismic Reflectors J and J₁, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 28° to 36°N and 70° to 82°W*, Marine Science International, Woods Hole, MA, p. 15, 1983.
- 3) Crosby, J. T., E. Uchupi, J. I. Ewing, P. L. Manley, S. T. Bolmer, Jr., J. D. Eusden, Jr., **B. E. Tucholke**, and R. L. McConnell, Thickness of J_S/J₂ to J/J₁ Sequence, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 28° to 36°N and 70° to 82°W*, Marine Science International, Woods Hole, MA, p. 27, 1983.

2) Crosby, J. T., J. I. Ewing, P. L. Manley, S. T. Bolmer, Jr., J. D. Eusden, Jr., **B. E. Tucholke**, R. J. Gleason, and R. L. McConnell, Thickness of Basement to J/J₁ Sequence, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 28° to 36°N and 70° to 82°W*, Marine Science International, Woods Hole, MA, p. 28, 1983.

1) Crosby, J. T., E. Uchupi, P. L. Manley, S. T. Bolmer, Jr., J. D. Eusden, Jr., J. J. Lambiase, J. I. Ewing, **B. E. Tucholke**, and R. L. McConnell, Thickness of J/J₁ to Beta Sequence, in *Ocean Margin Drilling Program Atlas Series: Eastern North American Continental Margin and Adjacent Ocean Floor 28° to 36°N and 70° to 82°W*, Marine Science International, Woods Hole, MA, 29, 1983.

World-Wide Web

1) **Tucholke, B.**, Discovery of "Megamullions" reveals gateways into the ocean crust and upper mantle, <http://www.fathom.com/feature/122130/index.html>.

Popular Articles, Reports, and Miscellaneous Publications

- 2004 18) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, and Leg 210 Shipboard Scientific Party, Margins of the Newfoundland-Iberia Rift: ODP Leg 210 drills in the Newfoundland Basin, *JOIDES Journal*, 30 (1), 20-24, 2004.
- 2003 17) **Tucholke, B. E.**, J.-C. Sibuet, A. Klaus, and Leg 210 Shipboard Scientific Party, ODP Leg 210 drills on the Newfoundland margin, *InterMargins Newsletter*, No. 3, 8-9, 2003.
- 1998 16) Fujioka, K., H. Chiba, T. Naganuma, H. Masuda, T. Oomori, P. Rona, **B. Tucholke**, T. Ishihara, K. Kato, S. Lee, D. Green, M. Aoki and H. Yamamoto, Hydrothermal processes and architecture of the slow-spreading MAR at TAG and Rainbow hydrothermal fields and Dante's Dome megamullion site (MODE'98 Leg 2), *InterRidge News*, 7 (2), 18-23, 1998.
- 15) **Tucholke, B. E.**, Discovery of "megamullions" reveals gateways into the ocean crust and upper mantle, *Oceanus*, 41 (1), 15-19, 1998.
- 1997 14) Lin, J., **B. E. Tucholke**, and M. C. Kleinrock, Off-axis crustal structure of the Mid-Atlantic Ridge, *InterRidge News*, 6 (1), 23-26, 1997.
- 1992 13) Kleinrock, M. C., **B. E. Tucholke**, and J. Lin, Ridge segmentation, migrating offsets, and crustal structure on the western flank of the Mid-Atlantic Ridge from 25°25'N to 27°10'N to 30 Ma., *Ridge Events*, 3 (2), 5-7, 1992.
- 1991 12) Reed, T. B. IV, and **B. E. Tucholke**, Geologic visualization of the Kane Fracture Zone: Interactive processing of sidescan and bathymetric data, *Oceans 91 Proceedings, IEEE/OES*, 2, 1152-1158, 1991.
- 11) **Tucholke, B. E.**, K. C. Macdonald, and P. J. Fox, ONR Seafloor natural laboratories on the Mid-Atlantic Ridge and East Pacific Rise, *Ridge Events*, 2 (1), 15-18, 1991.
- 1984 10) **Tucholke, B. E.**, and A. Martin, The Sea Beam system, in *Woods Hole Oceanographic Institution Annual Report 1983*, p. 19-20, 1984.

- 9) **Tucholke, B. E.**, Marine geology, in *Environmental Summary of the U.S. Atlantic Continental Slope and Rise, 28°-42°N*: Prepared for Minerals Management Service, Contract 14-12-0001-29200, by Marine Geoscience Applications, Woods Hole, MA, Vol. 1, p. 4.1 to 4.183, 1984.
- 1982 8) Shepard, L. E., J. E. Damuth, D. E. Hayes, G. R. Heath, E. P. Laine, M. Leinen, and **B. E. Tucholke**, Subseabed disposal: Systematic application of the site qualification plan, *Oceans 82 Proceedings, MTS-IEEE Counc. Oc. Eng.*, Washington, D.C., 1074-1079, 1982.
- 7) Schlager, W., M. A. Arthur, A. P. Lizitsyn, F. T. Manheim, B. Tissot, and **B. E. Tucholke**, Origin and evolution of marine sedimentary sequences, *Report of the Conference on Scientific Ocean Drilling*, JOI, Inc., Washington, D.C., p. 37-71, 1982.
- 1981 6) **Tucholke, B. E.**, Geological oceanography, in *Interim Report on Developing Site Selection Criteria for Disposal of Low Level Radioactive Waste off the East Coast of North America*: Prepared for Environmental Protection Agency by EG&G Environmental Consultants, Waltham, MA, p. 3-1 to 3-51, March, 1981.
- 1980 5) Hollister, C. D., **B. E. Tucholke**, A. J. Williams, and R. Chandler, The HEBBLE Project, *Woods Hole Oceanographic Institution Annual Report 1980*, p. 8-10, 1980.
- 1978 4) **Tucholke, B. E.**, Deep-sea occurrences of gas hydrates, *Lamont-Doherty Geological Observatory Yearbook*, 4, 45-48, 1978.
- 1975 3) **Tucholke, B. E.**, P. Vogt, et al., GLOMAR CHALLENGER drills in the North Atlantic, *Geotimes*, 20 (12), 18-21, 1975.
- 1974 2) Hollister, C. D., C. Craddock, J. A. Bogdanov, N. T. Edgar, J. Gieskes, B. U. Haq, J. Lawrence, F. Rogl, H. Schrader, **B. E. Tucholke**, W. Vennum, F. M. Weaver, and V. N. Zhivago, Deep drilling in the southeast Pacific basin, *Geotimes*, 19 (8), 16-19, 1974.
- 1973 1) **Tucholke, B. E.**, The history of sedimentation and abyssal circulation on the Greater Antilles Outer Ridge, (Ph.D. Dissertation), *Woods Hole Oceanographic Institution Report 74-1*, 314 pp., 1973.

Abstracts of Presentations (†Keynote, *Invited)

- 2019 209) Zheng, Tingting, J. Lin, H. Schouten, D. K. Smith, R. E. Parnell-Turner, B. E. Tucholke, J. R. Cann, and E. M. Klein, Variations in crustal structure in the region of the Galapagos triple junction, *Am. Geophys. Union Fall Meeting*, San Francisco, Abstract T43F-0504, 2019.
- 2018 208) Zheng, T., **B. E. Tucholke**, J. Lin, Long-Term Evolution of non-transform discontinuities at the Mid-Atlantic Ridge, 24°N - 27°30'N and 0 – 25 Ma, *Am. Geophys. Union Fall Meeting*, Washington, D.C., Abstract T33G-0501, 2018.
- 2017 207) Zheng, T., **B. E. Tucholke**, and J. Lin, Long-term evolution of a propagating non-transform offset on the Mid-Atlantic Ridge over the last 26 m.y., *Am. Geophys. Union Fall Meeting*, New Orleans, Abstract T33D-2622, 2017.
- 2014 206) Boyle, P. R., B. W. Romans, R. D. Norris, **B. E. Tucholke**, S. A. Swift, and P. F. Sexton, Cenozoic circulation history of the North Atlantic Ocean from seismic stratigraphy of the Newfoundland Ridge Drift Complex, *Am. Geophys. Union Fall Meeting*, San Francisco, Abstract PP51E-1175, 2014.

