

Gulf of Mexico Hydrates Research Consortium publications: 2000 - 2010

Publications and Presentations (*indicates peer reviewed)

2000

*McGee, T.M., 2000: A single-channel seismic reflection method for quantifying lateral variations in BSR reflectivity. *Marine Geology*, 164/1-2, 29-35.

*McGee, T.M., 2000: Pushing the limits of high resolution in marine seismic profiling. *Journal of Environmental and Engineering Geophysics*, 5, 43-53.

*McGee, T.M., 2000: High-resolution seismic profiling on water. Majorana Center of Scientific Culture School of Applied Geophysics, 10th Course: Development of Geophysical Methods with Application to Shallow Targets, *Annali di Geofisica*, 43, 1045-1073.

McGee, T., and Lowrie, A., 2000: Impact of hydrates on planetary evolution. Proceedings of the 31st International Geological Congress, Rio de Janeiro, Brazil.

*McGee, T.M., and Woolsey, J.R., 2000: A remote station to monitor gas hydrate outcrops in the Gulf of Mexico. *Annals of the New York Academy of Science*, 912, 527-532.

Roberts, H., J. Coleman, J. Hunt, Jr., and W. Shedd, 2000: Improving interpretation of sea floor geology, biology from remote sensing. *Offshore*, Volume 25, n. 9, p. 126-128.

Rogers, R., and M. Lee, Micellar solutions promote gas-hydrate formation, 2000, Los Angeles, CA, Annual Meeting of American Institute of Chemical Engineers, Nov.

*Zhong, Y., and R. Rogers, 2000: Surfactant Effects on Gas Hydrate Formation. *Chemical Engineering Science*, Volume 55, n. 19, p. 4175-4187.

2001

Hvozدارa, L., 2001: Long-term Observation in the Marine Environment using Mid-Infrared Spectroscopic Techniques and Quantum Cascade Lasers. Montpellier, France, Fourth International Conference on Mid-Infrared Optoelectronics Materials and Devices, April 2-4.

Hvozدارa, L., 2001: Quantum Cascade Lasers in Mid-Infrared Spectroscopy. Turku, Finland, 1st International Conference on Advanced Vibrational Spectroscopy, August 19-24.

Janotta, M., and B. Mizaikoff, 2001: Organically Modified Sol-Gels – Novel Recognition Layers for Infrared Optical Sensors. Blarney, Ireland, Fifth Euroconference on Environmental Analytical Chemistry: The Impact of Biosensors and Bioanalytical Techniques on Environmental Monitoring, September 8-12.

Lapham, L., D. Albert, J. Chanton, and C. Martens, 2001. Light hydrocarbon distributions and sulfate reduction rates in sediment porewaters near exposed gas hydrates. American Society of Limnology and Oceanography Annual Meeting.

Lee, M.S., 2001, The effects of biosurfactants on gas hydrate formation in ocean sediments. M.S. Thesis, Mississippi State University.

McGee, T.M., Lutken, C.B., Goebel, V.S. and Woolsey, J.R., 2001: Seismic images of structures associated with gas hydrates near the sea floor: initial results. Proceedings of the 63rd Conference of the European Association of Geoscientists and Engineers, Amsterdam, The Netherlands.

McGee, T.M. and Woolsey, J.R., 2001: Pushing the limits of seismic resolution in deep water. Proceedings of the Eleventh International Offshore and Polar Engineering Conference, Stavanger, Norway.

Mizaikoff, B., 2001: Mid-Infrared Fiberoptic Chemical Sensors – From the Lab into the Field. Blarney, Ireland, 5th Euroconference on Environmental Analytical Chemistry, The Impact of Biosensors and Bioanalytical Techniques on Environmental Monitoring, September 8-12.

*Roberts, H., 2001: Fluid and gas expulsion on the northern Gulf of Mexico continental slope: Mud-prone to mineral-prone responses. in C. Paull and W. Dillon, eds., *Natural Gas Hydrates: Occurrence, distribution, and detection*, American Geophysical Union, Geophysical Monograph, Volume 124, p. 145-161.

Roberts, H., R. Sassen, and A. Milkov, 2001: Seafloor expression of fluid and gas expulsion from deep petroleum systems, continental slope of the northern Gulf of Mexico. Houston, TX, GCSSEPM Research Foundation 21st Annual Research Conference, Petroleum Systems of Deep-Water Basins, December 2-5.

Rogers, R.E., and Lee, M.S., 2001: Biosurfactant from Microbial Activity in Ocean Sediments Enhances Gas Hydrate Formation. Presented at The Geological Society Earth System Processes- Global Meeting, Sponsored jointly by the Geological Society of London and Geological Society of America, Edinburgh, Scotland, June 24- 28, 2001.

Rogers, R.E., Lee, M.S., and Kothapalli, C.R., 2001: Biomolecules' Effects on Gas Hydrate Formation at Sand/Clay Interfaces. Presented at 2001 AIChE Annual Meeting, Reno, NV, Nov. 4- 9, 2001.

Sassen, R., 2001: Seafloor vents, seeps, gas hydrate: Relation to flux rate from the deep Gulf of Mexico petroleum system. Houston, TX, GCSSEPM Research Foundation, 21st Annual Research Conference, December 2-5.

*Sassen, R., S. Losh, L. Cathles III, H. Roberts, J. Whelan, A. Milkov, S. Sweet, and D. DeFreitas, 2001: Massive vein-filling gas hydrate: relation to ongoing gas migration from the deep subsurface in the Gulf of Mexico. *Marine Petroleum Geology*, Volume 18, p. 551-560.

*Sassen, R., S. Sweet, A. Milkov, D. DeFreitas, M. Kennicutt II, and H. Roberts, 2001: Stability of thermogenic gas hydrate in the Gulf of Mexico: Constraints on models of climate change. in C. Paull and W. Dillon, eds., *Natural*

Gas Hydrates: Occurrence, Distribution, and Detection, American Geophysical Union, Geophysical Monograph, Volume 124, p. 131-143.

Wang X.-C., R. F. Chen, J. Whelan and L. Eglinton, 2001: Contribution of "old" carbon from natural marine hydrocarbon seeps to sedimentary and dissolved organic carbon pools in the Gulf of Mexico. *Geophysical Research Letters*, 28, 3313-3316.

2002

Abrams, M., and J. Whelan, 2002: Near-Surface Hydrocarbon Migration: Mechanisms and Seepage Rates. Vancouver, BC, Canada, The American Association of Petroleum Geologists Hedberg Research Conference, April 7-10.

Cathles, L., C. Dofu, and H. Roberts, 2002: Estimation of the hydrate gas content of the Bush Hill vent site, Green Canyon Block 185, Gulf of Mexico. The American Association of Petroleum Geologists Annual Meeting, March 10-13, Houston, TX.

Dobbs, G., 2002: Mid-IR Sensing of Marine Pollutants in a Simulated Subsea Environment: Charleston, SC, SERMACS, November 13-16.

Geresi, E., 2002: Seismic Images of Geological Structures associated with Gas Hydrates near the Sea floor in the Mississippi Canyon Blocks. Houston, TX, The American Association of Petroleum Geologists Annual Meeting, March.

*Geresi, E., Lutken, C., McGee, T., and Lowrie, A., 2002: Complex geology and gas hydrate dynamics characterize Mississippi Canyon Block 798 on the upper continental slope of the northern Gulf of Mexico. *GCAGS Transactions*, 52, 309-321.

Hvozdar, L., N. Pennington, M. Kraft, M. Karlowatz, and B. Mizaikoff, 2002: Quantum Cascade Lasers for Mid-Infrared Spectroscopy, *Vibrational Spectroscopy*. Volume 30, p. 53-58.

Janotta, M., and B. Mizaikoff, 2002: Novel Recognition Layers for Mid-Infrared Evanescent Wave Sensors based on Organically Modified Sol-gels. Southeastern Regional Meeting of the American Chemical Society, Charleston, SC, November 13-16.

Karlowatz, M., 2002: Recent Developments in the Field of Mid-Infrared Fiberoptic Sensors for the Marine Environment. The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (PITTCON), New Orleans, LA, March 17-22.

Karlowatz, M., F. Vogt, and B. Mizaikoff, 2002: An Automated Sample Preparation System for Volatile Compounds Applied for Infrared Evanescent Wave Sensor Calibration. Southeastern Regional Meeting of the American Chemical Society, Charleston, SC, November 13-16.

Kothapalli, C.R., 2002, Catalysis of gas hydrates by biosurfactants in seawater-saturated sand/clay. M.S. Thesis, Mississippi State University.

*Lowrie, A., Carol Lutken, Erika Geresi, Richard H. Bennett, Richard Faas, Tom McGee, 2002: Natural Gas Hydrates: Permanent Earth Constituents Impacting Sediment Strength and Continental Margin Evolution. Canadian Recorder: Natural Gas Hydrates, v. 27, n. 8, p. 13-27.

Lowrie, A., and McGee, T.M., 2002: Sediment strength and hydrates along the northern Gulf of Mexico. Paper #14037, Proceedings of the Offshore Technology Conference, Houston, Texas.

Lowrie, A., McGee, T.M., and Lerche, I., 2002: Natural gas hydrates: Geologic constituents from the birth of the planet to the present. Paper #14032, Proceedings of the Offshore Technology Conference, Houston, Texas.

McGee, T., 2002: Report on Activities During FY2002 of the Gulf of Mexico Gas Hydrate Monitoring Station Project. Washington, DC, The Second Workshop of the International Committee on Methane Hydrates, October 28-31.

McGee, Thomas M., Carol B. Lutken, Vaughn S. Goebel and J. Robert Woolsey, 2002, Seismic Images of Structures Associated with Gas Hydrates near the Sea Floor: Initial Results. Proceedings of the AAPG Annual Meeting Houston, TX, V.11, A117.

