

**PETER B. FLEMINGS**

University of Texas at Austin  
1 University Station C1100  
Austin, TX 78712-0254

pflerings@jsg.utexas.edu  
Office: (512) 750-8411

**Education**

Ph.D. 1990 Geology, Cornell University: minors in structural mechanics and geodynamics  
M.S. 1987 Geology, Cornell University  
B.A. 1984 Geology, Dartmouth College

**Professional Experience**

2009-present Graduate Adviser, Department of Geological Sciences, The University of Texas at Austin  
2007-present Professor, Department of Geological Sciences, The University of Texas at Austin  
2007-present Jackson Chair of GeoSystems, The University of Texas at Austin  
2007-present Research Professor, Texas Institute of Geophysics and Bureau of Economic Geology, The University of Texas at Austin  
2003-2007 Professor of Geosciences, The Pennsylvania State University  
2002-2003 Visiting Scientist, Massachusetts Institute of Technology, Department of Civil and Environmental Engineering  
1998-2007 Co-Director of the Petroleum GeoSystems Initiative, The Pennsylvania State University  
1997-2003 Associate Professor of Geosciences, The Pennsylvania State University  
1993-1997 Assistant Professor of Geosciences, The Pennsylvania State University  
1992-1993 Research Scientist and Crosby Lecturer, Massachusetts Institute of Technology  
1991-1992 Associate Research Scientist, Lamont-Doherty Geological Observatory  
1991 Visiting Scientist, Exxon Production Research Company  
1990-1991 Post-Doc. Associate, Lamont-Doherty Geological Observatory  
1983 Geologist, Comp. Minera Autlan, Otongo Hgo., Mexico  
1982-1983 Geologist, Refinadora Costarricense De Petroleo, San Juan, Costa Rica

**Honors**

2010 Informal Advisor to Energy Secretary S. Chu's Science Team on the B.P. well  
2010 Vice Chair: 1<sup>st</sup> Gordon Research Conference on Hydrates  
2008 Keynote Speaker/ Co-Convener, 'Subsurface sediment mobilization and fluid flow', Geological Society, London.  
2007-2008 JOI-USSAC Distinguished Lecturer  
2006 Kavli Fellow and Speaker, Humboldt Foundation Frontiers of Science Symposium  
2006 AAPG Distinguished Lecturer  
2005 Co-Chief Scientist, IODP Expedition 308 – Gulf of Mexico, Hydrogeology  
2003 Penn State EMS College Mitchell Award for Innovation in Teaching  
2001 Best Paper Award, Cookman and Flemings, *STORMSED. Computers and Geosciences* 27 (6): 647-674.  
1997-present Geological Society of America Fellow  
1996 Penn State EMS College Wilson Teaching Award  
1995 Best Paper, J.C. Cam Sproule Memorial Award, Alexander and Flemings, 1995, Geologic Evolution of a Plio-Pleistocene Salt Withdrawal Mini-basin: Block 330, Eugene Island, South Addition, offshore Louisiana, *AAPG Bulletin* 79 (12): 1737-1756.  
1992 Crosby Distinguished Lecturer at M.I.T.  
1991 Best Paper Award, Mountain Geologist--Flemings, P. B., Nelson, S. N., 1991, Paleogeography of the Paleocene Wind River Basin

1994-1997 Shell Faculty Fellow  
1986 John McMullen Graduate Fellowship for academic record  
1983-1984 Member Casque and Gauntlet Honor Society, Dartmouth College