- 2011 205) Sibuet, J.-C., and **B. E. Tucholke**, The geodynamic province of transitional crust adjacent to magma-poor continental margins, *Am. Geophys. Union Fall Meeting*, San Francisco, Abstract T31D-01, 2011.
- 2010 204) Olive, J. A., M. D. Behn, and **B. E. Tucholke**, Oceanic core complex structure controlled by the depth distribution of magma emplacement, *Am. Geophys. Union Fall Meeting*, San Francisco, Abstract T21H-06, 2010.
- 203) G. Péron-Pinvidic, D.J. Shillington, and **B. Tucholke**, Characterization of sills associated with the U reflection on the Newfoundland margin: Evidence for widespread early post-rift magmatism on a magma-poor rifted margin, II Central & North Atlantic Conjugate Margins Conference, Lisbon, 29 September-1 October 2010.
- 202) Xu, M., J.P. Canales, **B.E. Tucholke**, and D. DuBois, Heterogeneous seismic velocity structure of the upper lithosphere at Kane oceanic core complex, Mid- Atlantic Ridge 23°17'N-23°37'N, *AGU Chapman Conference on Detachments in Oceanic Lithosphere: Deformation, Magmatism, Fluid Flow, and Ecosystems*, Agros, Cyprus, 8 - 16 May 2010.
- 201) **Tucholke, B.E.**, S.E. Humphris, and H.J.B. Dick, Manifestations of hydrothermal venting at Kane Megamullion, *AGU Chapman Conference on Detachments in Oceanic Lithosphere: Deformation, Magmatism, Fluid Flow, and Ecosystems*, Agros, Cyprus, 8 - 16 May 2010.
- 200) J.-A. Olive, M.D. Behn, and **B.E. Tucholke**, Emplacement of plutonic bodies in oceanic core complexes, *AGU Chapman Conference on Detachments in Oceanic Lithosphere: Deformation, Magmatism, Fluid Flow, and Ecosystems*, Agros, Cyprus, 8 - 16 May 2010.
- 199) L. N. Hansen, L.N., M.J. Cheadle, B.E. John, H.J.B. Dick, **B.E. Tucholke**, and M.A. Tivey, Mylonitic detachment faulting on the Mid-Atlantic Ridge at the Kane Fracture Zone Oceanic Core Complex, *AGU Chapman Conference on Detachments in Oceanic Lithosphere: Deformation, Magmatism, Fluid Flow, and Ecosystems*, Agros, Cyprus, 8 - 16 May 2010.
- 2009 198) *†**Tucholke, B.E.**, Crustal extension and mantle exhumation in weakly magmatic rifts and mid-ocean ridges, *Alpine Ophiolites and Modern Analogues Workshop*, Parma, Italy, 30 September – 2 October, 2009, Abstract Volume, p. 73.
- 197) Wang, T., J. Lin, and **B.E. Tucholke**, Melt anomalies of the northern Atlantic Ocean basin, *EOS Trans. Am. Geophys. Union*, 90 (52), Fall Meeting Suppl., Abstract V41C-2192, 2009.
- 2008 196) *†**Tucholke, B. E.**, Crustal extension and mantle exhumation in weakly magmatic rifts and mid-ocean ridges, *Robert E. Sheriff Distinguished Lecture, Houston Geological Society and University of Houston*, 17 November 2008.
- 195) Olive, J.-A., M. D. Behn, **B. E. Tucholke** and J. Lin, Modeling gabbro emplacement inside oceanic core complexes, *EOS Trans. Am. Geophys. Union*, 89 (52), Fall Meeting Suppl., Abstract T43B-2017, 2008.
- 194) Talwani, M., D. Sawyer, J. Hopper, **B. Tucholke**, G. Mountain, B. Dugan, D. Feary, J. Dickens, M. Arthur, B. Sageman, Exploration-focused rifted margin drilling using the D/V *JOIDES Resolution*, *Rifts Renaissance: Stretching the crust and extending exploration frontiers*, 19-21 August 2008, Houston, TX.
- 193) Dick, H.J.B., B.E. Tucholke, and M.A. Tivey, Focused melt flow in the shallow mantle: Evidence for transient instabilities in the partially molten mantle beneath an ocean ridge? *Geochimica et Cosmochimica Acta*, 72 (12), A216, 2008.

- 192) Canales, J.P., **B.E. Tucholke**, and M. Xu, Seismic evidence for large-scale compositional heterogeneity of oceanic core complexes, *GSA Fall Annual Meeting*, Houston, TX, Abstract 130-2, 2008.
- 191) Dick, H.J.B., **B.E. Tucholke**, M. A. Tivey, and J. P. Canales, Evidence for focused melt flow and transient instabilities in the shallow mantle beneath the Mid-Atlantic Ridge at Kane Megamullion, *Ridge 2000 Mid-Atlantic Ridge ~35-37.5°N Implementation Plan Workshop*, 27–28 March 2008, Portland, OR.
- 2007 190) Peron-Pinvidic, G., D. J. Shillington, and **B. E. Tucholke**, Characterization of the U reflection on the Newfoundland rifted margin: New constraints on "magma-poor" breakup, *EOS Trans. Am. Geophys. Union*, 88 (52), Fall Meeting Suppl., Abstract T41A-0369, 2007.
- 189) Williams, C. M., M. A. Tivey, M. D. Behn, H. J. B. Dick, and **B. E. Tucholke**, Geometry of a polarity reversal boundary in lower crust and upper mantle at Kane megamullion, *EOS Trans. Am. Geophys. Union*, 88 (52), Fall Meeting Suppl., Abstract T53B-1305, 2007.
- 188) Canales, J.-P., M. Xu, **B. Tucholke**, J. Collins, D. Dubois, The sub-seafloor structure of Mid-Atlantic Ridge core complexes, *EOS Trans. Am. Geophys. Union*, 88 (52), Fall Meeting Suppl., Abstract T51F-06, 2007.
- 187) Xu, M., J.P. Canales, **B.E. Tucholke**, and D. Dubois, Shallow seismic structure of the Kane core complex, Mid-Atlantic Ridge 23°30'N, *EOS Trans. Am. Geophys. Union*, 88 (52), Fall Meeting Suppl., Abstract T53B-1304, 2007.
- 186) Hansen, L. N., M. J. Cheadle, B. E. John, S. M. Swapp, H. J. B. Dick, **B. E. Tucholke**, and M. A. Tivey, Styles of detachment faulting at the Kane oceanic core complex, 23°N Mid-Atlantic Ridge, *EOS Trans. Am. Geophys. Union*, 88 (52), Fall Meeting Suppl., Abstract T51F-07, 2007.
- 185) **Tucholke, B. E.**, H. J. B. Dick, M. A. Tivey, and S. E. Humphris, Cemented mounds perched on the Kane megamullion detachment surface: A new manifestation of hydrothermal venting? *EOS Trans. Am. Geophys. Union*, 88 (52), Fall Meeting Suppl., Abstract T23B-1412, 2007.
- 184) ***Tucholke, B. E.**, M. D. Behn, J.-P Canales, M. Xu, W. R. Buck, and J. Lin, The crustal section exhumed by oceanic detachment faults, *EOS Trans. Am. Geophys. Union*, 88 (52), Fall Meeting Suppl., Abstract T51F-05, 2007.
- 183) ***Tucholke, B. E.**, Extension and mantle exhumation in weakly magmatic rifts and mid-ocean ridges, *Penrose Conference on Extending a Continent: Architecture, Rheological Coupling and Heat Budget*, Naxos, Greece, 9-13 October, 2007.
- 182) ***†Tucholke, B. E.**, and J.-C. Sibuet, From continental rifting to seafloor spreading in a magma-limited environment, *Académie des Sciences International Meeting on the Ocean Continent Transition*, Paris, France, 19-21 September 2007.
- 181) ***Sibuet, J.-C.**, **B. E. Tucholke**, S. P. Srivastava, and G. Manatschal, Transitional crust in the Newfoundland-Iberia rift and associated magnetic anomalies, *Geophysical Research Abstracts*, 9, 04989, 2007.
- 180) ***†Tucholke, B. E.**, and J.-C. Sibuet, Evolution of the Newfoundland-Iberia Rift, *CMOS/CGU/AMS Congress*, St. Johns, Newfoundland, 27 May - 1 June 2007, Abstract G05 3B2-1479, 2007.
- 2006 179) Hopper, J. R., T. Funck, **B. E. Tucholke**, H. Van Avendonk, D. J. Shillington, K. W. H. Lau, K. E. Loudon, W. S. Holbrook, and H. C. Larsen, Seismic imaging of oceanic crust off

Newfoundland: A possible analogue for ultra-slow spreading ridges, (Extended Abstract), Polar Ridges Workshop, Sestri Levante, Italy, 20-22 September 2006, *Ophioliti*, 31 (1), 235-236, 2006.

178) **Tucholke, B. E.**, M. Behn, W. R. Buck, R. Qin, and J. Lin, Development of long-lived normal faults at magma-limited mid-ocean ridges, Polar Ridges Workshop, Sestri Levante, Italy, 20-22 September 2006, *Ophioliti*, 31 (1), 248, 2006.

177) **Tucholke, B. E.**, M. Behn, W. R. Buck, R. Qin, and J. Lin, The role of melt supply in the formation of long-lived oceanic detachment faults, *EOS Trans. Am. Geophys. Union*, 87 (52), Fall Meeting Suppl., Abstract V23E-0700, 2006.

176) Butman, B., D. C. Twichell, P. A. Rona, **B. E. Tucholke**, T. J. Middleton, and J. M. Robb, New maps of the Hudson Canyon and the adjacent continental slope and rise, *EOS Trans. Am. Geophys. Union*, 87 (36), Ocean Sci. Meet. Suppl., Abstract OS45A-10, 2006.

175) ***Tucholke, B. E.**, D. S. Sawyer, and J.-C. Sibuet, Rifting and Breakup Between Newfoundland and Iberia, *MARGINS Rupturing of the Continental Lithosphere (RCL) Workshop*, 9-13 January 2006, Ensenada, Mexico, http://www.rcl-cortez.wustl.edu/Workshop_Abstracts.pdf, 2006.

2005 174) Van Avendonk, H. J., W. S. Holbrook, G. T. Nunes, D. J. Shillington, **B. E. Tucholke**, K. E. Loudon, H. C. Larsen, and J. R. Hopper, Seismic velocity structure of the Newfoundland rifted margin: Evidence for thinned continental crust, unroofed mantle and slow-spreading oceanic crust, *EOS Trans. Am. Geophys. Union*, 86 (52), Fall Meeting Suppl., Abstract T43B-1389, 2005.

173) **Tucholke, B. E.**, H. J. B. Dick, M. A. Tivey, and M. J. Cheadle, Structure of Kane megamullion, *EOS Trans. Am. Geophys. Union*, 86 (52), Fall Meeting Suppl., Abstract T33G-01, 2005.