McGee, T., C. Lutken, and R. Woolsey, 2002: Seismic Images of Structures Associated with Gas Hydrates near the Sea Floor: Initial Results. Biloxi, MS, Mississippi Academy of Sciences 66th Annual Meeting, February 21-22.

Mizaikoff, B., 2002: Mid-Infrared Sensor Technology for Liquid Phase Analysis. Annapolis, MD, Fifth International Conference on Mid-Infrared Optoelectronics Materials and Devices, September 8-11.

Mizaikoff, B., 2002: Optical Sensor Technology. Minneapolis, MN, Technology Awareness Forum, March 14.

Mizaikoff, B., 2002: Recent Advances and New Challenges For Infrared Sensors. Manchester, England, Europt(r)ode Conference, April 7-11.

Rogers, R., C. Kothapalli, and M. Lee, 2002, Influence of microbes on gas hydrate formation in porous media, *Proceedings of the Fourth International Conference on Gas Hydrates*, Yokohama, Japan, p. 547- 552.

Roberts, H., 2002: Surficial gas hydrates, part of the fluid and gas expulsion response spectrum: Identification from 3D seismic data. Proceedings of the 2002 Offshore Technology Conference.

Roberts, H., 2002: Geologic and biologic responses to varying rates of fluid and gas expulsion – Northern Gulf of Mexico. Vancouver, BC, Canada, The American Association of Petroleum Geologists Hedberg Research Conference, April 7-10.

Roberts, H., J. Coleman, J. Hunt, W. Shedd, R. Sassen, and A. Milkov, 2002: Gas hydrate deposits in a complex geologic setting, northern Gulf of Mexico Slope. Gulf Coast Association of Geological Societies Annual Meeting, October 30-November 1.

Rogers, R.E., 2002: Biosurfactants: The Link between Microbes and Gas Hydrates. Presented 2nd International Workshop on Methane Hydrates R&D, Washington, D.C., Oct. 30, 2002.

Rogers, R., C. Kothapalli, and M. Lee, 2002: Influence of Microbes on Gas Hydrate Formation in Porous Media. Yokohama, Japan, Fourth International Conference on Gas Hydrates, May 19- 23.

Sassen, R., 2002: Gas venting and gas hydrate stability in the northwestern Gulf of Mexico: Significance to sediment deformation. Houston, TX, 2002 Offshore Technology Conference, May 6-9.

Vogt, F., 2002: Chemometric Data Evaluation for Improved Seawater Monitoring of Chlorinated Hydrocarbons by Mid-Infrared Evanescent Wave Sensors. New Orleans, LA, The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (PITTCON), March 17-22.

*Vogt, F., M. Kraft, and B. Mizaikoff, 2002: First Results on Infrared Attenuated Total Reflection Spectroscopy for Quantitative Analysis of Salt Ions in Seawater. Applied Spectroscopy, Volume 56, p. 1376-1380.

*Whelan, J.K., L. Eglinton, L. Cathles, S. Losh, and H. Roberts, 2002, Surface & Subsurface Manifestations of Gas Movement Through a N-S Transect of the Gulf of Mexico, Marine and Petroleum Geology, In: Abrams, M.A. and

Whelan, J.K. eds, Near-Surface Hydrocarbon Migration: Mechanisms and Seepage Rates. Marine and Petroleum Geology Theme Volume based on 2002 AAPG Hedberg conference.

2003

Dobbs, G., N. Pennington, F. Vogt, and B. Mizaikoff, 2003: Investigating the Influence of Pressure on IR-ATR Spectroscopy for Underwater Spectroscopic Sensing Applications. Atlanta, GA, Southeast Meeting of the American Chemical Society, November.

Gallager, S. and J. Whelan, 2004, The Next Generation of in situ Biological and Chemical Sensors in the Ocean, Workshop report and Executive summary of workshop held at Woods Hole Oceanographic Institution, Sept 2003, 18pp.

Geresi, E., D. Hutchinson, P. Hart, and T. McGee, 2003: Using multiple attenuation to image geologic structures beneath the gas hydrate stability zone in the northern Gulf of Mexico. Seattle, WA, Geological Society of America Annual Meeting, Volume 35, n. 7, November.

Geresi, E., and McGee, T., 2003: Seismic imaging of the base of the hydrate stability zone in the northern Gulf of Mexico. EGU-AGU Joint Conference, Nice, France.

Hutchinson, Deborah R., Hart, Patrick E., Dugan, Brandon, Geresi, Erika, Sliter, Ray, and Newman, Kori, 2003: Subsurface Gas Hydrates in the Northern Gulf of Mexico. Annual Meeting of the Geological Society of America, Seattle, Washington. p.533

*Janotta, M., A. Katzir, and B. Mizaikoff, 2003: Sol-gel Coated Mid-Infrared Fiberoptic Sensors. Applied Spectroscopy, Volume 57, p. 823-828.

Janotta, M., and B. Mizaikoff, 2003: Sol-gel Based Mid-Infrared Evanescent Wave Sensors for Detection of Nitro-Compounds in Aqueous Solution. Orlando, FL, The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (PITTCON), March 9-14.

Johnson, Jeff, M.S. thesis, Physical Oceanography, University of Southern Mississippi, 2003, Passive microwave remote sensing of sea surface salinity: application of the scanning low frequency microwave radiometer in a coastal zone environment

Karlowatz, M., F. Vogt, and B. Mizaikoff, 2003: An Automated Sample Preparation System for Volatile Organic Compounds applied for IR Evanescent Wave Sensor Calibration. The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (PITTCON), Orlando, FL, March 9-14.

Lapham, L., J. Chanton, C. Martens, H. Scheafer, R. Chapman, and J. Puhlman, 2003: Innovations in Sampling Pore Fluids From Deep-Sea Hydrate Sites. San Francisco, CA, EOS, Transaction, American Geophysical Union, Volume 84, Fall Meeting Supplement, Abstract OS52D-05, December 8-12.

Lapham, L. L., Martens, C. S. and Coffin, R. B. 2003: Controls on the isotopic composition of dissolved methane in the pore waters of sediments containing disseminated gas hydrate off of Cascadia Margin. American Society of Limnology and Oceanography annual meeting program, p. 82.

*Lutken, Carol, Allen Lowrie, Erika Geresi, Richard Bennett, Richard Faas, Bradley Battista, and Tom McGee, 2003: Interpretation of high resolution seismic data from a geologically complex continental margin, northern Gulf of Mexico, GCAGS/GCSSEPM Transactions Volume 53, pp 504-516.

Lutken, Carol, Allen Lowrie, Erika Geresi, Charlotte Brunner, and Thomas McGee, 2003: Unexplained Geologic Features within the Hydrate Stability Zone, Upper Slope Mississippi Canyon, Northern Gulf of Mexico. Geoscience Horizons: Seattle 2003, Abstracts with Programs, Geological Society of America, p. 619.

Lutken, C.B., Woolsey, J.R., McGee, T.M., and Geresi, E.J., 2003: Geologic interpretation of the shallow subsurface within the gas hydrate stability zone, northern Gulf of Mexico, EGU-AGU Joint Conference, Nice, France.

McGee, T.M., Geresi, E.J., and Gossett, A.S., 2003: Imaging the hydrate stability zone using a vertical array: First results. Proceedings of the Offshore Technology Conference, Houston, Texas.

McGee, Thomas M., Goebel, Vaughn S., and Geresi, Erika J., 2003: Closing the gap between the hydrate stability zone and production reservoirs. Annual Meeting of the Geological Society of America, Seattle, Washington.