## PUBLICATIONS

### Papers in Refereed Journals

1. LONG, H., FLEMINGS, P.B., GERMAINE, J.T. & SAFFER, D.M. (in review) Consolidation and Pore Fluid Pressure of Ursa Sediments, Deepwater Gulf of Mexico *Earth and Planetary Science Letters*.
2. Moore, J.C., Urgeles, R., Conin, M., **Flemings, P.B.**, and Iturrino, G., J., in review, Threshold of breakout formation: Stress orientations and the mechanics borehole failure, Mississippi Fan, Gulf of Mexico, *Geosphere* (submitted 5/13/2010).
3. HUUSE, M., JACKSON, C.A.L., VAN RENSBERGEN, P., DAVIES, R.J., FLEMINGS, P.B. & DIXON, R.J. Subsurface Sediment Remobilization and Fluid Flow in Sedimentary Basins: An Overview. *Basin Research*, **22**, 342-360.
4. HUUSE, M., VAN RENSBERGEN, P., JACKSON, C.A.L., FLEMINGS, P.B., DAVIES, R.J. & DIXON, R.J. Subsurface Sediment Remobilization and Fluid Flow in Sedimentary Basins: Preface. *Basin Research*, **22**, 341-341.
5. Reilly, M., **Flemings, P.B.**, 2010, Deep pore pressures and seafloor venting in the Auger Basin, Gulf of Mexico, *Basin Research*, **22**, 380-397.
6. Lin, W., et al. (2010), Present-day principal horizontal stress orientations in the Kumano forearc basin of the southwest Japan subduction zone determined from IODP NanTroSEIZE drilling Site C0009, *Geophys. Res. Lett.*, **37**, L13303, doi:10.1029/2010GL043158.
7. Bohn, C.W., **Flemings, P.B.**, and Slingerland, R.L., in press, Accommodation change during bypass across a late stage fan in the shallow Auger basin, in Prather, B.E., Deptuck, M.E., Mohrig, D.C., van Hoorn, B., and Wynn, R.B., eds., Application of Seismic Geomorphology Principles to Continental Slope and Base-of-slope Systems: Case Studies from Seafloor and Near-Seafloor Analogues: SEPM Special Publication: Tulsa, Society of Sedimentary Geology.
8. Urgeles, R., Locat, J., Sawyer, D.E., **Flemings, P.B.**, Dugan, B., Binh, N.T.T. (2009): History of Pore Pressure Build Up and Slope Instability in Mud-Dominated Sediments of Ursa Basin, Gulf of Mexico Continental Slope. In Mosher, D.C., Moscardelli, L., Shipp, R.C., Chaytor, J.D., Baxter, C.D.P., Lee, H.J., Urgeles, R. (Eds.) Submarine Mass Movements and Their Consequences, Advances in Natural and Technological Hazards Research, **28**, Springer, Dordrecht (The Netherlands), pp. 179-190. [http://dx.doi.org/10.1007/978-90-481-3071-9\\_15](http://dx.doi.org/10.1007/978-90-481-3071-9_15)
9. Sawyer, D. E., **P. B. Flemings**, B. Dugan, and J. T. Germaine (2009), Retrogressive failures recorded in mass transport deposits in the Ursa Basin, Northern Gulf of Mexico, *J. Geophys. Res.*, **114**, B10102, doi:10.1029/2008JB006159.
10. Liu X., **Flemings, P.B.**, 2009, Dynamic response of oceanic hydrates to sea level drop, *Geophys. Res. Lett.*, **36**, L17308, doi:10.1029/2009GL039821.
11. Moore, J.C., Iturrino, G.J., **Flemings, P.B.**, and Sawyer, D.E., 2009. Data report: stress orientations from borehole breakouts, IODP Expedition 308, Ursa area, Mississippi Fan, Gulf of Mexico. In **Flemings, P.B.**, Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, *Proc. IODP*, **308**: College Station, TX (Integrated Ocean Drilling Program Management International, Inc.).doi:10.2204/iodp.proc.308.212.2009
12. **Flemings, P.B.**, Long, H., Dugan, B., Germaine, J., John, C., Behrmann, J.H., Sawyer, D., and Expedition 308 Scientists, 2008, Erratum to "Pore pressure penetrometers document high overpressure near the seafloor where multiple submarine landslides have occurred on the continental slope, offshore Louisiana, Gulf of Mexico" [*Earth and Planetary Science Letters* **269**/3-4 (2008) 309-32, *Earth and Planetary Science Letters*, doi: 10.1016/j.epsl.2008.06.027.
13. Schneider J., **P. B. Flemings**, B. Dugan, H. Long, J. T. Germaine (2009), Overpressure and consolidation near the seafloor of Brazos-Trinity Basin IV, northwest deepwater Gulf of Mexico, *J. Geophys. Res.*, **114**, B05102, doi:10.1029/2008JB005922.