172) ***Tucholke, B. E.**, D. S. Sawyer, and J.-C. Sibuet, Rifting and breakup between Newfoundland and Iberia, *EOS Trans. Am. Geophys. Union*, 86 (52), Fall Meeting Suppl., Abstract T52B-01, 2005.

171) Dick, H. J. B., M. A. Tivey, **B. E. Tucholke**, and M. J. Cheadle, The plutonic foundation of a MAR ridge spreading segment: The Kane oceanic core complex, *EOS Trans. Am. Geophys. Union*, 86 (52), Fall Meeting Suppl., Abstract T33G-02, 2005.

170) Williams, C. M., M. A. Tivey, **B. E. Tucholke**, and H. J. B. Dick, The nature of a magnetic polarity boundary in the lower crust and upper mantle at Kane megamullion, *EOS Trans. Am. Geophys. Union*, 86 (52), Fall Meeting Suppl., Abstract T41D-1332, 2005.

169) Cheadle, M. J., **B. E. Tucholke**, M. A. Tivey, H. J. B. Dick, J. J. Schwartz, and L. N. Hansen, The nature of detachment faulting at the Kane megamullion: Initial results, *EOS Trans. Am. Geophys. Union*, 86 (52), Fall Meeting Suppl., Abstract T41D-1331, 2005.

168) Reed, J. R. Jr., J. O. Wheeler, and **B. E. Tucholke**, The new Geologic Map of North America – A new look at an old continent, *Geological Society of America Abstracts with Programs*, 37 (7), 76, 2005.

167) **Tucholke, B. E.**, Marine geology of the Geologic Map of North America – An old continent viewed in a new context, *Geological Society of America Abstracts with Programs*, 37 (7), 76, 2005.

166) Wheeler, J. O., **B. E. Tucholke**, and J. R. Reed Jr., Geological architecture of North America, *Geological Society of America Abstracts with Programs*, 37 (7), 75, 2005.

- 165) Solvason, K. L. M., J. Hall, M. Enachescu, S. Deemer, K. W. H. Lau, K. Loudon, S. Holbrook, J. R. Hopper, H. C. Larsen, and **B. Tucholke**, Carson and Salar basins and the Newfoundland-Iberia connection, *American Association of Petroleum Geologists Annual Meeting*, Calgary, Abstract A97243, 2005.
- 2004 164) **Tucholke, B. E.**, J. P. Canales, J. Lin, and J. Collins, Salient features of megamullions formed by long-lived normal faults on the Mid-Atlantic Ridge, *Poster Abstracts and White Papers, Mid-Atlantic Ridge Workshop, Ridge 2000 Program, Providence, RI, 29 February-2 March 2004*, p. 72.
- 163) Lin, J., **B. Tucholke**, and A. Hosford Scheirer, First-order crustal structure and evolution of ridge segments of the Mid-Atlantic Ridge, *Poster Abstracts and White Papers, Mid-Atlantic Ridge Workshop, Ridge 2000 Program, Providence, RI, 29 February-2 March 2004*, p. 55.
- 162) Liu, Q., X. Zhao, B. Galbrun, H. Delius, and Leg 210 Scientific Party, Paleomagnetic and rock magnetic investigation of Leg 210 cores, Newfoundland Basin, *EOS Trans. Am. Geophys. Union*, 85 (47), Fall Meeting Suppl., Abstract GP11D-0869, 2004.
- 161) Shillington, D. J., W. S. Holbrook, G. Karner, D. Sawyer, S. Deemer, **B. Tucholke**, and ODP Leg 210 Shipboard Scientific Party, Distribution of post-rift sills on the Newfoundland nonvolcanic margin around the ODP Leg 210 transect from waveform inversions and synthetic seismograms, *EOS Trans. Am. Geophys. Union*, 85 (47), Fall Meeting Suppl., Abstract T41E-1273, 2004.
- 160) Singh, S. C., J. A. Collins, J. P. Canales, **B. E. Tucholke**, and R. S. Detrick, New insights into serpentinization at Atlantis Massif, 30° N Mid-Atlantic Ridge, using wide-angle seismic methods, *EOS Trans. Am. Geophys. Union*, 85 (47), Fall Meeting Suppl., Abstract V23B-0628, 2004.
- 159) Rona, P. A., J. M. Robb, B. Butman, M. I. Scranton, K. E. Kingman, **B. E. Tucholke**, and D. Twitchell, Slope instability and gas hydrates in the Hudson Canyon region, U.S. Atlantic continental margin, *EOS Trans. Am. Geophys. Union*, 85 (47), Fall Meeting Suppl., Abstract OS21E-07, 2004.
- 158) Stant, S. A. and Leg 210 Shipboard Scientific Party, Lower Neogene and upper Paleogene calcareous nannofossil biostratigraphy and age constraints on a middle Eocene hiatus associated with seismic Horizon A^u, *International Nannoplankton Association Conference*, 30 August – 2 September 2004, Lisbon, Portugal, 2004.
- 157) ***Tucholke, B. E.**, J.-C. Sibuet, SCREECH Working Group, and ODP Leg 210 Scientific Party, Opening of the Newfoundland-Iberia rift, *InterMARGINS Workshop Abstracts, Modeling the Extensional Deformation of the Lithosphere*, 11-16 July 2004, Pontresina, Switzerland, p. 29, 2004.
- 156) Shryane, T., M. Feely, and ODP Leg 210 Scientific Party, ODP Leg 210 drilling in the North Atlantic: What lies beneath?, *47th Irish Geological Research Meeting*, 20-22 February 2004, National University of Ireland, Galway.
- 155) Shryane, T., M. Feely, and ODP Leg 210 Scientific Party, Hydrocarbon inclusions in Palaeocene sediments from the North Atlantic, *47th Irish Geological Research Meeting*, 20-22 February 2004, National University of Ireland, Galway.
- 154) Shirai, M., H. Takata, and ODP Leg 210 Scientific Party, Cruise report of Ocean Drilling Program Leg 210 (Newfoundland margin, North Atlantic), *Japan Earth and Planetary Science Joint Meeting*, May 9-13, Chiba, Japan, Paper J071-P017 (CD-ROM volume), 2004.

- 153) Marsaglia, K., **B. E. Tucholke**, J.-C. Sibuet, A. Klaus, and ODP Leg 210 Scientific Party, Ocean Drilling Program Leg 210 drills the Newfoundland Basin, *CSPG-CHOA-CWLS Joint Conference*, 31 May – 4 June, 2004, Calgary, Alberta, Canada:
<http://www.cspgconvention.org/2004abstracts/201S0206.pdf>.
- 152) Deemer, S., K. Solvason, G. Eustace, J. Hall, H. Lau, K. Loudén, S. Holbrook, J. Hopper, H. Larsen, and **B. Tucholke**, Southeast Newfoundland nonvolcanic passive margin: SCREECH Transect 3, *EOS Trans. Am. Geophys. Union*, 85 (17), Joint Assembly Suppl., JA461, 2004.
- 151) Lau, K. W. H., K. E. Loudén, J. Hall, S. Deemer, **B. E. Tucholke**, W. S. Holbrook, H. C. Larsen, T. Funck, and J. R. Hopper, The seismic characteristics of the ocean-continent transition (OCT) across the eastern Grand Banks margin, *EOS Trans. Am. Geophys. Union*, 85 (17), Joint Assembly Suppl., JA456, 2004.
- 150) Solvason, K., J. Hall, S. Deemer, K. Loudén, H. K. W. Lau, S. Holbrook, **B. Tucholke**, J. Hopper, and H. C. Larsen, Southeast Newfoundland continental slope: SCREECH Lines 401 and 403, *EOS Trans. Am. Geophys. Union*, 85 (17), Joint Assembly Suppl., JA456, 2004.
- 149) Marsaglia, K., and ODP Leg 210 Scientific Party, Results from recent deep-water drilling in the Newfoundland Basin, east of Hibernia field, *Am. Assoc. Petrol. Geol. Bulletin*, 88 (13), 92, <http://aapg.confex.com/aapg/da2004/techprogram/A86219.htm>, 2004.
- 2003 148) Robertson, A. F., and Scientific Party of ODP Leg 210, Lower Cretaceous-middle Eocene slope-rise succession of the Newfoundland rift margin: Sedimentary and palaeoceanographic processes, *2003 British Sedimentological Research Group Annual General Meeting*, 20-22 December, Leeds, UK, 2003.
- 147) Van Avendonk, H., L. L. Lavie, G. T. Nunes, W. S. Holbrook, D. J. Shillington, **B. E. Tucholke**, K. E. Loudén, J. R. Hopper, and H. C. Larsen, Evidence for asymmetric rifting at the Newfoundland margin from SCREECH Transect 2 wide-angle data and numerical modeling, *EOS Trans. Am. Geophys. Union*, 84 (46), Fall Meeting Suppl., F1340, 2003.
- 146) Shillington, D. J., W. S. Holbrook, **B. E. Tucholke**, ODP Leg 210 Scientific Party, J. R. Hopper, H. Van Avendonk, K. Loudén, and H. C. Larsen, Seismic characterization of crust on the Newfoundland non-volcanic rifted margin: Prestack depth migrations of the SCREECH survey around ODP Leg 210 Sites 1276 and 1277, *EOS Trans. Am. Geophys. Union*, 84 (46), Fall Meeting Suppl., F1340, 2003.
- 145) ***Tucholke, B. E.**, J.-C. Sibuet, and ODP Leg 210 Scientific Party, ODP Leg 210 Drills the Newfoundland margin in the Newfoundland-Iberia non-volcanic rift, *EOS Trans. Am. Geophys. Union*, 84 (46), Fall Meeting Suppl., F1338, 2003.
- 144) Canales, J. P., J. Collins, and **B. Tucholke**, Multichannel seismic imaging of oceanic core complexes in the Mid-Atlantic Ridge, *Geophysical Research Abstracts*, 5, 04465, 2003.
- 143) Collins, J., J. Canales, and **B. Tucholke**, Seismic velocity structure of Mid-Atlantic Ridge core complexes, *Geophysical Research Abstracts*, 5, 10390, 2003.
- 142) Solvason, K., S. Deemer, J. Hall, K. W. H. Lau, K. Loudén, S. Holbrook, J. Hopper, H. C. Larsen, and **B. Tucholke**, Southeast Newfoundland continental slope: SCREECH lines 401 and 403, *Geophysical Research Abstracts*, 5, 07092, 2003.
- 141) Lau, K. W. H., K. E. Loudén, T. Funck, J. Hall, S. Deemer, **B. Tucholke**, W. S. Holbrook, H. C. Larsen, and J. Hopper, Seismic velocity structure across the eastern Newfoundland

(Grand Banks) and Iberia Abyssal Plain continental margin conjugates, *Geophysical Research Abstracts*, 5, 04573, 2003.