- McGee, T.M., Higley, P. and Woolsey, J.R., 2003: A vertical hydrophone array for imaging the hydrate stability zone. EGU-AGU Joint Conference, Nice, France.
- McGee, T.M., Higley, P.D., and Woolsey, J.R., 2003: A vertical hydrophone array for imaging the hydrate stability zone. Proceedings of the Association of American Petroleum Geologists, Salt Lake City, Utah.
- *Mizaikoff, B., 2003: Infrared Optical Sensors for Water Quality Monitoring, Water Science & Technology, Volume 47, n. 2, p. 35-42.
- *Mizaikoff, B., 2003: Mid-Infrared Fiberoptic Sensors. Analytical Chemistry, Volume 75, p. 258-267.
- Mizaikoff, B., 2003: Mid-Infrared Sensor Technology - Potential and Perspectives for Process Monitoring. New York, NY, American Chemical Society Fall National Meeting, September 7-11.
- Mizaikoff, B., N. Pennington, and F. Vogt, 2003: Mid-Infrared Spectroscopic Sensors for In-Situ Monitoring of Methane Dissolved in Sea Water. Houston, TX, Ocean Technology Conference, May 5-8.
- Rogers, R.E., Dearman, J.L., and Roberts, H.H., 2003: Enhancement of Gas Hydrate Formation in Gulf of Mexico Sediments. Presented at the Offshore Technology Conference, Houston, Texas, May 5- 8, 2003.
- *Rogers, R.E., Kothapalli, C., Lee, M.S., and Woolsey, J.R., 2003: Catalysis of Gas Hydrates by Biosurfactants in Seawater-Saturated Sand/Clay, Canadian J. Ch.E., 81, No. 5, pp.973-980.
- Sassen, R., 2003: Evidence of a deep source of bacterial methane in the Gulf of Mexico continental slope. New Orleans, LA, American Chemical Society Meeting, September 7-11.
- *Sassen, R., A. Milkov, E. Ozgul, H. Roberts, J. Hunt, M. Beeunas, J. Chanton, D. DeFreitas, and S. Sweet, 2003: Gas venting and subsurface charge in the Green Canyon area, Gulf of Mexico continental slope: evidence of a deep bacterial methane source? Organic Geochemistry, Volume 34, n. 10, p. 1555-1464.
- *Sassen, R., A. Milkov, H. Roberts, S. Sweet, and D. DeFreitas, 2003: Geochemical evidence of rapid hydrocarbon venting from a seafloor-piercing mud diapir, Gulf of Mexico continental shelf. Marine Geology, Volume 198, p. 319-329.
- Strack, E., and J. Kuszmaul, 2003: Describing the Spatial Continuity of Gas Hydrate Deposits Using Indicator Variography. Abstract OS51B-0863, San Francisco, CA, American Geophysical Union Fall Meeting, December 8-12.
- *Vogt, F., M. Karlowatz, M. Jakusch, and B. Mizaikoff, 2003: An Automated Sample Preparation System MixMaster for Investigation of Volatile Organic Compounds with Mid-Infrared Evanescent Wave Spectroscopy. The Analyst, Volume 128, n. 4, p. 397-403.
- Vogt, F., M. Kraft, and B. Mizaikoff, 2003: Mid-Infrared Attenuated Total Reflection (ATR) Spectroscopy for Quantitative Analysis of Salt Ions in Seawater. Orlando, FL, The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (PITTCON), March 9-14.
- *Vogt, F., and B. Mizaikoff, 2003: Introduction and Application of Secured Principal Component Regression (SPCR) for Analysis of Uncalibrated Spectral Features: Optical Spectroscopy and Chemical Sensing. Analytical Chemistry, Volume 75, p. 3050-3058.
- *Vogt, F., and B. Mizaikoff, 2003: Secured PCR (SPCR) for Detection, Correction, and Characterization of PCR Calibration Model Failures Induced by Uncalibrated Spectral Features. Journal of Chemometrics, Volume 17, p. 225-236.
- Winters, W.J., Waite, W.F., Mason, D.H., Novosel, I., Boldina, O.M., Dallimore, S.R., Collett, T.S., Lorenson, T.D., Paull, C.K., Rogers, R.E., Bryant, W., and McGee, T.M., 2003: Physical Properties of Sediment Containing Natural and Laboratory-Formed Gas Hydrate. American Association of Petroleum Geologists Annual Conference, Salt Lake City, May 11- 14.
- Woolsey, J.R., McGee, T.M., Lutken, C.B., and Geresi, E.J., 2003: A sea-floor observatory for studying the hydrocarbon system within the gas hydrate stability zone of the northern Gulf of Mexico. EGU-AGU Joint Conference, Nice, France.

2004

Baena, A., G. Dobbs, and B. Mizaikoff, 2004: Investigating Polymer Coatings for Infrared Methane Sensing Applications in the Deep Sea. Research Triangle Park, NC, Southeast Meeting of the American Chemical Society, November.

Battista, B. M. Camelia C. Knapp, E. Geresi, T. McGee, R. Chapman, A. Lowrie, J. R. Woolsey, Gas Hydrates of the Northern Gulf of Mexico from Standard Processing of Vertical Line Array and Deep-towed Data: Structural Control on Seafloor Deformation and Slope Destabilization, AAPG Annual Meeting, Dallas, 18-22 April 2004.

Battista, B. M. and Camelia Knapp, Using the Hilbert-Huang Transform to Improve Seismic Profiling of Gas Hydrates in the Gulf of Mexico, AGU, Dec. 2004.

Camilli, R., B. Bingham, M. Jakuba, H. Singh, and J. Whelan, 2004; Integrating In-situ Chemical Sampling with AUV Control Systems, In Collected papers for 2004 Oceans Conference, 9 pp. From 2004 Oceans conference in Victoria, B.C., Sept 2004.

*Chen, D., L. Cathles, and H. Roberts, 2004: The geochemical signatures of variable gas venting at gas hydrate sites, Marine and Petroleum Geology. Volume 21, p. 317-326.

Chapman, R., J. Pohlman, R. Coffin, J. Chanton, and L. Lapham, 2004; Thermogenic gas hydrates in the Northern Cascadia Margin, Eos Trans. AGU, 85 (38), 361.

Dobbs, G., P. Boezerooij, N. Pennington, F. Vogt, and B. Mizaikoff, 2004: IR-ATR Spectroscopy for Underwater Sensing Applications. Seventh European Conference on Optical Chemical Sensors and Biosensors [Europt(r)odeVII], Madrid, Spain, April.

Geresi, Erika, Ross Chapman, Tom McGee and J. R. Woolsey, 2004: Seismic calibration of the proposed DOE/JIP drill site in Atwater Valley 14. AAPG Annual Convention, Dallas, TX, Abstracts Volume, pA51.

*Janotta, M., 2004: Analysis of Corrosion Processes at DLC Protected ZnSe Waveguide Surfaces. Langmuir, Volume 20, p. 8634-8640.

*Janotta, M., 2004: Direct Analysis of Oxidizing Agents in Aqueous Solution with Attenuated Total Reflectance Mid-Infrared Spectroscopy and DLC Protected Waveguides. Analytical Chemistry, Volume 76, p. 384-391.

*Karlowitz, M., M. Kraft, and B. Mizaikoff, 2004: Simultaneous Quantitative Determination of Benzene, Toluene and Xylenes in Water with Mid-Infrared Evanescent Field Spectroscopy. Analytical Chemistry, Volume 76, p. 2643-2648.

*Lapham, L., J. Chanton, C. Martens, and H. Mendlovitz, 2004: Innovations in sampling pore fluids at deep sea hydrate sites. in B. J Thompson, ed., Energy, Simulation-Training, Ocean Engineering and Instrumentation, Research Papers of the Link Foundation Fellows, Volume 3, p. 4.

*Lowrie, A., P. A. Dean, and C. B. Lutken, 2004: Within five years, hydrate exploitation can be a reality in the northern Gulf of Mexico. GCAGS/GCSSEPM Transactions Volume 54, p371-382.

Lowrie, A., Dean, P.A., Lutken, Carol Blanton, Geresi, Erika, and McGee, Tom, 2004: The lower Mississippi Canyon: Possible Loci of Multiple Mass-Wasting Events. AAPG Annual Convention, Dallas, TX, Abstracts Volume, pA88.

Lowrie, A., Dean, P.A., Lutken, Carol Blanton, Geresi, Erika, and McGee, Tom, 2004: Hydrate Exploration and Exploitation within Five Years in the Northern Gulf of Mexico, AAPG Annual Convention, Dallas, TX, Abstracts volume, pA87.

*Lowrie, A., C. B. Lutken, and T. M. McGee, 2004: Multiple Outer Shelf Deltas and Downslope Massive Mass-Wastings Characterize the Mississippi Canyon, Northern Gulf of Mexico. GCAGS/GCSSEPM Transactions Volume 54, p.383-392.

Lutken, Carol Blanton, Geresi, Erika, McGee, Tom, Wood, Warren T., and Lowrie, A., 2004: Complex Geology Creates Difficult Interpretational Scenarios in Hydrated Areas Along Western Flank of Mississippi Canyon, Northern Gulf of Mexico, AAPG Annual Convention, Dallas, TX, Abstracts Volume, pA89.

Lutken, C., and T. McGee, 2004: Remote Observatory to Provide Detailed Data on Near-Sea-Floor Fluid Dynamics. Fire in the Ice Newsletter, Summer, p. 1-4.

McGee, T., Chapman, R., Knapp, C., Geresi, E., Battista, B., Morley, M. and Woolsey, R., 2004: An integrated seismic study of the proposed DOE/JIP drill site in Atwater Valley Block 14. AAPG Annual Convention, Dallas, TX, Abstracts Volume, pA94.

McGee, T. M., J. R. Woolsey, P. D. Higley, N. R. Chapman, 2004: Toward understanding the migration of hydrocarbons and brines through the gas hydrate stability zone of the northern Gulf of Mexico. 32nd International Geological Congress, Florence, Italy.

McGee, T., C. Lutken, R. Rogers, C. Brunner, J. Dearman, F. Lynch, and R. Woolsey, 2004: Can Fractures in Soft Sediments Host Significant Quantities of Gas Hydrates? Vancouver, BC, Canada, The American Association of Petroleum Geologists Hedberg Research Conference, September 9-12.

Mizaikoff, B., 2004: Mid-Infrared Sensor Technology – From the Lab into the Field? Santa Fe, NM, American Chemical Society ProSpective Conference on Emerging Opportunities in Chemical Sensing and Biosensing, May 16-19.

Morley, Mike, Chapman, Ross, McGee, Tom, and Woolsey, J.R., 2004: Estimation of Seismic Velocities in the Hydrate Stability Zone Using Ship Noise at a Vertical Hydrophone Array, AAPG Annual Convention, Dallas, TX, Abstracts Volume, pA99. .

Rogers, R.E., Woods, C.E., Tao Ding, Zhang, G., Dearman, J.L., and Kelleher, B., 2004: Gas Hydrate Catalysis from Biosurfactants- Bentonite Interactions that Impact Sediment Stability. American Association of Petroleum Geologists Annual Meeting, April 18- 21, Dallas, Texas.

Rogers, R., Zhang, G., Dearman, J., and Woods, C., 2004: Investigations into Surfactant/Gas-Hydrate Relationship. American Chemical Society, Division of Petroleum Chemistry, March 2004, San Diego, CA.

Rogers, R.E., Zhang, G., Kothapalli, C., and French, W.T., 2004: Laboratory Evidence of Microbial-Sediment-Gas Hydrate Synergistic Interactions in Ocean Sediments. Offshore and Polar Engineering Conference, sponsored by the International Society of Offshore and Polar Engineers, May 23- 28, Toulon, France.