14. Nelson, H.M., **Flemings, P.B.**, Germaine, J.T., Dugan, B.E., 2009, Data Report: Radiography and X-ray CT Imaging of Whole Core from IODP Expedition 308, Gulf of Mexico, In Flemings, P.B., John, C. (Eds.), *Proc. ODP, Sci. Results*, 308, doi:10.2204/iodp.proc.308.213.2009.
15. Gilhooly, W.P., III, Macko, S.A., and **Flemings, P.B.**, 2008. Data report: isotope compositions of sedimentary organic carbon and total nitrogen from Brazos-Trinity Basin IV (Sites U1319 and U1320) and Ursa Basin (Sites U1322 and U1324), deepwater Gulf of Mexico. In Flemings, P.B., Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, *Proc. IODP*, 308: College Station, TX (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.308.208.2008
16. Long, H., **Flemings, P.B.**, Dugan, B., Germaine, J.T., and Ferrell, D., 2008. Data report: penetrometer measurements of in situ temperature and pressure, IODP Expedition 308. In Flemings, P.B., Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, *Proc. IODP*, 308: College Station, TX (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.308.203.2008
17. Sawyer, D.E., Jacoby, R., **Flemings, P.**, and Germaine, J.T., 2008. Data report: particle size analysis of sediments in the Ursa Basin, IODP Expedition 308 Sites U1324 and U1322, northern Gulf of Mexico. In Flemings, P.B., Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, *Proc. IODP*, 308: College Station, TX (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.308.205.2008
18. Long, H., Flemings, P.B., Germaine, J.T., Saffer, D.M., and Dugan, B., 2008. Data report: consolidation characteristics of sediments from IODP Expedition 308, Ursa Basin, Gulf of Mexico. In Flemings, P.B., Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, *Proc. IODP*, 308: College Station, TX (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.308.204.2008
19. Sawyer, A.H., **Flemings, P.B.**, Elsworth, D., Kinoshita, M., 2008, Response of Submarine Hydrologic Monitoring Instruments to Formation Pressure Changes: Theory and Application to Nankai Advanced CORs, *Journal of Geophysical Research*, V.113, B01102, doi:10.1029/2007JB005132.
20. Liu, X., **Flemings, P.B.**, 2007, Dynamic multiphase flow model of hydrate formation in marine sediments, *J. Geophys Res.*, 112, B03101, doi:10.1029/2005JB004227.
21. Long, H., **Flemings, P.B.**, Germaine, J.T., 2007, Analysis and Interpretation for DVTP-P and Piezoprobe Deployments at Hydrate Ridge, *Journal of Geophysical Research*, 112, B04101, doi:10.1029/2005JB004165.
22. Ramgulam, A., Ertekin, T., **Flemings, P.B.**, 2007, Utilization of Artificial Neural Networks in the Optimization of History Matching, Prepared for presentation at the 2007 SPE Latin American and Caribbean Petroleum Engineering Conference held in Buenos Aires, Argentina, 15-18 April 2007, SPE Paper 107468-PP.
23. Sawyer, D.E., **Flemings, P.B.**, Shipp, C., Winker, C., 2007, Seismic Geomorphology, Lithology, and Evolution of the Late Pleistocene Mars-Ursa Turbidite Mini-Basin, Northern Gulf of Mexico, *AAPG Bulletin*, V.91, no. 2, pp. 215-234.
24. Behrmann, J.H., **Flemings, P.B.**, John, C.M., and the Expedition 308 Scientists, 2006, Rapid Sedimentation, Overpressure and Focused Fluid Flow, Gulf of Mexico continental margin, *Scientific Drilling*, Vol. 3, pp. 12-17. doi:10.2204/iodp.sd.3.03.2006.
25. Tan, B., Germaine, J.T., **Flemings, P.B.**, 2006, Consolidation and Strength Characteristics of Sediments from ODP Site 1244, Hydrate Ridge, Cascadia Continental Margin, *Proceedings ODP, Sci. Results*, Leg 204, April 27, 2006, [http://www-odp.tamu.edu/publications/204\\_SR/102/102\\_.htm](http://www-odp.tamu.edu/publications/204_SR/102/102_.htm).
26. **Flemings, P.B.**, Behrmann, J., John, C. and Expedition 308 Scientists, 2005. Overpressure and Fluid Flow Processes in the Deepwater Gulf of Mexico: Slope Stability, Seeps and Shallow-Water Flow. *IODP Prel. Rept.*, 308. doi:10.2204/iodp.pr.308.2005.
27. Liu, X., **Flemings, P.B.**, 2005, Passing gas through the hydrate stability zone of southern Hydrate Ridge, offshore Oregon, *Earth and Planetary Science Letters*, v. 241, p. 211-226.