140) ***Tucholke, B. E.**, W. R. Buck, L. Lavier, and J. Lin, Investigation of megamullion formation in relation to magma supply, *Geophysical Research Abstracts*, 5, 07925, 2003.

139) Deemer, S., G. Eustace, J. Hall, K. W. H. Lau, K. Loudon, S. Holbrook, J. Hopper, H. C. Larsen and **B.E. Tucholke**, Southeast Newfoundland nonvolcanic passive margin: SCREECH transect 3, *Geophysical Research Abstracts*, 5, 07100, 2003.

138) Hopper, J. R., T. Funck, H. C. Larsen, W. S. Holbrook, K. Loudon, and **B. E. Tucholke**, Continental breakup, mantle serpentinization, and the onset of ultra-slow seafloor spreading along the Newfoundland rifted margin, *Geophysical Research Abstracts*, 5, 07145, 2003.

137) ***Tucholke, B. E.**, and the SCREECH Team, Non-volcanic conjugate margins of the Newfoundland-Iberia rift, *Geophysical Research Abstracts*, 5, 07878, 2003.

136) Shillington, D., S. Holbrook, G. Nunes, H. Van Avendonk, **B. E. Tucholke**, J. Hopper, H. Larsen, and K. Loudon, Seismic evidence for compositional asymmetry on the Newfoundland-Iberia nonvolcanic rifted margin pair: New results from SCREECH transect 2, *Geophysical Research Abstracts*, 5, 08170, 2003.

135) Shillington, D. J., W. S. Holbrook, J. R. Hopper, K. E. Loudon, **B. E. Tucholke**, H. C. Larsen, T. Funck, H. Lau, S. Deemer, and J. Hall, Asymmetric rifted margins: Evidence from the western side of the Newfoundland-Iberia conjugate margin pair, *10th International Symposium of "Deep Seismic Profiling of the Continents and Their Margins"*, Taupo, New Zealand, 6-10 January 2003.

134) Lau, K. W. H., K. E. Loudon, T. Funck, J. Hall, S. Deemer, **B. Tucholke**, W. S. Holbrook, H. C. Larsen, and J. R. Hopper, Seismic velocity model across the eastern Newfoundland (Grand Banks) continental margin, *Geological Society of America Abstracts with Programs*, 35 (3), 101, 2003.

2002 133) *Whelan, J., **B. Tucholke**, P. Rona, and M. Scranton, Hudson Canyon region - A major gas hydrate province offshore New York, New Jersey, and Delaware, *Second Workshop of the International Committee on Gas Hydrates*, 29-31 October 2002, Washington, D.C.

132) Collins, J. A., **B. E. Tucholke**, and J. P. Canales, Seismic velocity structure of Mid-Atlantic Ridge core complexes, *EOS Trans. Am. Geophys. Union*, 83, F1355, 2002.

131) Shillington, D. J., W. S. Holbrook, G. T. Nunes, H. Van Avendonk, **B. E. Tucholke**, J. Hopper, H. C. Larsen, and K. Loudon, Seismic evidence for compositional asymmetry on the Newfoundland-Iberia nonvolcanic rifted margin pair: New results from SCREECH Transect 2, *EOS Trans. Am. Geophys. Union*, 83, F1261, 2002.

130) Canales, J. P., J. Collins, and **B. Tucholke**, Multichannel seismic imaging of oceanic core complexes in the Mid-Atlantic Ridge, *EOS Trans. Am. Geophys. Union*, 83, F1354, 2002.

129) Hopper, J. R., T. F. Funck, H. C. Larsen, W. S. Holbrook, K. Loudon, and **B. Tucholke**, Is there ultra-slow spreading oceanic crust off the Newfoundland rifted margin?, *EOS Trans. Am. Geophys. Union*, 83, F1329, 2002.

128) Van Avendonk, H. J. A., G. T. Nunes, W. S. Holbrook, D. J. Shillington, **B. E. Tucholke**, K. Loudon, H. C. Larsen, and J. R. Hopper, The nature of the ocean-continent transition on the Newfoundland rifted margin: Results from detailed tomographic imaging of the crust, *EOS Trans. Am. Geophys. Union*, 83, F1262, 2002.

- 2001 127) Shillington, D. J., W. S. Holbrook, G. T. Nunes, H. Van Avendonk, **B. E. Tucholke**, J. Hopper, H. C. Larsen, K. E. Loudon, H. Lau, and S. Deemer, Crustal structure and composition of the Newfoundland nonvolcanic rifted margin on the future ODP Leg 210 drilling transect, *EOS Trans. Am. Geophys. Union*, 82 (47) (Fall Meeting Supplement), F1260, 2001.
- 126) Collins, J. S., **B. E. Tucholke**, and J. P. Canales, Structure of Mid-Atlantic Ridge megamullions from seismic refraction experiments and multichannel seismic reflection profiling, *EOS Trans. Am. Geophys. Union*, 82 (47) (Fall Meeting Supplement), F1100, 2001.
- 125) Loudon, K., G. Oakey, and **B. E. Tucholke**, Sediment thickness and regional variations of basement depth in the North Atlantic, *EOS Trans. Am. Geophys. Union*, 82 (47) (Fall Meeting Supplement), F1217, 2001.
- 124) **Tucholke, B. E.**, N. W. Driscoll, W. S. Holbrook, J. R. Hopper, H. C. Larsen, K. Loudon, T. A. Minshall, D. S. Sawyer, J.-C. Sibuet, S. P. Srivastava, and R. B. Whitmarsh, Drilling the Newfoundland margin in the Newfoundland-Iberia rift, *EOS Trans. Am. Geophys. Union*, 82 (47) (Fall Meeting Supplement), F1261, 2001.
- 123) Hall, J., S. Deemer, C. Hurich, H. Lau, K. Loudon, **B. Tucholke**, S. Holbrook, J. Hopper, and H.C. Larsen, A new deep seismic reflection profile from the SCREECH Project, Newfoundland Basin, NW Atlantic Margin, *EOS Trans. Am. Geophys. Union*, 82 (47) (Fall Meeting Supplement), F1260, 2001.
- 122) Fujiwara, T., J. Lin, T. Matsumoto, P. B. Kelemen, J. F. Casey, and **B. E. Tucholke**, Crustal structure and evolution in the last 5 Ma of the Mid-Atlantic Ridge near the Fifteen-Twenty Fracture Zone, *EOS Trans. Am. Geophys. Union*, 82 (47) (Fall Meeting Supplement), F1101, 2001.
- 121) Hopper, J. R., T. Funck, H. C. Larsen, **B. Tucholke**, W. S. Holbrook, and K. Loudon, Images of a continent-ocean boundary: A new seismic reflection and refraction survey offshore Newfoundland, SCREECH Transect 1, *European Union of Geosciences XI, Journal of Conference Abstracts*, 6 (1), 718, 2001.
- 120) Holbrook, W. S., H. Van Avendonk, D. Shillington, G. Nunes, **B. E. Tucholke**, K. Loudon, J. Hopper, and H. C. Larsen, Crustal structure across the continent-ocean transition on the Newfoundland nonvolcanic rifted margin at SCREECH Transect 2, *European Union of Geosciences XI, Journal of Conference Abstracts*, 6 (1), 721, 2001.
- 119) Lau, K. W. H., K. E. Loudon, J. Hall, S. Deemer, **B. Tucholke**, W. S. Holbrook, and J. R. Hopper, A comparison of seismic reflection profiles across the Newfoundland Basin and southern Iberia Abyssal Plain conjugate margins, *European Union of Geosciences XI, Journal of Conference Abstracts*, 6 (1), 721, 2001.
- 118) Loudon, K. E., **B. Tucholke**, and K. W. H. Lau, A regional comparison of the conjugate ocean continent transitions of the Newfoundland Basin and Iberia Abyssal Plain, *European Union of Geosciences XI, Journal of Conference Abstracts*, 6 (1), 718, 2001.
- 117) Lau, K. W. H., K. E. Loudon, J. Hall, S. Deemer, **B. Tucholke**, W. S. Holbrook, J. R. Hopper, and T. Funck, New seismic profiles across the eastern Grand Banks and Newfoundland Basin: First results from Mariprobe Phase I Program, *Geol. Assoc. Canada - Mineral. Assoc. Canada St. John's 2001 Abstracts*, 26, 82, 2001.
- 116) Funck, T., J. R. Hopper, H. C. Larsen, **B. E. Tucholke**, W. S. Holbrook, and K. E. Loudon, A new seismic reflection and refraction survey at the continent-ocean boundary at Flemish Cap:

SCREECH Transect 1, *Geol. Assoc. Canada - Mineral. Assoc. Canada St. John's 2001 Abstracts*, 26, 48, 2001.