*Sassen, R., H. Roberts, R. Carney, A. Milkov, D. DeFreitas, B. Lanoil, and C. Zhang, 2004: Free hydrocarbon gas, gas hydrate, and authigenic minerals in chemosynthetic communities of the northern Gulf of Mexico continental slope: relation to microbial processes. *Chemical Geology*, Volume 205, p. 195-217.

*Vogt, F., 2004: Chemometric Correction of Drift Effects in Optical Spectra. *Applied Spectroscopy*, Volume 58, p. 683-692.

*Vogt, F., and B. Mizaikoff, 2004: Fault Tolerant Spectroscopic Data Evaluation Based on Extended Principal Component Regression Correcting for Spectral Drifts and Uncalibrated Spectral Features. *Journal of Chemometrics*, Volume 17, p. 660-665.

*Whelan, J., 2004: When seafloor meets ocean, the chemistry is amazing: in more and more places, scientists are finding vast amounts of natural gas on the ocean bottom. *Oceanus*, Volume 42, n. 2, p. 66-71.

Woods, C.E., Jr., 2004, Examination of the effects of biosurfactant concentration on natural gas hydrate formation in seafloor porous media. M.S. Thesis, Mississippi State University.

2005

*Abrams, M., and J. Whelan, eds., 2005: Marine and Petroleum Geology, Special issue on Near-Surface Hydrocarbon Migration, Mechanisms and Seepage Rates, Volume 22, p. 456-596.

Bernabini, M., F-L. Chiocci, F. Mele, L. Orlando, A. Bosman, L. Macelloni, 2005, *Rilievo batimetrico multibeam e sismico dell'alveo del Fiume Tevere*. Atti del XXIV Convegno Nazionale GNGTS, Rome, Italy, November, 15-18 2005.

Dobbs, G., and B. Mizaikoff, 2005: IR-ATR Deep-Sea Sensing Interfaces: Optimizing Probe Designs through Experimental and Spectral Ray Tracing Analysis of Evanescent Field Interactions. Atlanta, GA, Optics in the Southeast, October.

Geresi, Erika, Ross Chapman, Tom McGee and J.R. Woolsey, 2005: Gas hydrate geohazard assessment in the northern Gulf of Mexico using a vertical line array. AAPG Annual Meeting, Calgary.

Hardage, B., 2005: Assessing deep water gas hydrate systems and seafloor stability. AGU-NABS-SEG-SPD/AAS Joint Assembly, New Orleans, LA, May 23–27.

Lapham, L., J. Chanton, C. Martens, J. Pohlman, and R. Chapman, 2005: In-situ light hydrocarbon concentrations and stable carbon isotope values in hydrate-bearing sediments of Cascadia Margin. Vancouver Island, Vienna, Austria, Second General Assembly European Geosciences Union, April 24-29.

*Lowrie, Allen and Lutken, Carol, 2005: Free gas exploitation within the northern Gulf of Mexico; a viable potential? Transactions of the 55th Annual Meeting of the GCAGS, New Orleans, LA, p.456-461.

Lutken, C., 2005: Mississippi Canyon Block 118 Seafloor Monitoring Station Update. Fire in the Ice Newsletter, Spring, p. 8-9.

Lutken, C., T. McGee, R. Rogers, J. Dearman, F. Lynch, C. Brunner, J. Kuykendall, and R. Woolsey, 2005: Can Fractures in Soft Sediments Host Significant Quantities of Gas Hydrates? Oxford, MS, Mississippi Academy of Sciences' Annual Meeting, February 17-18.

*Macelloni, Leonardo, 2005: Ph.D. dissertation, High-resolution marine digital seismic method: theoretical constraints, digital processing, new developments. University of Rome La Sapienza.

McGee, T., 2005: Can Fractures in Soft Sediments Host Significant Quantities of Gas Hydrates? Victoria, BC, Canada, Fourth International Methane Hydrates Workshop, May 9-11.

McGee, T., C. Lutken, R. Woolsey, R. Rogers, J. Dearman, F. Lynch, and C. Brunner, 2005: Can Fractures in Soft Sediments Host Significant Quantities of Gas Hydrates? Calgary, AB, Canada, The American Association of Petroleum Geologists Annual Meeting, June 19-22.

McGee, T. M., J. R. Woolsey and C. B. Lutken, 2005: A new method for improving the resolution of shallow sub-bottom seismic reflections in deep water. Joint Meeting of the Society of Exploration Geophysicists and the American Geophysical Union, New Orleans, LA.

Mizaikoff, B., 2005: From Chemical Sensors to Multifunctional Analytical Platforms. Invited Oral Presentation as Recipient of the Pittsburgh Conference Achievement Award, PITTCON, Orlando, FL, February 27-March 4.

Mizaikoff, B., 2005: Spectroscopic Sensors in Marine Environments. Invited Presentation, MarTech 2005, Bremen, Germany, October 9-12.

Rogers, R., J. Dearman, and G. Zhang, Interactions of bioagents and fine mineral particles to promote gas hydrates, 2005, Vancouver, Island, B.C., MMS Workshop on Marine Gels and Polygonal Fault Systems, July.

Rogers, R., G. Zhang, J. Dearman, and C. Woods, 2005, Investigations into surfactant/gas-hydrate relationship, San Diego, CA, American Chemical Society, March.

*Whelan, J., L. Eglinton, L. Cathles III, S. Los, and H. Roberts, 2005: Surface and Subsurface Manifestations of Gas Movement Through a N-S Transect of the Gulf of Mexico. Marine and Petroleum Geology, p. 479-497.

Woolsey, J.R., T. McGee, C. Lutken, and P. Higley, 2005: Gas Hydrates Seafloor Observatory---First Stage Deployment and Test Set for 2005. Proceedings of the 2005 Offshore Technology Conference, paper 17571.

2006

Backus, M. M., Murray, Paul, Hardage, B. A., and Graebner, R. J., 2006: High-resolution multicomponent seismic imaging of deepwater gas-hydrate systems. The Leading Edge, v. 25, no. 5, p. 578- 598.

Bradley Battista, , A. Addison, Camelia Knapp, T. McGee, Application of the Empirical Mode Decomposition to Seismic Reflection and Ground Penetrating Radar Data, AGU Fall Meeting, Dec. 2006.

Dobbs, G. T., B. Balu, C. Young, A. Sinha, D. W. Hess, B. Mizaikoff, 2006: Plasma-assisted Deposition of Fluorocarbon Films for Molecular Recognition Layers in Mid-Infrared Attenuated Total Reflection Chemical Sensors. FACSS, Orlando/FL, September 24-28.

*Dobbs, G., and B. Mizaikoff, 2006: Shining New Light at Old Principles: Localization of Evanescent Field Interactions at IR-ATR Sensing Interfaces. Appl. Spectrosc., v.60, pp.573-583.

Dobbs, G. and B. Mizaikoff, 2006: In-situ monitoring of gas hydrate formation/dissociation with mid-IR fiber-optic evanescent field spectroscopy. Europt(r)ode VIII, Tuebingen, Germany, April 2-5.

Dobbs, G., Y. Raichlin, A. Katzir, B. Mizaikoff, 2006: Mid-Infrared Fiberoptic Evanescent Field Spectroscopy on the Nucleation of Gas Hydrates. Eastern Analytical Symposium, Somerset, NJ, November 13-16.

Hardage, B., 2006: Seismic estimation of gas hydrate concentrations in deepwater environments: assumptions and limitations. Houston, TX, The American Association of Petroleum Geologists Annual Convention, April.

Hardage, B. A., DeAngelo, Michael, Sava, Diana, and Remington, Randy, 2006: Technology can avoid the fizzles. AAPG Explorer, Geophysical Corner, March, p. 28–29.

Hardage, B. A., and Murray, Paul, 2006: High resolution P-P imaging of deepwater near-seafloor geology. AAPG Explorer, v. 27, no. 7, p. 30.

Hardage, B. A., and Murray, P. E., 2006: Detailed imaging of deepwater hydrate geology with horizontal arrays of seafloor sensors. Offshore Technology Conference, paper 17929, 3 p.

Hardage, B. A., and Murray, P. E., 2006: P-SV data most impressive image. AAPG Explorer, Geophysical Corner, v. 27, no. 8, p. 30.

Hardage, B. A., Murray, Paul, Sava, Diana, Backus, M. M., Remington, R. L., Graebner, R. J., and Roberts, H. H., 2006: Evaluation of deepwater gas-hydrate systems. The Leading Edge, v. 25, no. 5, p. 572–577.

Hardage, B. A., Remington, R. L., and Roberts, H. H., 2006: Gas hydrate--a source of shallow water flow? The Leading Edge, v. 25, no. 5, p. 634–636.

Hardage, B. A., and Roberts, H. H., 2006: Gas hydrate in the Gulf of Mexico: what and where is the seismic target? The Leading Edge, v. 25, no. 5, p. 566–571.

Lapham, L.L., Chanton, J.P., Martens, C.S., Higley, P.D., Jannasch, H.W., Woolsey, J.R., 2006: Pore Fluid Array Construction and Deployment at Mississippi Canyon 118, Gulf of Mexico. Offshore Technology Conference, Houston, TX, #18170.

*Lloyd, K.G., L. Lapham, and A. Teske. 2006. An anaerobic methane-oxidizing community of ANME-1 archaea in hypersaline Gulf of Mexico sediments. *Applied and Environmental Microbiology*. Volume 72, p. 7218-7230.

Lutken, C.B., Brunner, C.A., Lapham, L., Chanton, J., Rogers, R., Sassen, R., Dearman, J., Lynch, L., Kuykendall, J., Lowrie, A., 2006: Analyses of Core Samples from Mississippi Canyon 118. Offshore Technology Conference, Houston, TX, #18208.