28. Seldon, B., **Flemings, P.B.**, 2005, Reservoir Pressure and Sea Floor Venting: Predicting Trap Integrity in a Gulf of Mexico Deepwater Turbidite Minibasin, *American Association of Petroleum Geologists Bulletin*, v. 89, no. 2, p. 193-209.
29. **Flemings, P.B.**, Lupa, J.A., 2004, Pressure prediction in the Bullwinkle Basin through petrophysics and flow modeling (Green Canyon 65, Gulf of Mexico), *Journal of Marine and Petroleum Geology*, v. 21, p. 1311-1322.
30. Trehu, A., **Flemings, P.B.**, Bangs, N. L., Chevallier, J., Gracia, E., Johnson, J. E., Liu, C.-S., Liu, Xiaoli, Riedel, M., Torres, M.E., 2004, Feeding methane vents and gas hydrate deposits at south Hydrate Ridge, *Geophysical Research Letters*, v. 31, L23310, 4 pgs.
31. Dugan, B., et al., 2003, Measuring Pore Pressure in Marine Sediments with Penetrometers: Comparison of the Piezoprobe and DVTP-P Tools in ODP Leg 204, Research Papers of the Link Foundation Fellows, v. 3, p. 179-199.
32. Dugan, B.E., **Flemings, P.B.**, Olgaard, D.L., Gooch, M.J., 2003, Consolidation Behavior, Stress, and Pressure of Sediments from ODP Site 1073, US Mid-Atlantic Continental Slope, *Earth and Planetary Science Letters*, v. 215, p. 13-26.
33. Elsworth, D., Lee, D.S., Long, H., **Flemings, P.B.**, 2003, Penetration-Induced Pore Pressure Magnitudes – Methods to Determine Transport Parameters from Terrestrial and Marine Penetrometer Testing, *Proceedings of the International Conference on T-H-M-C Processes in Geosystems: Fundamentals, Modeling, Experiments and Applications*, Stockholm, Sweden, October 13-15, 2003.
34. **Flemings, P.B.**, Liu, X., Winters, W., 2003, Critical Pressure and Multiphase Flow in Blake Ridge Hydrates, *Geology*, v. 31, no. 12, p. 1057-1060.
35. Mikada, H., Kinoshita, M., Becker, K., Davis, E.E., Meldrum, R.D., **Flemings, P.B.**, Gulick, S.P.S., Matsubayashi, O., Morita, S., Goto, S., Misawa, N., Fugino, K., and Toizumi, M., 2003, Hydrogeological and geothermal studies around Nankai trough (KR02-10 Nankai trough cruise report), *JAMSTEC J. Deep Sea Res.*, V. 22, p. 125-171.
36. Swanston, A.M., **Flemings, P.B.**, Comisky, J.T., Best, K.D., 2003, Time-lapse imaging at Bullwinkle, GC 65, offshore Gulf of Mexico, *Geophysics*, v. 68, no. 5, p. 1470-1484.
37. Yuvancic-Strickland B., Kuhl, E.J., Lee, T.W., Seldon, B.J., **Flemings, P.B.**, Ertekin, T., 2003, Integration Of Geologic Model And Reservoir Simulation, Popeye Field, Green Canyon 116, *Transactions of the Gulf Coast Association of Geological Societies (GCAGS)*, v. 53, p. 918-932.
38. Dugan, B. and **Flemings, P.B.**, 2002, Fluid flow and stability of the US continental slope offshore New Jersey from the Pleistocene to the present, *Geofluids*, 2(2), p. 137-146.
39. Dugan, B., Olgaard, D.L., **Flemings, P.B.**, and Gooch, M.J., 2002. Data report: Bulk physical properties of sediments from ODP Site 1073. In Christie-Blick, N., Austin, J.A., Jr., and Malone, M.J. (Eds.), Proc. ODP, Sci. Results, 174A [Online]. Available from World Wide Web: <[http://www-odp.tamu.edu/publications/174A\\_SR/chap\\_07/chap\\_07.htm](http://www-odp.tamu.edu/publications/174A_SR/chap_07/chap_07.htm)>. [Cited 2003-02-08]
40. **Flemings P.B.**, Stump, B.B., Finkbeiner, T., Zoback, M., 2002, Overpressure and Flow-Focusing in the Eugene Island 330 Field (Offshore Louisiana, U.S.A.): Theory, Examples, and Implications, *American Journal of Science*, v. 302, p. 827-855.
41. Liu, X., **Flemings, P.B.**, 2002, Stress-limited Gas Column Height in the Gas Hydrate System of Blake Ridge, *Proceedings of the Fourth International Conference on Gas Hydrates*, Yokohama, Japan, May 19-23, v. 2, p. 807-812.
42. Lupa, J., **Flemings, P.B.**, Tennant, S., 2002, Pressure and trap integrity in the deepwater Gulf of Mexico, *The Leading Edge*, v. 21, no. 2, p. 184-187.
43. Stump, B, **Flemings, P.B.**, 2002, Consolidation State, Permeability, and Stress Ratio as Determined from Uniaxial Strain Experiments on Mud Samples from the Eugene Island 330 Area, Offshore Louisiana, in: A.R. Huffman and G.L. Bowers, eds., Pressure regimes in sedimentary basins and their prediction: *AAPG Memoir 76*, p. 131-144.