- 2000 115) McKnight, A., and **B. E. Tucholke**, Evolution of an ancient (~20 Ma) megamullion complex on the Mid-Atlantic Ridge at 27°N, *EOS Trans. Am. Geophys. Union*, 81 (48) (Fall Meeting Supplement), F1074, 2000.
- 114) Loudon, K. E., **B. Tucholke**, H. Lau, J. Hall, C. Hurich, W. S. Holbrook, J. R. Hopper, T. Funck, H.C. Larsen, and H. Van Avendonk, Preliminary results of a seismic survey across the eastern Newfoundland continental margin (SCREECH Transect 3), *EOS Trans. Am. Geophys. Union*, 81 (48) (Fall Meeting Supplement), F1113, 2000.
- 113) Holbrook, W. S., **B. Tucholke**, H. Van Avendonk, D. Shillington, G. T. Nunes, J. R. Hopper, H. C. Larsen, K. Loudon, and T. Funck, Crustal structure across the continent-ocean transition on the Newfoundland nonvolcanic rifted margin at SCREECH Transect 2, *EOS Trans. Am. Geophys. Union*, 81 (48) (Fall Meeting Supplement), F1113, 2000.
- 112) Hopper, J. R., **B. Tucholke**, W. S. Holbrook, H. C. Larsen, T. Funck, K. Loudon, H. Van Avendonk, H. Lau, D. Shillington, M. Hornbach, and G. Nunes, Preliminary results of a new seismic reflection and refraction survey offshore Newfoundland, SCREECH Transect 1, *EOS Trans. Am. Geophys. Union*, 81 (48) (Fall Meeting Supplement), F1113, 2000.
- 1999 111) Caress, D. W., H. G. Greene, and **B. E. Tucholke**, Intra-canyon basins and headwalls in submarine canyon systems, *EOS Trans. Am. Geophys. Union*, 80 (45) (Fall Meeting Supplement), F561, 1999.
- 110) **Tucholke, B. E.**, T. Ishihara, and K. Fujioka, Structural Development of Dante's Domes Megamullion on the Mid-Atlantic Ridge, *EOS Trans. Am. Geophys. Union*, 80 (46) (Fall Meeting Supplement), F955, 1999.
- 109) **Tucholke, B. E.**, N. W. Driscoll, and W. S. Holbrook, The asymmetric Newfoundland - Iberia rift, *Abstracts of Talks and Posters, Non-Volcanic Rifting of Continental Margins: A Comparison of Evidence from Land and Sea*, The Geological Society, London, UK, 16-17 September 1999, p. 48.
- 1998 108) **Tucholke, B. E.**, K. Fujioka, and T. Ishihara, Shinkai 6500 dives on Dante's Domes, a megamullion in the eastern rift mountains of the Mid-Atlantic Ridge at 26.6 degrees North, *EOS Trans. Am. Geophys. Union*, 79 (45) (Fall Meeting Supplement), F45, 1998.
- 107) **Tucholke, B. E.**, Geological structure of spreading segments in magma-supply-limited ocean crust, *Geological Society of America Penrose Conference, Ophiolites and Oceanic Crust: New Insights from Field Studies and Ocean Drilling Program*, Marshall, CA, 13-17 September 1998.
- 1997 106) **Tucholke, B. E.**, J. Lin, and M. C. Kleinrock, Relation between rift-axis magmatism, frequency of detachment faulting, and development of inside-corner highs in slow-spreading crust, *EOS Trans. Am. Geophys. Union*, 78 (46) (Fall Meeting Supplement), F663, 1997.
- 1996 105) Tanaka, T., J. Lin, **B. Tucholke**, M. Kleinrock, and N. Isezaki, Magnetic structure of slow-spreading crustal segments inferred from 3-D magnetic vectors on the eastern flank of the Mid-Atlantic Ridge at 26°N, *EOS Trans. Am. Geophys. Union*, 77 (46) (Fall Meeting Supplement), F728, 1996.
- 104) Lin, J., **B. E. Tucholke**, M. C. Kleinrock, and J. Escartin, Along- and across-isochron gravity and bathymetric anomalies on the Mid-Atlantic Ridge: Implications for tectonics of slow-

- spreading crust, *EOS Trans. Am. Geophys. Union*, 77 (46) (Fall Meeting Supplement), F724, 1996.
- 103) Kleinrock, M. C., **B. E. Tucholke**, and J. Lin, Geometry and structure of inside corners and pseudofaults at a slow-spreading ridge, *EOS Trans. Am. Geophys. Union*, 77 (46) (Fall Meeting Supplement), F723, 1996.
- 102) **Tucholke, B. E.**, J. Lin, and M. C. Kleinrock, Mullions, megamullions, and metamorphic core complexes on the Mid-Atlantic Ridge, *EOS Trans. Am. Geophys. Union*, 77, (46) (Fall Meeting Supplement), F724, 1996.
- 101) ***Tucholke, B. E.**, Structure of mid-ocean ridges, *NAGT Symposium, Plate Tectonics, What Students Should Know, Geol. Soc. Am. Abstr. with Programs*, 28 (7), A-223, 1996.
- 100) Jaroslow, G. E., D. K. Smith, and **B. E. Tucholke**, Seamount production and evolution in the western North Atlantic Ocean, 25°30' - 27°10'N: *FARA-InterRidge Mid-Atlantic Ridge Symposium*, 19-22 June 1996, Reykjavik, Iceland, *Journal of Conference Abstracts*, 1, 802, 1996.
- 99) **Tucholke, B. E.**, J. Lin, and M. C. Kleinrock, Off-axis structure of spreading segments on the Mid-Atlantic Ridge flank near 26°N, *ODP-InterRidge-IAVCEI Workshop, The Oceanic Lithosphere and Scientific Drilling into the 21st Century*, 26-28 May 1996, North Falmouth, MA, p.111, 1996.
- 1995 98) ***Tucholke, B. E.**, M. C. Kleinrock, M. Tivey, and J. Lin, Fast-propagating rifts in slow-spreading crust, *EOS Trans. Am. Geophys. Union*, 76 (46) (Fall Meeting Supplement), F554, 1995.
- 97) *Lin, J., **B. E. Tucholke**, M. C. Kleinrock, and J. Escartin, Contrasting inside- vs. outside-corner crustal structure on flanks of a slow-spreading ridge, *EOS Trans. Am. Geophys. Union*, 76 (46) (Fall Meeting Supplement), F554, 1995.
- 96) *Jaroslow, G. E., D. K. Smith, and **B. E. Tucholke**, Production and evolution of seamounts in the ONR Natural Laboratory, North Atlantic Ocean, *EOS Trans. Am. Geophys. Union*, 76 (46) (Fall Meeting Supplement), F553-F554, 1995.
- 1994 95) Jaroslow, G. E., D. K. Smith, and **B. E. Tucholke**, The off-axis record of volcanism in the western North Atlantic Ocean, *EOS Trans. Am. Geophys. Union*, 75 (44) (Fall Meeting Supplement), 660, 1994.
- 94) **Tucholke, B. E.**, W. K. Stewart, and M. C. Kleinrock, Dissection and degeneration of fault scarps observed by fine-scale survey of slow-spreading ocean crust, *EOS Trans. Am. Geophys. Union*, 75 (44) (Fall Meeting Supplement), 649, 1994.
- 93) Shaw, P. R., M. A. Tivey, **B. E. Tucholke**, M. C. Kleinrock, and J. Lin, Past plate motions recorded in abyssal hill lineations and magnetic lineations on the western flank of the MAR, 26N, *EOS Trans. Am. Geophys. Union*, 75 (16) (Spring Meeting Supplement), 330, 1994.
- 1993 92) Austin, J. A., Jr., J.-C. Sibuet, S. Srivastava, K. Coflin, and **B. E. Tucholke**, Understanding the ocean-continent transition along conjugate passive continental margins: Deep drilling in the northern Newfoundland Basin, *EOS Trans. Am. Geophys. Union*, 74 (43), 614, 1993.
- 91) Shaw, P. R., M. C. Kleinrock, and **B. E. Tucholke**, Multiscale analysis of the tectonic fabric of the northern Mid-Atlantic Ridge flank, *EOS Trans. Am. Geophys. Union*, 74 (43), 574, 1993.