Lutken, C., T. McGee, A. Lowrie, C. Brunner, R. Rogers, L. Macelloni, A. Bosman, K. Sleeper, J. Dearman, R. Woolsey, L. Lynch, 2006: Comparison Of Two Candidate Sites For Gas Hydrates Sea Floor Monitoring. Vicksburg, MS, Mississippi Academy of Sciences' Annual Meeting, February 21-22.

*Lutken, Carol, Tom McGee, Allen Lowrie, Charlotte Brunner, Rudy Rogers, Leonardo Macelloni, Alessandro Bosman, Ken Sleeper, Jennifer Dearman, J. Robert Woolsey, Leo Lynch, 2006: Comparison of Two Gas Hydrates Sites for Sea Floor Monitoring, Transactions of the 56th Annual Meeting of the GCAGS, Lafayette, LA.

Lutken, C., T. McGee, and R. Woolsey, 2006: Gulf of Mexico Gas Hydrates Monitoring Station and Sea-floor Observatory: A Status Report. The American Association of Petroleum Geologists Annual Meeting, Houston, TX., April 9-12.

Martin, Kevin, M.S. theses, 2006 Geological Oceanography, University of Southern Mississippi, Development of a technique to quantify the volume of bubbles released from hydrocarbon seeps, using an inductive conductivity cell. McGee, Thomas M., 2006: A sea-floor observatory to monitor gas hydrates in the Gulf of Mexico. The Leading Edge, May, p. 644-647.

McGee, Thomas M., 2006: A sea-floor observatory to monitor a cold seep in the Gulf of Mexico. US-EU Baltic Workshop, Klaipeda, Lithuania, 23-25 May.

McGee, Tom, and Hardage, B. A., 2006: Hydrate system to be monitored: AAPG Explorer, Geophysical Corner, May, p. 24.

McGee, T., C. Lutken, R. Sassen, C. Brunner, R. Rogers, L. Macelloni, A. Bosman, K. Sleeper, J. Dearman, J.R. Woolsey, L. Lynch, 2006: Preliminary results at a hydrate/carbonate mound in the northern Gulf of Mexico. Fifth International Methane Hydrates Workshop, Edinburgh, U.K., 9-12 October.

McGee, Tom, and Leonardo Macelloni, 2006: Overview of observatory development and the site selection process. OTC Paper No. 18204, Houston, 3 May.

- McGee, T., L. Macelloni and V. Goebel, 2006: Seismo-acoustic imagery of a carbonate/hydrate mound in the Gulf of Mexico. AGU Fall Meeting, San Francisco, CA, 11-15 December.
- McGee, T., L. Macelloni, A. Bosman, C. Lutken, C. Brunner, R. Rogers, J. Dearman, K. Sleeper, and J. Woolsey, 2006, Hydrocarbon gas hydrates in sediments of the Gulf of Mexico, Burlington House, Piccadilly, U.K., Geological Society of London, January.
- Mizaikoff, B., 2006: Mid-Infrared Chemical Sensors based on Quantum Cascade Lasers: The Next Generation. International Symposium on Spectral Sensing Research, Bar Harbor, ME, May 29-June 2.
- Mizaikoff, B., 2006: Environmental Analysis with Optical Sensors - Quo Vadis? Invited Presentation, Europt(r)ode VIII, Tuebingen/Germany, April 2-5.
- Mizaikoff, B., 2006: Next-Generation Mid-Infrared Sensors in Harsh Environments. Invited Presentation, ACS Fall Meeting, San Francisco/CA, September 10-14.
- Mizaikoff, B., 2006: A New Frontier: Mid-Infrared Chemical Sensors Based on Single-Mode Waveguides. Invited Presentation, SPIE Optics East, Boston, MA, October 1-4.
- Murray, P.E., C. Zala and M. Dunham-Wilkie, 2006: Storage and Distribution of Digital Data from the Gulf of Mexico Seafloor Observatory. Proceedings of the Houston, TX, Offshore Technology Conference (OTC 17962), May 1-4.
- Pi Y., Li S., Pearson A., Noakes J., Culp R., and Zhang C. L. Effects of gas hydrates on archaeal community structure and carbon cycle in the Gulf of Mexico. American Geophysical Union Annual Meeting. December 10-16, 2006. San Francisco.
- Pizarro, Oscar, Norm Farr, Richard Camilli, Jean Whelan, Chris Martens, Joanne Goudreau, Howard Mendlovitz and Luis Camilli, 2006, In-situ Optical Characterization of Methane Seeps and Bubble Plumes, AGU Annual Meeting.
- Roberts, H. H., Hardage, B. A., Shedd, W. W., and Hunt, J., Jr., 2006: Seafloor reflectivity--an important seismic property for interpreting fluid/gas expulsion geology and the presence of gas hydrate. *The Leading Edge*, v. 25, no. 5, p. 620– 628.
- Rogers, R.E., Sassen, R., Dearman, J.S., and Zhang, G., 2006: Factors Prompting Seafloor Experiments to Investigate Microbial/Hydrate Relationships. Paper No. 2006-TK-01, The Sixteenth (2006) International Offshore and Polar Engineering Conference & Exhibition, San Francisco, May 28- June 2.
- Sassen, R., H. Roberts, W. Jung, C. Lutken, D. DeFreitas, S. Sweet, and N. Guinasso, Jr., 2006: The Mississippi Canyon 118 gas hydrate site: a complex natural system. Proceedings, 38th Offshore Technology Conference, paper 18132.
- Sava, Diana, and Hardage, B. A., 2006: Rock physics characterization of hydrate-bearing deepwater sediments. *The Leading Edge*, v. 25, no. 5, p. 616– 619.
- Sleeper, K., Lowrie, A., Bosman, A., Macelloni, L., Swann, C.T., 2006: Bathymetric Mapping and High-Resolution Seismic Profiling by AUV in MC118. Offshore Technology Conference, Houston, TX, #18133.
- Wang F., Wang S., Jiang L., Ye G., Xiao X., Noakes J., Zhang C. L., 2006, Community structure and population dynamics of bacteria and Archaea at hydrocarbon seeps/gas hydrates in the Gulf of Mexico. American Geophysical Union Annual Meeting. December 10-16, San Francisco.
- Zhang C. L., J. Noakes. 2006. Sea-floor Observatory in the Gulf of Mexico: Tracing the Carbon Flow in Gas-Hydrate Environments. OTC publication. Paper number: OTC 17804-pp.
- Zhang C.L. and Noakes J. 2006, Hydrates As An Energy Source: Lipid Biomarkers And Carbon-Isotope Signatures For Tracing The Carbon-and-Energy Flow In The Gulf of Mexico Gas-Hydrate Systems. Ocean Technology Conference, May 2006. Houston, TX.
- Zhang C. L., Yan T., Ye Q., Pancost R. D., and Noakes J. Lipid Biomarkers, Isotope Signatures, and Genomics of Gas Hydrates and Hydrocarbon Seeps in the Gulf of Mexico. Environmental Systems Microbiology Symposium. March 29-31, 2006. GaTech, Atlanta.

2007

*Battista, Bradley, Camelia Knapp, Tom McGee and Vaughn Goebel, 2007: Application of the Empirical Mode Decomposition and Hilbert-Huang Transform to seismic reflection data. *Geophysics*, 72(2), pp. H29-H37.

Battista, Bradley, A. Addison, Camelia Knapp, T. McGee, Application of the Empirical Mode Decomposition to Seismic Reflection and Ground Penetrating Radar Data, AGU Fall Meeting, Dec. 2007

Camilli, R., and A. Duryea. "Characterizing marine hydrocarbons with in-situ mass spectrometry" *in proceedings of IEEE OCEANS Vancouver 2007*.

Chanton, J. P., L. L. Lapham, C. S. Martens, P. D. Higley, and J. R. Woolsey. 2007. Gulf of Mexico Hydrate Research Consortium Geochemistry Overview. Geochemistry Department of Energy-National Energy Technology Laboratory Merit Review Board Meeting. Oral presentation. Golden, Colorado. September 17-21.

Dearman, J.L., 2007, Gas hydrate formation in Gulf of Mexico sediments. Ph.D. Dissertation, Mississippi State University.

Dobbs, Gary T., Balamurali Balu, Christina Young, Christine Kranz, Dennis W. Hess, and Boris Mizaikoff, 2007, *Mid-Infrared Chemical Sensors Utilizing Plasma-Deposited Fluorocarbon Membranes*, *Anal. Chem.*, 79(24), 9566-9571.

Dobbs, Gary T., An Nguyen, Yulia Luzinova, Yosef Raichlin, Christine Kranz, Abraham Katzir, Roger Sassen, and Boris Mizaikoff, 2007, *Infrared Spectroscopy for Exploring Complex Oceanic Gas Hydrate Ecosystems*, FACSS, 10-07, Memphis, TN.

*Geresi, Erika, 2007: Ph.D. dissertation: Vertical line array performance in gas hydrate bearing sediment in the northern Gulf of Mexico. University of Victoria, B.C.

Gerstoft, P, LA Brooks, S Fried, B Kuperman, K Sabra, 2007, *Ocean acoustic interferometry using noise and active sources*, invited paper presented by Peter Gerstoft at the American Geophysical Union Meeting, San Francisco, CA.

Hardage, B. A., 2007: Gas hydrate and LNG tankers. *AAPG Explorer*, v. 28, no. 5, Geophysical Corner, p. 36.

Hardage, B. A., Sava, Diana, DeAngelo, Michael, and Remington, R. L., 2007: Which seismic wave mode is best? *AAPG Explorer*, v. 28, no. 4, Geophysical Corner, p. 32.