44. Finkbeiner, T., Zoback, M., Stump B.B., **Flemings, P.B.**, 2001, Stress, Pore Pressure, and Dynamically Constrained Hydrocarbon Columns in the South Eugene Island 330 Field, Gulf of Mexico, *American Association of Petroleum Geologists Bulletin*, v. 85, no. 6, p. 1007-1031.
45. Cookman, J., **Flemings, P.B.**, 2001, STORMSED1.0: Hydrodynamics and Sediment Transport in a 2-D Steady-State, Wind- and Wave-Driven, Coastal Circulation Model, *Computers and Geosciences*, v. 27, p. 647-674.
46. Dugan, B., **Flemings, P.B.**, 2000, Overpressure and Fluid Flow in the New Jersey Continental Slope: Implications for Slope Failure and Cold Seeps, *Science*, v. 289, p. 288-291.
47. Dugan, B., **Flemings, P.B.**, 2000, The New Jersey margin: compaction and fluid flow, *Journal of Geochemical Exploration*, v. 69-70, p. 477-481.
48. Stump, B., **Flemings, P.B.**, 2000, Overpressure and fluid flow in dipping structures of the offshore Gulf of Mexico (E.I. 330 field), *Journal of Geochemical Exploration*, v. 69-70, p. 23-28.
49. Metzger, J.M., **Flemings, P.B.**, Christie-Blick, N., Mountain, G. S., Austin Jr., J., Hesselbo, S., 2000, Late Miocene to Pleistocene sequences at the New Jersey outer continental shelf (ODP Leg 174A, Sites 1071 and 1072), *Sedimentary Geology*, v. 134, no. 1-2, p. 149-180.
50. Burkhart, T.D., Hoover, A.R., **Flemings, P.B.**, 2000, Time-lapse seismic monitoring of the K8 and K40 reservoirs, South Timbalier block 295, offshore Louisiana, *Geophysics*, v. 65, no. 2, p. 351-367.
51. Gordon, D.S., **Flemings, P.B.**, 1999, Two-dimensional Modeling of Groundwater Flow in an Evolving Deltaic Environment. *NES/SEPM Special Publication*, no. 62, p. 301-312.
52. Hoover, A.R., Burkhart, T.D., **Flemings, P.B.**, 1999, Reservoir and Production Analysis of the K40 Sand, South Timbalier 295, Offshore Louisiana, with Comparison to Time-Lapse (4-D) Seismic Results, *AAPG Bulletin*, v. 83, no. 10, p. 1624-1641.
53. Gordon, D., and **Flemings, P.B.**, 1998, Generation of overpressure and compaction-driven fluid flow in a Plio-Pleistocene growth-faulted basin, Offshore Louisiana. *Basin Research*, v. 10, no. 2, p. 177-196.
54. Poulsen, C.P., **Flemings, P.B.**, Robinson, R.A. J., Metzger, J.M., 1998, Three-Dimensional stratigraphic evolution of the Miocene Baltimore Canyon region: Implications for eustatic interpretations and the systems tract model. *GSA Bulletin*, v. 110, no. 9; p. 1105-1122.
55. Rowan, M.G., Hart, B.S., Nelson, S., **Flemings, P.B.**, Trudgill, B.D, 1998, Three-dimensional geometry and evolution of a salt-related growth-fault array: Eugene Island 330 field, offshore Louisiana, Gulf of Mexico, *Marine & Petroleum Geology*, v. 15, p. 309-328.
56. Stump, B.B., **Flemings, P.B.**, Feinbeiner, T., and M. D. Zoback, 1998, Pressure differences between overpressured sands and bounding shales of the Eugene Island 330 Field (Offshore Louisiana, USA) with implications for fluid flow induced by sediment loading, in Mitchell, A. and Grauls, D., editors, *Overpressures in Petroleum Exploration*, Memoire 22, Elf EP Editions, p. 83-92.
57. Deshpande, A., **Flemings, P.B.**, and Huang, J., 1997, Quantifying lateral heterogeneities in fluvio-deltaic sediments using 3-D reflection seismic data: offshore Gulf of Mexico. *Journal of Geophysical Research*, v. 102, no. B7, p.15,385 - 15,401.
58. Hart, B.S., Sibley, D.M., and **Flemings, P.B.**, 1997, Seismic stratigraphy, facies architecture, and reservoir character of a Pleistocene shelf margin delta complex, Eugene Island Block 330 Field, Louisiana Offshore, *AAPG Bulletin*, v. 81, no. 3, p. 380-397.
59. **Flemings, P.B.**, Hoover, A.R., Burkhart, T., and Nelson, S.E., 1996, A Case Study of Amplitudes in Drained Pay: The EI-330 LF Sand: In Pacht, J.A., Sheriff, R.E., and Perkins, B.F., eds., *Stratigraphic Analysis Utilizing Geophysical, Wireline and Borehole Technology for Petroleum Exploration and Production: Gulf Coast Section Society of Economic Paleontologists and Mineralogists Foundation Seventeenth Annual Research Conference*, p. 99-110.
60. **Flemings, P.B.**, and Grotzinger, J.P., 1996, STRATA: Freeware for Solving Classic Stratigraphic Problems. *GSA Today*, v. 6, no. 12, p. 1-7.
61. Hart, B.S., Sibley, D.M., and **Flemings, P.B.**, 1996, Reservoir compartmentalization by depositional features in a Pleistocene shelf margin (lowstand) delta complex, Eugene Island 330 Field, Louisiana