- 90) *Kleinrock, M. C., and **B. E. Tucholke**, Evidence from towed and remotely operated vehicles for variations in the structure of the traces of nontransform offsets at the Mid-Atlantic Ridge, *EOS Trans. Am. Geophys. Union*, 74 (43), 574, 1993.
- 89) ***Tucholke, B. E.**, M. Kleinrock, and W. K. Stewart, Fine-scale, near-bottom surveys of ocean crust on the flank of the Mid-Atlantic Ridge, 26 to 27 degrees North, *EOS Trans. Am. Geophys. Union*, 74 (43), 574, 1993.
- 88) Jung, W., P. Vogt, J. McCune, and **B. E. Tucholke**, Variability of the acoustic backscatter strengths in a northern Mid-Atlantic Ridge west flank, *EOS Trans. Am. Geophys. Union*, 74 (43), 342, 1993.
- 87) *Reed, T. B., D. K. Smith, and **B. E. Tucholke**, Multi-source, multi-scale imagery of the MAR, 25-27 deg. North, *International Conference on Acoustic Classification and Mapping of the Seabed*, 14-16 April 1993, Univ. of Bath, England.
- 86) Shaw P. R., **B. E. Tucholke**, and J. Lin, Large-scale tectonic fabric of the northern Mid-Atlantic Ridge flank, *EOS Trans. Am. Geophys. Union*, 74 (16), 306, 1993.
- 85) *Lin, J., **B. E. Tucholke**, and M. Kleinrock, Evidence from gravity and morphology for long-term variability in magmatic vs. tectonic extension at the Mid-Atlantic Ridge, *EOS Trans. Am. Geophys. Union*, 74 (16), 303, 1993.
- 84) *Lin, J., **B. E. Tucholke** and M. C. Kleinrock, Off-axis "boudin-shaped" gravity lows on the western flank of the Mid-Atlantic Ridge at 25°25'N-27°10'N: Evidence for long-term pulses in magmatic accretion in spreading segments, *EOS Trans. Am. Geophys. Union*, 74 (16), 380, 1993.
- 1992 83) *Kleinrock, M. C., **B. E. Tucholke**, and J. Lin, HAWAII MR1 sidescan sonar survey of the Mid-Atlantic Ridge rift valley from 25°25'N to 27°N, *EOS Trans. Am. Geophys. Union*, 73 (43), 567, 1992.
- 82) Reed, T. B., IV, D. Smith, **B. E. Tucholke**, Multi-source, multi-scale imagery of the MAR, 25° - 27° North, *EOS Trans. Am. Geophys. Union*, 73 (43), 552, 1992.
- 81) ***Tucholke, B. E.**, M. C. Kleinrock, W. K. Stewart, J. Lin, J. Goff, G. Jaroslow, B. Brooks, P. Lemmond, J. Howland, M. Marra, T. Reed, M. Edwards, J. R. Fricke, U. Herzfeld, Geological and geophysical survey of the Mid-Atlantic Ridge flank at 25°25'N to 27°10'N, *EOS Trans. Am. Geophys. Union*, 73 (43), 552, 1992.
- 80) Goff, J. A., M. C. Kleinrock, J. Lin, and **B. Tucholke**, Quantitative analysis of abyssal hill morphology within three segments: The west flank of the MAR 25°25'N-27°10'N and 0-30 Ma., *EOS Trans. Am. Geophys. Union*, 73 (43), 538, 1992.
- 79) *Kleinrock, M. C., **B. E. Tucholke**, J. Lin and M. A. Tivey, The trace of non-transform offsets and the evolution of Mid-Atlantic Ridge spreading segments between 25°25'N and 27°10'N over the past 30 m.y., *EOS Trans. Am. Geophys. Union*, 73 (43), 538, 1992.
- 78) *Lin, J., **B. E. Tucholke**, M. C. Kleinrock, and J. A. Goff, Variations in crustal faulting and magmatic accretion along the Mid-Atlantic Ridge and off-axis: results from the western flank of the MAR at 25-27 deg N, *EOS Trans. Am. Geophys. Union*, 73 (43), 538, 1992.
- 77) ***Tucholke, B. E.**, J. Lin, and M. C. Kleinrock, Crustal structure of spreading segments on the western flank of the Mid-Atlantic Ridge at 25°25'N to 27°10'N, *EOS Trans. Am. Geophys. Union*, 73 (43), 537, 1992.

- 76) Reed, T. B., IV, **B. E. Tucholke**, K. C. Macdonald, K. Crane, P. Vogt, and J. C. Sempere, Interactive visualization of 3D-plus data sets: simulated flights along the Mid-Atlantic Ridge, the East Pacific Rise, and the Knipovich Ridge, *EOS Trans. Am. Geophys. Union*, 73, 46, 1992.
- 75) **Tucholke, B. E.**, and J. Lin, Detachment faulting and its relation to geologic structure at first-and second-order offsets of slow-spreading ridges, *EOS Trans. Am. Geophys. Union*, 73, 286, 1992.
- 1991 74) **Tucholke, B. E.**, and J. Lin, Asymmetric crustal structure at ridge-axis offsets, Mid-Atlantic Ridge, *EOS Trans. Am. Geophys. Union*, 72, 467, 1991.
- 73) ***Tucholke, B. E.**, T. B. Reed IV, and J. Lin, Bottom roughness of the Mid-Atlantic Ridge flank observed in SeaMARC II sidescan sonar and Sea Beam multibeam bathymetry, *J. Acoustical Soc. America*, 90, 2236, 1991.
- 72) Reed, T. B., IV and **B. E. Tucholke**, Geologic visualization of the Kane Fracture Zone: interactive processing of side-scan and bathymetric data, *EOS Trans. Am. Geophys. Union*, 72, 266, 1991.
- 71) ***Tucholke, B. E.**, J. Lin, and T. B. Reed IV, Patterns of seafloor faulting and volcanic morphology observed along- and across-axis on the Mid-Atlantic Ridge, 24°-27°N, *EOS Trans. Am. Geophys. Union*, 72, 260, 1991.
- 1990 70) ***Tucholke, B. E.**, The tectonic fabric and record of plate-motion changes in North Atlantic Ocean crust, *Soviet National Meeting on Marine Geology*, Gelendjik, USSR, 15-20 October, 1990.
- 69) **Tucholke, B. E.**, and C. T. Friedrichs, Depositional history of the Newfoundland Basin east of the Grand Banks, *EOS Trans. Am. Geophys. Union*, 71, 1614-1615, 1990.
- 1989 68) †**Tucholke, B. E.**, Geology of the North American plate: lessons from the oceans (Address to the Geological Society of America Centennial Symposium), *GSA News & Information*, 11, 34, 1989.
- 1988 67) **Tucholke, B. E.**, H. Schouten, H. J. B. Dick, and W. K. Stewart, SeaMARC II study of fine-scale crustal structure in the Kane Fracture Zone, *EOS Trans. Am. Geophys. Union*, 69, 1430, 1988.
- 66) ***Tucholke, B. E.**, J. A. Austin, Jr., and E. Uchupi, Crustal structure and rift-drift history of the Newfoundland Basin, *Geol. Assoc. Canada, Mineral Assoc. Canada, Canadian Soc. Petrol. Geol. Joint Ann. Mtg. Program with Abstracts*, 13, A127, 1988.
- 1987 65) **Tucholke, B. E.**, E. Uchupi, and C. Urien, Regional tectonic framework of the South Atlantic Ocean, 20°S to 55°S, 30°E to 75°W, *Tenth Argentine Geological Congress*, 14-18 September 1987.
- 64) Urien, C., **B. Tucholke**, and L. Martins, Continental embankment off Rio Grande do Sul (Brazil) and Buenos Aires (Argentina) margin, *Tenth Argentine Geological Congress*, 14-18 September 1987.
- 63) Austin, J. A., Jr., K. J. Meador, and **B. E. Tucholke**, Seismic stratigraphy of the northern Newfoundland Basin, *EOS Trans. Am. Geophys. Union*, 68, 1480, 1987.
- 1986 62) **Tucholke, B. E.**, and H. Schouten, Structural response of North Atlantic transforms to "extensional" shifts in pole of relative plate motion, *EOS Trans. Am. Geophys. Union*, 67, 1228, 1986.

- 61) *Gardner, W. D., P. E. Biscaye, and **B. E. Tucholke**, Nepheloid layers, eddy kinetic energy, and benthic storms, *EOS Trans. Am. Geophys. Union*, 67, 1018-1019, 1986.
- 60) Smoot, N. C., and **B. E. Tucholke**, Multibeam sonar evidence for evolution of Corner Rise and Cruiser seamount groups, *EOS Trans. Am. Geophys. Union*, 67, 1221, 1986.
- 59) *Mountain, G. S., K. G. Miller, and **B. E. Tucholke**, Cenozoic development of deep-water circulation in the North Atlantic, *Second International Conference on Paleoceanography*, 6-13 Sept. 1986, Woods Hole, MA, 1986.
- 1985 58) ***Tucholke, B. E.**, E. Uchupi, and C. Urien, Regional tectonic framework of the South Atlantic Ocean, 20°S to 55°S, 30°E to 75°W, *EOS Trans. Am. Geophys. Union*, 66, 1290, 1985.
- 57) Meador, K. J., J. A. Austin, Jr., and **B. E. Tucholke**, Shelf to basin correlations in the Newfoundland Basin, *EOS Trans. Am. Geophys. Union*, 66, 1105, 1985.
- 56) Shephard, L. E., **B. E. Tucholke**, V. A. Fry, R. D. Flood, and R. C. Searle, Sediment dispersal patterns within the Nares Abyssal Plain: Observations from GLORIA sonographs, *Geol. Soc. Am. Abstr. with Programs*, 17, 714, 1985.
- 55) **Tucholke, B. E.**, and H. Schouten, Global plate motion changes recorded in the Kane Fracture Zone, *Geol. Soc. Am. Abstr. with Programs*, 17, 737, 1985.
- 1984 54) **Tucholke, B. E.**, Geology of the U.S. Atlantic slope and rise, Jurassic to Recent, in J. Rogers and J. Sougy, *The West African Connection: Evolution of the Central Atlantic Ocean and its Continental Margins*, *Travaux des Laboratoires des Sciences de la Terra* (Penrose Conference Report), Serie B, No. 24, p. 17, 1984.
- 53) **Tucholke, B. E.**, and L.A. Raymond, Submarine geology for the Geologic Map of North America, *Geol. Soc. Am. Abstr. with Programs*, 16, 678, 1984.
- 1983 52) Ebinger, C. J., and **B. E. Tucholke**, Seismic stratigraphy of the Sohm Abyssal Plain and Nova Scotian continental rise, *EOS Trans. Am. Geophys. Union*, 64, 730, 1983.
- 51) Driscoll, M., and **B. E. Tucholke**, Seafloor zonation in sediment texture and benthic megafauna in the HEBBLE area, *EOS Trans. Am. Geophys. Union*, 64, 729, 1983.
- 50) ***Tucholke, B. E.**, V. A. Fry, and L. E. Shephard, 1983, Geologic studies of the Nares Abyssal Plain as a sub-seabed nuclear waste disposal site, *EOS Trans. Am. Geophys. Union*, 64, 741, 1983.
- 49) Miller, K. G., **B. E. Tucholke**, and G.S. Mountain, Cenozoic development of abyssal circulation in the Atlantic, *First International Conference on Paleoceanography*, Zurich, Switzerland, p. 41, 1983.
- 48) Cura, J., W. Curtis, R. Gillmore, K. Ketchum, G. Mariani, C. Menzie, **B. Tucholke**, and E. Burke, 1983, The development of site-selection criteria for the disposal of low-level radioactive waste off the east coast of North America, *IODS Special Symposium - Ocean Waste Management: Policies and Strategies*, Univ. Rhode Island, May 1983, p. 20-21, 1983.
- 47) **Tucholke, B. E.**, and K. G. Miller, Late Paleogene abyssal circulation in the North Atlantic: *Am. Assoc. Petrol. Geol. Bull.*, 67, 559, 1983.