Higley, Paul, 2007: New Concepts in Robotic Operated Vehicle (ROV) Design. Mid-South Area Science and Engineering Conference, Oxford, MS, MAESC 10071.

*Kelleher, B.P., Simpson, A.J., Rogers, R.E., Dearman, J., Kingery, W.L., 2007: Effects of natural organic matter from sediments on the growth of marine gas hydrates. *Marine Chemistry*, 103: 237- 249.

Lapham, Laura, Jeffery Chanton, Robert Woolsey, Kenneth Sleeper, 2007: Biogeochemical Sensors: Design and Applications of the Pore Fluid Array for the Mississippi Canyon 118, Gas Hydrate Seafloor Observatory. Mid-South Area Science and Engineering Conference, Oxford, MS, MAESC 10075.

Lapham, Laura, Jeff Chanton, Chris Martens, Ken Sleeper, and J. R. Woolsey, 2007, *Methane and biogeochemical gradients within acoustic wipe-out zones at a Gulf of Mexico cold seep*, presented by Lapham at the American Geophysical Union Meeting, San Francisco, CA.

Lapham, L.L, J. Chanton, C.S. Martens, K Sleeper and J.R. Woolsey. 2007. Methane and biogeochemical gradients within acoustic wipe-out zones at a Gulf of Mexico cold seep. American Geophysical Union. Oral presentation. Acapulco, Mexico, May 22-25.

Lapham, L., J. Chanton, C. Martens, P. Higley, H. Jannasch, J. Woolsey, and K. Sleeper, 2007, Biogeochemical sensors: design and applications of the Pore Fluid Array for the Mississippi Canyon 118 Gas Hydrate Seafloor Observatory, Oxford, MS, Mid-South Area Engineering and Sciences Conference, University of Mississippi, May 17-18.

Lapham, L. L., J. P. Chanton, C. S. Martens, P. D. Higley, H. W. Jannasch, and J. R. Woolsey. 2007. Monitoring long-term gas hydrate stability using a Pore-Fluid Array (PFA). Hydrate observatory meeting. Poster presentation. Joint Oceanographic Institutions Gas Hydrate Observatories Workshop on July 18-20 in Portland, Oregon.

Lapham, L. L., J. P. Chanton, C. S. Martens, K. Sleeper and J. R. Woolsey. 2007. Spatial variability in microbial activity associated with acoustic wipe-out zones in the northern Gulf of Mexico. Abstract. American Geophysical Union, Acapulco, Mexico, May 22-25.

Lutken, C. B. and J. R. Woolsey, 2007: A Sea Floor Observatory for Real -Time Investigation of Gas Hydrates. Mid-South Area Science and Engineering Conference, Oxford, MS, MAESC 10070.

Lutken, C.B., 2007, *Gulf of Mexico Gas Hydrates Research Consortium and Sea-floor Observatory*, Report to the Department of Energy's Methane Hydrate Merit Review, Golden, Colorado September 20.

Lutken, C.B., 2007, *Gulf of Mexico Gas Hydrates Research Consortium and Sea-floor Observatory* Report to the Department of Energy's Methane Hydrate Advisory Committee, Golden, CO, April 24 – 25.

Macelloni, L., 2007: AUV Multibeam Sonar: Survey, Mapping Application and Relevant Data Processing. Mid-South Area Science and Engineering Conference, Oxford, MS, MAESC 10078.

Macelloni, L., S. Caruso, T. M. McGee, C. B. Lutken, A. Bosman, K. Sleeper and J.R. Woolsey Jr., 2007: Mississippi Canyon Block 118 Hydrates Mound: a complex hydrates structure in the Northern Gulf of Mexico. Oral Presentation, Sesto Forum Italiano di Scienze della Terra - Geoitalia 2007, Rimini, September, 12-14.

Martens, Christopher, Howard Mendlovitz, Rich Camilli, Norman Farr, J. Robert Woolsey, Kenneth Sleeper, 2007: Design and application of the Chimney Sampler and Benthic Boundary Layer Arrays for the Mississippi Canyon 118, Gas hydrate seafloor observatory. Mid-South Area Science and Engineering Conference, Oxford, MS, MAESC10074.

McGee, Thomas, 2007: Implementation of Shallow-Source/Deep-Receiver Technology to Obtain High Seismic Resolution of Sub-bottom Sediment in Deep Water. Mid-South Area Science and Engineering Conference, Oxford, MS, MAESC10062.

McGee, Thomas, 2007: Geophysical Sensors: Design and Applications of the Acoustic Water-column Line Array and Seismic Sea-floor Line Arrays for the Gulf of Mexico Sea-floor Observatory. Mid-South Area Science and Engineering Conference, Oxford, MS, MAESC10063.

McGee, T.M., 2007: Using ambient noise for subsurface imaging. Underwater noise workshop, International Association of Oil and Gas Producers, Burlington, Massachusetts, 4-5 June.

McGee, Tom, Peter Gerstoft, and Ross Chapman, 2007: Using ambient noise to image the interior of a carbonate/hydrate mound. Gas-Hydrate Observatories Workshop, Portland, Oregon, 18-20 July.

McGee, T., C. Lutken, R. Rogers, C. Brunner, P. Verdugo and J. R. Woolsey, 2007: Why and how hydrates fill fractures in soft sediments. Gas-Hydrate Observatories Workshop, Portland, Oregon, 18-20 July.
McGee, T. M., L. Macelloni, Vaughn Goebel, 2007, Seismo-acoustic imagery of a carbonate/hydrate mound in the Gulf of Mexico. In McKay, M. and J. Nides (eds) 2007, *Proceedings: Twenty-third Gulf of Mexico information transfer meeting*, January 2007. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, La. OCS Study MMS 2007-066. 612 pp.

Mizaikoff, B., 2007: Good Vibrations - Infrared Spectroscopy and Sensing in Extreme Environments. Invited Presentation, ANAKON 2007, Jena, Germany, March 27-30.

Mizaikoff, B. and C. Kranz, 2007: From Infrared Chemical Sensors to Multifunctional Scanning Probes - Research at the Applied Sensors Laboratory, Friedrich Schiller Universität Jena, Jena, Germany, March 29.

*Rogers, R., Zhang, G., Dearman, J., and Woods, C., 2007: Investigation into surfactant/gas-hydrate relationship. in *Gas Hydrates and Clathrates*, special volume of the *Journal of Petroleum Science & Engineering*, 56, 1-3.

Sassen, R., S. T. Sweet, A. V. Milkov, D. A. DeFreitas, G. G. Salata, and E. C. McDade, 2007, *Geology and Geochemistry of Gas Hydrates, Central Gulf of Mexico Continental Slope*, *Corpus Christi Geological Society Bulletin*, January.

Woolsey, J. R., L. Macelloni, T. M. McGee, C. B. Lutken, K. Sleeper and P. Higley, 2007: A Deep Sea Floor Observing System For Real-Time Observation In The Northern Gulf Of Mexico. Poster, Sesto Forum Italiano di Scienze della Terra - Geoitalia 2007, Rimini September, 12-14.

*Zhang, G., Rogers, R.E., French, W.T., and Lao, W., 2007: Investigation of microbial influences on seafloor gas-hydrate formations. *Marine Chemistry*, 103 (2007) 359- 369.

2008

Battista, Bradley M., 2008, Advanced Nonlinear Signal Processing Tools for use with High-Resolution Seismic Reflection and Ground-Penetrating Radar Data, PhD Thesis, University of South Carolina.

Bowles, M.W., and S.B. Joye (2008) Nitrate reduction pathways in sediments from a Gulf of Mexico cold seep. Denitrification RCN Meeting, Cambridge Maryland, May.

Bowles, M.W., V.A. Samarkin, and S.B. Joye. (2008) Activity, diversity and relative abundance of sulfate reducing bacteria in oil-rich sediments from a lower continental slope Gulf of Mexico cold seep. ASLO-AGU-ERF-TOS Ocean Sciences, Orlando Florida, March.

*Brooks, Laura A, Peter Gerstoff, and David P Knobles (2008), Multichannel array diagnosis using noise cross-correlation, J Acoust. Soc. Am EL,124,EL203-EL209, DOI:10.1121/1.2960937. (PDF)

Haacke, R., M. Riedel, J. Pohlman, K. Rose, **L. Lapham**, T. Hamilton, R. Enkin, G.D. Spence, and R.D. Hyndman. Investigations on the role of gas hydrate in wide-spread slope failures at frontal ridges of the accretionary wedge of the northern Cascadia margin. American Geophysical Union meeting, Dec 2008.

Ingram, Wesley, Meyers, S., Brunner, C., and Martens, C., 2008, Centennial millennial scale stability of a large gas hydrate field in the northern Gulf of Mexico, The Geological Society of America, Southeastern Section, 57th Annual Meeting, 10 -11 April, Abstracts and Program, v. 40, no. 4.

Ingram, W. C., Meyers, S., Brunner, C., 2008, Centennial-Millennial Scale Stability of a Large Gas-Hydrate Field in the Northern Gulf of Mexico: Investigating Linkages to Climate Change and Slope Erosion, Geological Society of America Annual Meeting, Abstracts and Program, p. 278.

Ingram, W.C., Meyers, S.M., Brunner, C., and Martens, C., Centennial-Millennial scale stability of a large Gas Hydrate field in the Northern Gulf of Mexico, Abstract. Presented at the Society of Exploration Geophysics Meeting on Unconventional Resources, Vancouver, British Columbia, Canada, Sept. 2008.

*Lapham, L., J. Chanton, C. Martens, K. Sleeper and J. Robert Woolsey, 2008, "Microbial activity in surficial sediments overlying acoustic wipeout zones at a Gulf of Mexico cold seep," *Geochemistry, Geophysics, Geosystems*, Volume 9, No. 6, June 4.