- Offshore, In Weimer, P. and Davis, T. eds., *AAPG Studies in Geology No. 42 and SEG Geophysical Development Series No. 5*, AAPG/SEG Tulsa, p. 21-26.
62. Jordan, T.E., Tamm, V., Figueroa, G., **Flemings, P.B.**, Richards, D., Tabbutt, K., Cheatham, T., 1996, Development of the Miocene Manantiales foreland basin, Principal Cordillera, San Juan, Argentina. *Revista Geologica de Chile*, v. 23, no. 1, p. 43-79.
  63. Rowan, M.G., Villamil, T., **Flemings, P.B.**, and Weimer, P., 1996, Use of cross-section restoration to determine paleobathymetry and sea-floor topography in the Gulf of Mexico basin, *Geology*, v. 24, no. 4, p. 299-302.
  64. Alexander, L.L., **Flemings, P.B.**, 1995, Geologic Evolution of a Plio-Pleistocene Salt Withdrawal Mini-basin: Block 330, Eugene Island, South Addition, Offshore Louisiana, *AAPG Bulletin*, v. 79, no. 12, p. 1737-1756.
  65. Hart, B.S., **Flemings, P.B.**, Deshpande, A., 1995, Porosity and Pressure: Role of Compaction Disequilibrium in the Development of Geopressures in a Gulf Coast Pleistocene Basin, *Geology*, v. 23, no. 1, p. 45 - 48.
  66. Anderson, R.N., **Flemings, P.B.**, Losh, S., Austin, J., Woodhams, R.L., and Global Basins Research Network Field Demonstration Team, 1994, In Situ Properties of a Major Gulf of Mexico Growth Fault: Implications for Behavior as a Hydrocarbon Migration Pathway, *Oil & Gas Journal*, v. 92, no. 23, p. 97-104.
  67. Rothman, D.H., Grotzinger, J., **Flemings, P.B.**, 1994, Scaling in Turbidite Deposition, *Journal of Sedimentary Research*, v. A64, no. 1, p. 59-67.
  68. Rowan, M.G., Weimer, P. and **Flemings, P.B.**, 1994, Three-dimensional geometry and evolution of a composite, multi-level salt system, western Eugene Island, offshore Louisiana, *Transactions of the Gulf Coast Associations of Geological Societies*, v. 44, p. 641-648.
  69. Greenlee, S., Devlin, W., Miller, K., Mountain, G., **Flemings, P.B.**, 1992, Litho- and Biostratigraphy of Neogene Depositional Sequences from the Baltimore Canyon Trough, Offshore New Jersey, *GSA Bulletin*, v. 104, p. 1403-1411.
  70. **Flemings, P.B.**, and Nelson, S.N. 1991, Paleogeography of the Paleocene Wind River Basin, *The Mountain Geologist*, v. 28, no. 2, p. 37-52.
  71. Jordan, T.E., and **Flemings, P.B.**, 1991, Large-Scale Stratigraphic Architecture, Eustatic Variation, and Unsteady Tectonism: A Theoretical Evaluation, *Journal of Geophysical Research*, v. 96, no. B4, p. 6681-6699.
  72. **Flemings, P.B.**, and Jordan, T.E., 1990, Stratigraphic Modeling of Foreland Basins: Interpreting Thrust Deformation and Lithosphere Rheology, *Geology*, v. 18, p. 430-434.
  73. Jordan, T.E. and **Flemings, P.B.**, 1990, Analisis Teorico de la Estratigrafia de Cuencas de Antepais Durante Deformaciones Episodicas, *Tercera Reunion Argentina de Sedimentologia*, May.
  74. **Flemings, P.B.**, and Jordan, T.E., 1989, A Synthetic Stratigraphic Model of Foreland Basin Development, *Journal of Geophysical Research*, v. 94, p. 3851-3866.

### Book Chapters

1. Jordan, T.E., **Flemings, P.B.**, Beer, J.A., 1988, Dating Thrust Fault Activity by Use of Foreland Basin Strata, In: Kleinspehn, K. and Paola, C. (eds.) *New Perspectives in Basin Analysis*, Springer-Verlag: New York, p. 307-330.
2. Jordan, T.E. and **Flemings, P.B.**, 1990, From Geodynamic Models to Basin Fill -- A Stratigraphic Perspective, In: Cross, T. (ed.) *Quantitative Dynamic Stratigraphy*, Prentice Hall, Inc.: New Jersey, p.149-163.

### Non-refereed Publications

1. Bishop, B., Wolfe, J., **Flemings, P.B.**, 1994, Landmark Workstation on Offshore Rig Guides Drilling Decisions, *UserNet: The Technical Newsletter for Landmark Users*, March/April 1994, p. 1-5.