- 1982 46) Grow, J. A., A. A. Drake, Jr., N. Ratcliffe, R. Faill, W. Manspeizer, D. Hutchinson, K. Klitgord, W. Bonini, A. B. Watts and **B. E. Tucholke**, U.S. Geodynamics Transect E-2: New Jersey, *Geol. Soc. Am. Abstr. with Programs*, 14, 504, 1982.
- 45) Shepard, L. E., J. E. Damuth, D. E. Hayes, G. R. Heath, E. P. Laine, and **B. E. Tucholke**, Subseabed disposal: Systematic application of the site characterization plan, *Oceans 82 MTS - IEEE Conference*, Washington, D.C., 20-22 Sept. 1982.
- 44) **Tucholke, B. E.**, and K. G. Miller, Stratigraphy of the northern North Atlantic and the evolution of Cenozoic abyssal circulation, *Geol. Soc. Am. Abstr. with Programs*, 14, 634, 1982.
- 43) *Mountain, G. S., and **B. E. Tucholke**, Cenozoic stratigraphy of the U.S. Atlantic continental slope and rise, *Geol. Soc. Am. Abstr. with Programs*, 14, 571-572, 1982.
- 42) ***Tucholke, B. E.**, and G. S. Mountain, Mesozoic stratigraphy of the U.S. Atlantic continental slope and rise, *Geol. Soc. Am. Abstr. with Programs*, 14, 634, 1982.
- 1981 41) Burke, E., J. Cura, R. Gillmore, G. Mariani, C. Menzie, C. Ketchum, and **B. Tucholke**, Deepwater disposal of low-level radioactive wastes in the western North Atlantic: Development of site-selection criteria, *Oceans 81 IEEE - MTS Conference*, Boston, MA, 1981.
- 40) Damuth, J. E., **B. E. Tucholke**, and A. N. Shor, Bathymetry and near-bottom sedimentation processes of the Nova Scotian continental rise, *EOS Trans. Am. Geophys. Union*, 62, 892, 1981.
- 39) **Tucholke, B. E.**, Origin of longitudinal ripples on the Nova Scotian continental rise, *EOS Trans. Am. Geophys. Union*, 62, 892, 1981.
- 38) Mountain, G. S., and **B. E. Tucholke**, Current-controlled deposition of abyssal Upper Jurassic to Neocomian sediments adjacent to the western Bahama Escarpment, *Geol. Soc. Am. Abstr. with Programs*, 13, 515, 1981.
- 37) **Tucholke, B. E.**, and W. J. Ludwig, Seismic stratigraphy of the J-Anomaly Ridge and Sohm Abyssal Plain, *Geol. Soc. Am. Abstr. with Programs*, 13, 569, 1981.
- 36) *Miller, K. G., and **B. E. Tucholke**, Evidence for development of abyssal circulation south of the Greenland-Scotland Ridge, *NATO Advanced Research Institute: Structure and Development of the Greenland- Scotland Ridge - New Methods and Concepts*, Bressanone, Italy, 11-15 May, 1981.
- 35) Laine, E. P., and **B. E. Tucholke**, Neogene and Quaternary development of the lower continental rise off the central U.S. east coast, *Am. Assoc. Petrol. Geol., Hedberg Res. Conf. on Continental Margin Processes*, Galveston, 12-16 January, 1981.
- 1980 34) Biscaye, P. E., W. D. Gardner, R. J. Zanaveld, H. S. Pak, and **B. E. Tucholke**, Nephels! Have we got nephels!, *EOS Trans. Am. Geophys. Union*, 61, 1014, 1980.
- 33) Shor, A. N., and **B. E. Tucholke**, Geologic effects of turbidity currents and contour currents on the Nova Scotian continental rise, *EOS Trans. Am. Geophys. Union*, 61, 1015, 1980.
- 32) **Tucholke, B. E.**, C. D. Hollister, P. E. Biscaye, and W. D. Gardner, Current-produced bedforms in HEBBLE study area, Nova Scotian continental rise, *EOS Trans. Am. Geophys. Union*, 61, 1014, 1980.

- 31) ***Tucholke, B. E.**, Correlation of unconformities on the Agulhas Plateau with regional erosion in the South Atlantic, *AAPG Research Conference: Interregional Unconformities - Documentation, Causes, and Uses*, Woods Hole, 28-30 April 1980.
- 30) Ludwig, W. J. and **B. E. Tucholke**, Structure of the J-Anomaly Ridge, Sohm Abyssal Plain, and Nova Scotian slope and rise, *EOS Trans. Am. Geophys. Union*, 61, 219, 1980.
- 29) ***Tucholke, B. E.**, and C. D. Hollister, Current Zonation and bedforms on Nova Scotian continental rise determined from bottom photography, *Symposium on Scientific and Engineering Applications of Underwater Photography*, Woods Hole, MA, 21-24 April, 1980.
- 28) *Laine, E. P., and **B. E. Tucholke**, The Neogene and Quaternary evolution of the lower continental rise off the eastern United States, *Geol. Assoc. Canada Annual Meeting*, Halifax, Nova Scotia, 1980.
- 27) Rothe, P. and **B. E. Tucholke**, Mineralogical composition of sedimentary formations in the Atlantic Ocean, *Berliner Geowissenschaftliche Abhandlungen*, Series A, Vol. 19 (Internationales Alfred Wegener Symposium, Berlin), 192-193, 1980.
- 1979 26) Hoose, P. J., **B. E. Tucholke**, R. W. Embley and P. Lonsdale, Abyssal furrows on sediment swells on the western Bermuda Rise, *EOS Trans. Am. Geophys. Union*, 60, 855, 1979.
- 25) **Tucholke, B. E.**, C. D. Hollister, P. E. Biscaye, W. Gardner, and L. Sullivan, Zonation and effects of abyssal currents on the Nova Scotian continental rise, *EOS Trans. Am. Geophys. Union*, 60, 855, 1979.
- 24) Damuth, J. E., **B. E. Tucholke**, and M. F. Coffin, Bottom processes on the Nova Scotian continental rise revealed by 3.5-kHz echo character, *EOS Trans. Am. Geophys. Union*, 60, 855, 1979.
- 23) **Tucholke, B. E.**, R. E. Houtz, and W. J. Ludwig, Sediment thickness patterns in the western North Atlantic Ocean, *Abstracts with Programs, 1979 GSA Annual Meetings*, 11, 530, 1979.
- 22) ***Tucholke, B. E.**, and R. W. Embley, Variations in sound velocity, bulk properties, and lithology and echo character in cores from northwestern Atlantic abyssal plains, CNR/NORDA Workshop: *Interpretive Modelling of Deep-Ocean Sediments and Their Physical Properties*, Bay St. Louis, Mississippi, Sept. 4-7, 1979.
- 21) ***Tucholke, B. E.**, Geologic significance of sedimentary reflectors in deep western North Atlantic, *Am. Assoc. Petrol. Geol. Bull.*, 63, 543, 1979.
- 1978 20) **Tucholke, B. E.**, R. E. Houtz, J. Diebold and D. M. Barrett, Continental crust beneath the Agulhas Plateau in the southwestern Indian Ocean, *Abstracts with Programs, 1978 GSA Annual Meetings*, 10, 506, 1978.
- 19) **Tucholke, B. E.**, Geological significance of abyssal currents on the Agulhas Plateau, southwestern Indian Ocean, *Abstracts with Programs, 1978 GSA Annual Meetings*, 10, 507, 1978.
- 18) Hoose, P. J., R. W. Embley, and **B. E. Tucholke**, Current-controlled sedimentation on the western Bermuda Rise, *EOS Trans. Am. Geophys. Union*, 59, 299, 1978.
- 17) *Jansa, L. F., P. Enos, **B. E. Tucholke**, F. Gradstein, and R. E. Sheridan, Mesozoic-Cenozoic sedimentary formations of the North American Basin, western North Atlantic, *Second Maurice Ewing Memorial Symposium*, Harriman, N.Y., p. 20-21, 1978.