Lapham, L. L., J. P. Chanton, Martens, C. S., Mendlovitz, H. P., Higley, P. D., Lutken, C. B., and Woolsey, J. R. (2008). Unique tools sample sediment pore water near seafloor hydrate mounds in the Gulf of Mexico. *Fire in the Ice, Methane Hydrate Newsletter*. Winter: 20pg.

*Lapham, L.L., J .P. Chanton, C.S. Martens, P. D. Higley, H. W. Jannasch and J.R. Woolsey (2008). Measuring long term changes in dissolved ion and gas concentrations and stable isotopes at a hydrate site: Mississippi Canyon 118, Gulf of Mexico. *Environmental Science and Technology*, 42, 7368-7373.

*Lapham, L.L., M.J. Alperin, J.P. Chanton, and C.S. Martens (2008). Upward advection rates and dissolved methane and sulfate concentrations at two Gulf of Mexico brine seeps. *Marine Chemistry*, 112, 65-71. <http://dx.doi.org/10.1016/j.marchem.2008.06.001>

Lapham, L.L., J .P. Chanton, C.S. Martens, P. D. Higley, H. W. Jannasch and J.R. Woolsey. Temporal variability in pore-fluid chemistry at a Gulf of Mexico gas hydrate site. American Geophysical Union meeting, Dec 2008.

Lloyd. K.G., MacGregor, B.J., and A. Teske, 2008, Quantification of archaeal RNA and DNA in marine sediments with qPCR and qRT-PCR. Cairns, Australia, 12th Meeting of the International Society for Microbial Ecology (ISME), August 11-15.

Lutken, C., 2008: In Memorium: J. Robert Woolsey, Jr., *Fire in the Ice Newsletter*, Fall, p. 22-24.

Macelloni, Leonardo, Bradley M. Battista, Thomas M. McGee and Vaughn Goebel, 2008, *A Band-Modulated Hilbert-Huang Transform For Seismic Attribute Analysis In Shallow, Hydrate-Bearing Sediments*, IEEE/OES Chile-US Workshop on Ocean Observation Systems, Working Group on Observation and Assessment of Gas Hydrates in the Coastal Ocean, Viña Del Mar , Chile, 4-7 Nov., 2008.

*McGee, T., L. Macelloni, A. Bosman , C. Lutken, C. Brunner, R. Rogers, J. Dearman, K. Sleeper and J. R. Woolsey, 2008, Hydrocarbon gas hydrates in sediments of the Mississippi Canyon area, northern Gulf of Mexico.

In Special Publication of the Geological Society of London, Sediment-hosted gas hydrates: New insights on natural and synthetic systems, D. Long (ed.)

*McGee, T., J. R. Woolsey, L. Macelloni, B. Battista, S. Caruso, L. Lapham, V. Goebel and J. Carroll, 2008, *Progress toward a sea-floor observatory at a carbonate/hydrate mound in the northern Gulf of Mexico*, US/EU Baltic 2008 International Symposium Tallin, Estonia May 27-29

McGee, T., and R. Rogers, 2008: Biogeophysics in the context of natural gas hydrates: northern Gulf of Mexico. AGU Chapman Conference on Biogeophysics, Portland, Maine, 13-16 October.

McGee, T., J. R. Woolsey, L. Lapham, R. Kleinberg, L. Macelloni, B. Battista, C. Knapp, S. Caruso, V. Goebel, R. Chapman, P. Gerstoft, 2008, *Structure Of A Carbonate/Hydrate Mound In The Northern Gulf Of Mexico*. Proceedings of the 6th International Conference on Gas Hydrates (IGCH 2008), Vancouver, British Columbia, Canada.

McGee, T., J. R. Woolsey, L. Lapham, R. Kleinberg, L. Macelloni, B. Battista, C. Knapp, S. Caruso, V. Goebel, R. Chapman and P. Gerstoft, 2008: Structure of a carbonate/hydrate mound in the northern Gulf of Mexico and possible hydrate distribution within it. Proceedings of IEEE/OES Chile-US Workshop on Ocean Observing Systems, Valparaiso, Chile, 3-6 November.

McGee, T., V. Goebel, A. Bosman and L. Macelloni, 2008: Recent techniques for acquiring and processing ultra-high-resolution images of the sea floor and shallow sub-bottom in deep water. Proceedings of IEEE/OES Chile-US Workshop on Ocean Observing Systems, Valparaiso, Chile, 3-6 November.

Radich, J., R. Rogers, W. French, and G. Zhang, 2008, Microbial and sediment effects on kinetics of gas hydrate formation," Philadelphia, PA, American Chemical Society National Meeting & Exposition, August.

Rawn, Claudia J., Roger Sassen, Shannon M. Ulrich, Tommy J. Phelps, Bryan C. Chakoumakos, E. Andrew Payzant, 2008, *Low temperature x-ray diffraction studies of natural gas hydrate samples from the Gulf of Mexico*, Proceedings of the 6th International Conference on Gas Hydrates (ICGH 2008), Vancouver, British Columbia, CANADA, July 6-10.

Rogers, R., G. Zhang, J. Dearman, and W. Wilson, 2008, Laboratory Tests of Hydrate Formation in Porous Media Influenced by Bioproducts, Orlando, FL, Annual Ocean Sciences Meeting, March 30-April 3.

Rogers, R.E., J. L. Dearman, G. Zhang, W.W. Wilson, C.B. Lutken, 2008, Gulf of Mexico Sediment Evaluations for Microbial-Mineral-Hydrate Associations, AAPG Annual Meeting San Antonio, April 20-24.

Rogers, R., G. Zhang, J. Radich, and S. Xiong, 2008, Role of microbe-mineral interactions in seafloor gas hydrate accumulations, Oxford, MS, 38th Annual Underwater Mining Institute, November.

Rogers, R., G. Zhang, J. Dearman, and W. Wilson, Laboratory tests of hydrate formation in porous media influenced by bioproducts, 2008, Orlando, FL, Ocean Sciences Annual Meeting, March.

Teske, A, 2008, Deep subsurface archaea – Diversity and Detection. Institute for the Chemistry and Biology of the Oceans, Oldenburg University, Germany. March 5.

*Traer, James, Peter Gerstoft, Peter D Bromirski, WS Hodgkiss, and Laura A Brooks (2008), Shallow-water seismo-acoustic noise generation by Tropical Storms Ernesto and Florence, J Acoust. Soc. Am EL, 124, EL170-EL176, DOI:10.1121/1.2968296 (PDF).

Zhang, G., R. Rogers, and T. French, 2008, Laboratory Tests to Determine Role of Bioproducts in Seafloor Gas Hydrate Accumulations, San Antonio, TX, AAPG Annual Convention and Exhibition, April 20- 23.

2009

*Addison, A. D., B. M. Battista, and C. C. Knapp, 2009, Improved Hydrogeophysical Parameter Estimation from Empirical Mode Decomposition Processed Ground Penetrating Radar Data, *Journal of Environmental and Engineering Geophysics* vol. 14, no. 4, pp. 171-178.

*Battista, B. M., A. D. Addison, and C. C. Knapp, 2009, Empirical Mode Decomposition Operator for Dewowing GPR Data, *Journal of Environmental and Engineering Geophysics*, vol. 14, no. 4, pp.163-169.

Bell, R. J., S. K. Toler, R. T. Short, R. H. Byrne, In Situ Mass Spectrometry for Chemical Measurements in the Water Column and on the Sea Floor (poster), OceanObs '09 meeting in Venice, Italy (2009).

Biddle, J.F., S.M. Huse, M.L. Sogin, K.G. Lloyd, A. Ramette, A. Boetius, and A. Teske, 2009, Microbial Census of Marine Microbes at Methane Seeps: Initial results. Marine Biological Laboratory, Woods Hole, MA, ICOMM User workshop, April 6-9.

Bowles, M.W., and S.B. Joye (2009) A geochemical and microbiological analysis of nitrate reduction at a hydrothermal vent and a cold seep. 19th Annual V. M. Goldschmidt Conference, Davos, Switzerland, June.

*Brooks, Laura A, Peter Gerstoft (2009), Green's function approximation from cross-correlations of 20–100 Hz noise during a tropical storm, *Journal of Acoust. Soc. Am* 125, 723-734 (PDF).

* Brooks, Laura A, Peter Gerstoft (2009), Green's function approximation from cross-correlation of active sources in the ocean, *J Acoust. Soc. Am.*, 126, 46-55.(PDF)

*Brooks, Laura A, Peter Gerstoft (2009), Green's function approximation from cross-correlations of 20–100 Hz noise during a tropical storm, *J Acoust. Soc. Am* 125, 723-734.

Camilli, R., L. Macelloni, V. Asper, M. Woolsey, J. Williams, A. Diercks, C.B. Lutken, K. Sleeper, 2009, Discovery and characterization of cold seeps using a mass spectrometer operating aboard an autonomous underwater vehicle, AGU fall meeting, San Francisco, CA, December, 17, 2009.

*Geresi, Erika, Ross Chapman, Tom McGee and Bob Woolsey, in press: Monitoring seafloor instability caused by the presence of gas hydrate using ocean acoustical and geophysical techniques in the northern Gulf of Mexico. in Collett, T., A. Johnson, C. Knapp and R. Boswell, eds., *Natural Gas Hydrates: Energy Resource and Associated Geologic Hazards*, The American Association of Petroleum Geologists Hedberg Special Publication.