2. Billeaud, L.B., Anderson, R.N., **Flemings, P.B.**, Austin, J., 1994, Searching for Evidence of Active Gas and Oil Migration within a Growth Fault Zone in the Gulf of Mexico, *Petroleum Engineer International*, December 1994, p. 17-22.
3. Anderson, R.N., Boulanger, A., He, W., Xu, L., **Flemings, P.B.**, Burkhardt, T.D., Hoover, A.R., 1997, 4D time-lapse monitoring in the South Timbalier 295 Field, Gulf of Mexico, *Proceedings of the 29th Annual Offshore Technology Conference*, vol. 1, p. 317-324.
4. **Flemings, P.B.**, Huffman, A.R., Bruce, R., Benoit, J., Mayne, P., 2000, Geofluids of Passive Margins: At the Interface of the Practical and the Fundamental, *JOI/USSAC Newsletter* 13 (2): 10-11.
5. Elsworth, D., Lee, D.S., Long, H., **Flemings, P.B.**, 2003, Penetration-Induced Pore Pressure Magnitudes – Methods to Determine Transport Parameters from Terrestrial and Marine Penetrometer Testing, *Proceedings of the International Conference on T-H-M-C Processes in Geosystems: Fundamentals, Modeling, Experiments and Applications*, Stockholm, Sweden, October 13-15, 2003.
6. **Flemings, P.B.**, IODP Expedition 308 Scientific Party, 2005, Expedition 308 Gulf of Mexico Hydrogeology, *JOI News*, Fall/Winter 2005, p. 8-9.
7. **Flemings, P.B.**, Comisky, J., Liu, X., Lupa, J.A., 2001, Stress-Controlled Porosity in Overpressured Sands at Bullwinkle (GC65), Deepwater Gulf of Mexico, *Proceedings of the Offshore Technology Conference*, OTC Paper #13103.
8. **Flemings, P.B.**, Germaine, J., Long, H., Dugan, B., Sawyer, D., Behrmann, J.H., John, C., Shipboard Scientific Party, IODP Expedition 308, 2006, Measuring Temperature and Pressure with the Temperature Two Pressure (T2P) Probe in the Ursa Basin, Gulf of Mexico: Development of a New Pressure and Temperature Probe for the IODP, *Proceedings of the Offshore Technology Conference*, Houston, Texas, May 1-4, 2006, OTC Paper #17957.
9. Dugan, B., **Flemings, P.B.**, Sawyer, D., Iturrino, G.J., Moore, J.C., Schneider, J., 2007, Physical Properties of Mass Transport Complexes in the Ursa Region, Northern Gulf of Mexico (IODP Expedition 308) Determined from Log, Core, and Seismic Data, *Proceedings of the Offshore Technology Conference*, Houston, Texas, April 30-May 3, 2007, OTC Paper #18704.
10. Iturrino, G.J., Dugan, B.E., Sawyer, D., **Flemings, P.B.**, Moore, J.C., 2007, Interpretation of Downhole Measurements, Deformation Analyses, and Lithologic Characterization in the Ursa Basin, Gulf of Mexico, *Proceedings of the Offshore Technology Conference*, Houston, Texas, April 30-May 3, 2007, OTC Paper #19097.
11. Long, H., **Flemings, P.B.**, Germaine, J., Dugan, B., Sawyer, D., Shipboard Scientific Party, IODP Expedition 308, 2007, In Situ Pore Pressure at IODP Site U1324, Ursa Basin, Gulf of Mexico, *Proceedings of the Offshore Technology Conference*, Houston, Texas, April 30-May 3, 2007, OTC Paper #18772.
12. Moore, J.C., Iturrino, G.J., **Flemings, P.B.**, Hull, I., Gay, A., 2007, Fluid Migration and State of Stress above the Blue Unit, Ursa Basin: Relationship to the Geometry of Injectites, *Proceedings of the Offshore Technology Conference*, Houston, Texas, April 30-May 3, 2007, OTC Paper #18812.
13. Sawyer, D., **Flemings, P.B.**, Dugan, B., Shipboard Scientific Party, IODP Expedition 308, 2007, Lateral Variations in Core, Log, and Seismic Attributes of a Mass Transport Complex in the Ursa Region, IODP Expedition 308, Northern Gulf of Mexico, *Proceedings of the Offshore Technology Conference*, Houston, Texas, April 30-May 3, 2007, OTC Paper #19098.

### **In-House Publications**

1. Anderson, R.N., Cathles, L.M., **Flemings, P.B.**, He, W., Hobart, M., Huang, J., Lytle, W., Manhardt, P., Murphy, B., Nelson, R., Wilkinson, C., Jellinek, R., 1991, Sedimentary Basins as Thermochemical Reactors, *The Lamont-Doherty Geological Observatory 1991 Report*, p. 68-76.
2. Anderson, R.N., **Flemings, P.B.**, Losh, S., Whelan, J., Billeaud, L., Austin, J., Woodhams, R.L., 1995, The Pathfinder Drilling Program into a Major Growth Fault in Eugene Island 330: Implications for Behavior of Hydrocarbon Migration Pathways, *GBRN Data Volume 1994*.
3. **Flemings, P.B.**, Zoback, M., Bishop, B., Anderson, R.N., 1995, State of Stress in the Pathfinder

Well, *GBRN Data Volume 1994*.