- 16) ***Tucholke, B. E.**, and G. S. Mountain, Lithologic correlation and significance of major seismic reflectors in the western North Atlantic, *Second Maurice Ewing Memorial Symposium*, Harriman, NY., p. 40-41, 1978.
- 1977
- 15) ***Tucholke, B. E.**, and E. P. Laine, Neogene sedimentation in the New York Bight, *Symposium on the Development of the New York Bight*, Palisades, N.Y., p. 19-20, 1977.
 - 14) **Tucholke, B. E.**, and G. S. Mountain, Depositional patterns and depositional environment of Cretaceous black clays in the western North Atlantic, *Abstracts with Programs, 1977 GSA Annual Meetings*, 9, 1207, 1977.
 - 13) Mountain, G. and **B. E. Tucholke**, Horizon B: Acoustic character and distribution in the western North Atlantic, *EOS Trans. Am. Geophys. Union*, 58, 406, 1977.
 - 12) **Tucholke, B. E.**, and G. Mountain, The Horizon-A Complex: Lithostratigraphic correlation and paleoceanographic significance of reflectors in the western North Atlantic, *EOS Trans. Am. Geophys. Union*, 58, 406, 1977.
- 1976
- 11) Embley, R. W. and **B. E. Tucholke**, A continuous erosional zone in the Cape, Agulhas and Mozambique Basins, *Abstracts with Programs, 1976 GSA Annual Meetings*, 8, 854, 1976.
 - 10) **Tucholke, B. E.**, Jurassic to Recent lithofacies and acoustic facies in the western North Atlantic basin, *Abstracts with Programs, 1976 GSA Annual Meetings*, 8, 1147-48, 1976.
 - 9) ***Tucholke, B. E.**, Sedimentation processes and acoustic stratigraphy off West Antarctica, *25th International Geological Congress, Sydney Australia*, 3, 886-887, 1976.
- 1975
- 8) **Tucholke, B. E.**, P. Vogt, et al., Preliminary results from Leg 43 Deep Sea Drilling Project in the western North Atlantic, *Abstracts with Programs, 1975 GSA Annual Meetings*, 7, 1305, 1975.
- 1974
- 7) Hollister, C. D., A. Malahoff, **B. Tucholke**, D. Caccione, W. Gardner and N. Marshall, Active sedimentary processes in submarine canyons, *Abstracts with Programs, 1974 GSA Annual Meetings*, 6, 799, 1974.
 - 6) Craddock, C., C. D. Hollister, J. Bogdanov, N. T. Edgar, J. Gieskes, B. Haq, J. Lawrence, F. Rogl, H. Schrader, **B. Tucholke**, W. Vennum, F. Weaver, and V. Zhivago, Crustal ages from deep-sea drilling in the southeast Pacific basin, *Abstracts with Programs, 1974 GSA Annual Meetings*, 6, 698, 1974.
- 1972
- 5) **Tucholke, B. E.**, C. D. Hollister, and J. I. Ewing, Deep circulation and sedimentation north of Puerto Rico, *Abstracts with Programs, 1972 GSA Annual Meetings*, 4, 693, 1972.
 - 4) **Tucholke, B. E.**, and C. D. Hollister, Late Pleistocene and Holocene sedimentation in the Western Gulf of Maine, *EOS Trans. Am. Geophys. Union*, 53, 422, 1972.
- 1971
- 3) Hollister, C. D., **B. E. Tucholke**, and A. J. Silva, Results of Giant Piston Coring in the Gulf of Maine, *EOS Trans. Am. Geophys. Union*, 52, 259, 1971.
- 1970
- 2) **Tucholke, B. E.**, and C. D. Hollister, Deposition and composition of acoustically transparent deep-sea sediments: Greater Antilles Outer Ridge, *Abstracts with Programs, 1970 GSA Annual Meetings*, 2, 710, 1970.
- 1966
- 1) Wilson, R. W. and **B. E. Tucholke**, A first record of an alligator from the middle Oligocene of the Big Badlands of South Dakota, *Proc. S.D. Acad. Sciences*, 45, 287-288, 1966.

Abstracts of Presentations - Symposia of the Office of Naval Research Acoustic Reverberation Special Research Program

- 1995 14) Jaroslow, G. E., and **B. E. Tucholke**, Detailed mapping of sediment distribution in the Acoustic Reverberation Corridor, *Acoustic Reverberation Special Research Program, 1995 Research Symposium*, 19-21 July 1995, Woods Hole Ocean. Inst., Woods Hole, MA, 1995.
- 13) **Tucholke, B. E.**, W. K. Stewart, and M. C. Kleinrock, Irregularity of fault scarps in the Acoustic Reverberation Corridor caused by slope failure and mass wasting, *Acoustic Reverberation Special Research Program, 1995 Research Symposium*, 19-21 July 1995, Woods Hole Ocean. Inst., Woods Hole, MA, 1995.
- 1993 12) **Tucholke, B. E.**, M. C. Kleinrock, and W. K. Stewart, Fine-scale geological and geophysical surveys at Sites B', C', A and D in the Acoustic Reverberation Corridor, *Acoustic Reverberation Special Research Program, 1993 Fall Research Symposium*, 1-3 December 1993, Scripps Inst. Ocean., La Jolla, CA, p. 16-22 (extended abstract).
- 11) Caruthers, J. W., and **B. E. Tucholke**, Geology and geophysics at ARSRP Sites A and C, *Acoustic Reverberation Special Research Program, 1993 Spring Research Symposium*, 23-25 March 1993, Scripps Inst. Ocean., La Jolla, CA, p. 23, 1993.
- 10) **Tucholke, B. E.**, M. C. Kleinrock, and W. K. Stewart, Geological and geophysical characteristics of the Acoustic Reverberation Corridor, and their relevance to the conduct of G&G fine-scale surveys, *Acoustic Reverberation Special Research Program, 1993 Spring Research Symposium*, 23-25 March 1993, Scripps Inst. Ocean., La Jolla, CA, p. 11-14 (extended abstract), 1993.
- 1992 9) **Tucholke, B. E.**, Fine-scale, near-bottom geological and geophysical investigations of ocean crust in the ONR ARSRP Acoustic Reverberation Corridor (west flank of the Mid-Atlantic Ridge, 26°-27°N), *Acoustic Reverberation Special Research Program, 1992 Fall Research Symposium*, 18 - 20 November 1992, Woods Hole Ocean. Inst., Woods, Hole, MA, p. 29, 1992.
- 8) **Tucholke, B. E.**, M. C. Kleinrock, J. Lin, and W. K. Stewart, Geological and geophysical survey of the Acoustic Reverberation Corridor on the west flank of the Mid-Atlantic Ridge at 25°25'N to 27°10'N, *Acoustic Reverberation Special Research Program, 1992 Fall Research Symposium*, 18 - 20 November 1992, Woods Hole Ocean. Inst., Woods, Hole, MA, p. 28, 1992.
- 7) Reed, T. B. IV, D. Smith, and **B. E. Tucholke**, Multi-source, multi-scale imagery of the MAR, 25°-27° North, *Acoustic Reverberation Special Research Program, 1992 Fall Research Symposium*, 18 - 20 November 1992, Woods Hole Ocean. Inst., Woods, Hole, MA, p. 20, 1992.
- 6) Goff, J. A., M. C. Kleinrock, J. Lin, and **B. Tucholke**, Quantitative analysis of abyssal hill morphology within three segments: The western flank of the MAR at 25°25'N - 27°10'N and 0 - 30 Ma, *Acoustic Reverberation Special Research Program, 1992 Fall Research Symposium*, 18 - 20 November 1992, Woods Hole Ocean. Inst., Woods, Hole, MA, p. 14, 1992.
- 5) **Tucholke, B. E.**, M. C. Kleinrock, and P. Lemmond, Geology and geophysics reconnaissance survey of the Acoustic Reverberation Corridor, *Acoustic Reverberation Special Research Program, 1992 Spring Research Symposium*, 7-9 April 1992, Scripps Inst. Ocean., La Jolla, CA, p. 33, 1992.
- 1991 4) **Tucholke, B. E.**, and J. Lin, Initial model for the geologic structure of Mid-Atlantic Ridge oceanic crust offset by small ridge-axis discontinuities, *Acoustic Reverberation Special Research Program, 1991 Fall Research Symposium*, 24-25 September 1991, Woods Hole Ocean. Inst., Woods Hole, MA, p. 30, 1991.

3) Jaroslow, G., and **B. Tucholke**, Echo character of the Mid-Atlantic Ridge flank in the region of the Acoustic Reverberation Corridor, *Acoustic Reverberation Special Research Program, 1991 Fall Research Symposium*, 24-25 September 1991, Woods Hole Ocean. Inst., Woods Hole, MA, p. 15, 1991.

2) **Tucholke, B. E.**, Geological and geophysical survey of the Acoustic Reverberation Corridor, Mid-Atlantic Ridge, *Second Annual Acoustic Reverberation Special Research Program Symposium*, 20-22 March 1991, Scripps Inst. Ocean., La Jolla, CA, p. 5, 1991.

1) **Tucholke, B. E.**, J. Lin, and T. B. Reed IV, Patterns of seafloor morphology observed along- and across-axis on the Mid-Atlantic Ridge 24°-27° N, *Second Annual Acoustic Reverberation Special Research Program Symposium*, 20-22 March 1991, Scripps Inst. Ocean., La Jolla, CA, p. 4, 1991.