*Hardage, B., H. Roberts, P. Murray, R. Remington, D. Sava, W. Shedd, J. Hunt Jr.: Multicomponent seismic technology assessment of fluid-gas expulsion geology and gas hydrate systems: Gulf of Mexico. in Collett, T., A. Johnson, C. Knapp and R. Boswell, eds., *Natural Gas Hydrates: Energy Resource and Associated Geologic Hazards*, The American Association of Petroleum Geologists Hedberg Special Publication.

Lapham, L.L., C.S. Martens, and J.P. Chanton. Controls on gas hydrate stability in methane-depleted sediments: Laboratory and field measurements, American Geophysical Union (AGU) fall meeting, San Francisco, CA, December, 17, 2009.

Lloyd, K.G., 2009, Microbially driven methane and sulfur cycling in a Gulf of Mexico methane seep and the White Oak River estuary, Ph.D. thesis, University of North Carolina.

Lloyd, K.G., 2009, Spatial structure and activity of shallow microbial communities in a Gulf of Mexico methane seep. Goldschmidt Conference, Davos, Switzerland, June 21-26.

McGee, T. 2009, Geologic structures associated with the carbonate/hydrate mound in Mississippi Canyon Block 118, Gulf of Mexico, AGU fall meeting, San Francisco, CA, December, 17, 2009.

*McGee, Thomas, Carol Lutken, Rudy Rogers, Charlotte Brunner, Jennifer Dearman, F. Leo Lynch and J. Robert Woolsey, in press: Can fractures in soft sediments host significant quantities of gas hydrates? in Collett, T., A. Johnson, C. Knapp and R. Boswell, eds., *Natural Gas Hydrates: Energy Resource and Associated Geologic Hazards*, The American Association of Petroleum Geologists Hedberg Special Publication.

McGee, T.; J. R. Woolsey, L. Lapham, R. Kleinberg, L. Macelloni, B. L Battista, C. Knapp, S. Caruso, V. Goebel, R. Chapman, P. Gerstoft, 2009, A Multidisciplinary Sea-Floor Observatory in the Northern Gulf of Mexico. *Proceedings of the Virtual Institute of Scientific Users of Deep-Sea Observatories*, Tromsø, Norway, June 11-12

McGee, T.,¹ C. Lutken¹, L. Macelloni¹, J. R. Woolsey¹, L. Lapham², R. Kleinberg³, B. Battista⁴, C. Knapp⁴, S. Caruso⁵, V. Goebel⁶, R. Chapman⁷, P. Gerstoft⁸, 2009, A multidisciplinary sea-floor observatory in the northern Gulf of Mexico, *Oceans 2009 in Biloxi*, MS.

Radich, J.G., 2009, Laboratory and theoretical investigations of direct and indirect microbial influences on seafloor gas hydrates. M.S. Thesis, Mississippi State University.

*Radich, J., R.E. Rogers, W.T. French, and G. Zhang, 2009, Biochemical reaction and diffusion in seafloor gas hydrate capillaries: Implications for gas hydrate stability, *Chemical Engineering Science* 64, p4278-4285.

*Sassen, R., H. Roberts, W. Jung, B. Phaneuf, A. Milkov, C. Lutken, D. DeFreitas, S. Sweet, and N. Guinasso, in press: Geologic and geochemical setting of the Mississippi Canyon 118 gas hydrate site, Gulf of Mexico: significance to hydrate volume. in Collett, T., A. Johnson, C. Knapp and R. Boswell, eds., *Natural Gas Hydrates:*

Energy Resource and Associated Geologic Hazards, The American Association of Petroleum Geologists Hedberg Special Publication.

Short, R. T., R. J. Bell, A. Chaudhary, S. K. Toler, F. H.; W. van Amerom, In Situ Mass Spectrometry for Marine Applications: Present and Future (oral), 57th American Society of Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, in Philadelphia, PA (2009).

Toler, S. K., R. J. Bell, R. T. Short, Underwater Mass Spectrometry: Developments and Deployments (poster), 7th Harsh-Environment Mass Spectrometry Workshop, in Santa Barbara, CA (2009).

*Teske, A. 2009, Sulfate-reducing and methanogenic hydrocarbon-oxidizing microbial communities in the marine environment. Chapter 104. In K. Timmis (ed.), Handbook of Hydrocarbon Microbiology, Springer.

Xiong, Shangmin, 2009, Microbially induced and disrupted memory phenomena during gas-hydrate occurrences in seafloor sediments, M.S. Thesis, Mississippi State University.

2010:

Bell, R. J., S. K. Toler, R. T. Short, In Situ Chemical Analyses by Underwater Mass Spectrometry (oral), Goldschmidt Conference on Earth, Energy and the Environment in Knoxville, TN (2010).

*Camilli, R.; Bowen, A.; Farr, N., 2010, "Bright Blue: Advanced Technologies for Marine Environmental Monitoring and Offshore Energy" accepted to IEEE Oceans 2010. pp 1-7.

Knapp, James H., Camelia C. Knapp, Leonardo Macelloni, Antonello Simonetti, Carol Lutken, 2010, *Subsurface Structure and Stratigraphy of a Transient, Fault-Controlled Thermogenic Hydrate System at MC-118, Gulf of Mexico* AAPG 2010 Annual Convention Oral Presentation, Abstracts Volume, p.134.

Knapp, Camelia C., James H., Knapp, Adrian Addison, Leonardo Macelloni, Michael Waddell, 2010, *Geophysical Baseline Characterization of Subsurface Gas Hydrates at MC-118, Gulf of Mexico*, AAPG 2010 Annual Convention Poster Presentation, Abstracts Volume, p.134.

Lloyd, K. G., D. Albert, J. F. Biddle, J. Chanton, O. Pizarro, and A. Teske. 2010. Spatial structure and activity of sedimentary microbial communities underlying a *Beggiatoa* spp. mat in a Gulf of Mexico hydrocarbon seep. *PLoS One*, 5(1): e8738.

Lloyd, K. G., B. J. MacGregor, and A. Teske. 2010. Quantitative PCR methods for RNA and DNA in marine sediments: Maximizing yield while overcoming inhibition. *FEMS Microbiology Ecology*. 72: 143-151.

Lutken, Carol B., Leonardo Macelloni, Laura Lapham, Simona Caruso, Mariangela Lodi, Richard Camilli, Vernon Asper, Arne Diercks, Camelia Knapp, Jim Knapp, 2010, *Monitoring Seafloor Morpho-Geological Evolution of the MC118 Hydrate/Carbonate Mound via Multiple AUV Missions*, AAPG 2010 Annual Convention Poster Presentation, Abstracts Volume, p.155.

Short R. T., R. J. Bell, S. K. Toler, F. H. W. van Amerom, Recent Developments and In Situ Measurements of Underwater Mass Spectrometers (poster), 58th ASMS Conference on Mass Spectrometry and Allied Topics in Salt Lake City, UT (2010).

Short, R. T., R. J. Bell, A. M. Cardenas, A. Chaudhary, S. K. Toler, F. H. W. van Amerom, Miniature Ion Trap Mass Spectrometers and Applications for In Situ Analysis of Seawater (invited oral), Annual meeting of the Center for Analytical Instrumentation Development at Purdue University in West Lafayette, (2010).

In Press:

Battista, B. M., L. Macelloni, Camelia C. Knapp, and T. McGee, A Band-Modulated Empirical Mode Decomposition Operator for use with High-Resolution Seismic Reflection Data, *IEEE Transactions on Geoscience and Remote Sensing* (in review).

*Dearman, J., W. Wilson, R. Rogers, and G. Zhang, 2009, Gas hydrate promotion by smectite-bioproduct interactions, *Marine Chemistry*, accepted for publication and in press.

Jian Zhang, Peter Gerstoft, and Peter D. Bromirski (2010), Pelagic and coastal sources of P-wave microseisms: Generation under tropical cyclones, *Geophys. Res. Lett.*, doi:10.1029/2010GL044288.

Lapham, L. L., Chanton, J. P., Chapman, R. and Martens, C. S., (2010). Methane under-saturated fluids in deep-sea sediments: Implications for gas hydrate stability and rates of dissolution. *Earth and Planetary Science Letters* in press.

In Review:

Bowles, M.W., Samarkin, V.A., and S.B. Joye. Geochemistry, microbial activity, and microbial community composition in gas and oil-rich sediments from the Northern Gulf of Mexico. *Geochimica et Cosmochimica Acta* (in review)

Camilli, R., O. Pizarro, J. Whelan "An in-situ chemical observatory characterizing a naturally occurring gas hydrate formation" for submission to *Deep Sea Research* New paper just accepted by IEEE OCEANS

*Ingram, W.C, Meyers, S.M., Brunner, C., and Martens, C.S. Late Pleistocene-Holocene sedimentation surrounding an active seafloor gas hydrate and cold seep field on the Northern Gulf of Mexico Slope. (Submitted to *Marine Geology*)

Joye, S.B., V.A. Samarkin and M.W. Bowles (2009) Microbial activity and abundance in "in tact" structure II gas hydrate incubated at in situ temperature and pressure. *Geobiology* (submission planned in July 2009).

Lapham, L.L., J.P. Chanton, R. Chapman, and C.S. Martens (submitted to *Earth and Planetary Science Letters* June 2009). Methane under-saturated fluids in deep-sea sediments: Implications for gas hydrate stability.

Leifer, I., and D. Culling (2009), Formation of seep bubble plumes in the Coal Oil Point seep field, *Geo-Marine Letters*, submitted.

Leifer, I., et al. (2009), Geologic control of natural marine seep hydrocarbon emissions, Coal Oil Point seep field, California, *Geo-Marine Letters*, submitted.

Leifer, I., et al. (2009 (in prep)), Spatial and temporal variations in marine seep field emissions on diurnal to decadal time scales and decameter to kilometer length scales, *Geochemistry, Geophysics, Geosystems*.