4. Hart, B.S., Deshpande, A., **Flemings, P.B.**, 1995, Formation Pressures in the Pathfinder Well, *GBRN Data Volume 1994*.
5. **Flemings, P.B.**, 1995, Elvis Oil Wins Penn State Gulf of Mexico Lease Sale, *EMS Bulletin*.
6. **Flemings, P.B.**, Anandkrishnan, S., 1997, New Geoscience Class Prepares Students for Oil Industry Careers, *Earth & Mineral Sciences Bulletin*.
7. **Flemings, P.B.**, 2000, 1998-2000 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.
8. **Flemings, P.B.**, 2001, 2000-2001 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.
9. **Flemings, P.B.**, 2002, 2001-2002 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.
10. **Flemings, P.B.**, 2003, 2002-2003 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.
11. **Flemings, P.B.**, 2004, 2003-2004 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.
12. **Flemings, P.B.**, 2005, 2004-2005 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.
13. **Flemings, P.B.**, 2006, 2005-2006 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.
14. **Flemings, P.B.**, 2007, 2006-2007 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships.

## Reports

1. Rowan, M.G., Weimer, P., Budhijanto, F., **Flemings, P.B.**, 1994, Integrated Regional Stratigraphic and Structural Framework and Geologic Evolution of the Eugene Island Block 330 Area, Offshore Louisiana, DOE Annual Report, 122 p.
2. Finkbeiner, T., Stump, B.B., Zoback, M., **Flemings, P.B.**, 1996, Pressure (Pp), Overburden (Sv), and Minimum Horizontal Stress (Shmin) in Eugene Island Block 330, GRI-96/0285, 31 p.
3. Hicks, P.J., Bennett, M.H., **Flemings, P.B.**, Shaw, C.A., Symington, W.A., 1996, Numerical Simulations of Fluid Flow in Faults: Final Report of State 1. Report to Exxon Production Research Company, EPR.28EX.96, 78 p.
4. Hicks, P.J., Bennett, M.H., **Flemings, P.B.**, 1996, Numerical Simulations of Fluid Flow in Faults: First Quarterly Report of Stage II. Report to Exxon Production Research Company, 27 p.
5. Shaw, C.J., Symington, W.A., **Flemings, P.B.**, Hicks, P.J., 1996, Numerical Simulations of Fluid Flow in Faults: Implications of Stage I Results. Report to Exxon Production Research Company, EPR29EX.96, 15 p.
6. Stump, B.B., **Flemings, P.B.**, 1997, Sediment Loading and Resulting Pressure Differences Between Overpressured Sands and Bounding Shales of the Eugene Island 330 Field, Offshore Louisiana, GRI-97/0266, 42 p.
7. Finkbeiner, T., Zoback, M., **Flemings, P.B.**, 1998, Characterization of the Full Stress Tensor in Eugene Island Block 330, Offshore Gulf of Mexico, GRI-98/0072, 41 p.
8. **Flemings, P.B.**, Ertekin, T., Ashbaugh, J., Altemus, R., 2000, Petroleum GeoSystems Initiative 1999-2000 Annual Report, 85 p.
9. **Flemings, P.B.**, Ertekin, T., Altemus, R., 2001, Petroleum GeoSystems Initiative 2000-2001 Annual Report, 197 p.
10. **Flemings, P.B.**, 2002, Demonstration of Stress Control on Entrapment of Gas in Geopressured Strata with Application to: Exploration (Risking Seal Integrity) and Production (Optimizing Well Bore Stability and Fracture Completion Approaches), GRI Final Report, Contract 5095-260-3558.
11. **Flemings, P.B.**, Ertekin, T., Altemus, R., 2002, Petroleum GeoSystems Initiative 2001-2002 Annual Report, 92 p.



12. Dugan, B., **P.B. Flemings**, F.R. Rack, G. Bohrmann, A.M. Trehu, D. Schroeder, and the Shipboard Scientists of ODP Leg 204, 2003, Measuring Pore Pressure in Marine Sediments with Penetrometers: Comparison of the Piezoprobe and DVTP-P Tools in ODP Leg 204, in B.J. Thompson (Ed.), *Energy, Simulation-Training, Ocean Engineering and Instrumentation: Research Papers of the Link Foundation Fellows*, Volume 3.
13. **Flemings, P.B.**, Ertekin, T., McCormick, S., 2005, Petroleum GeoSystems Initiative 2003-2005 Annual Report, 92 p.

#### **Service Bulletins and Circulars**

- Flemings, P.B.**, Grotzinger, J.P., Morris, J.E., 1996, Strata 2.1: A Stratigraphic Modeling Package Users Manual. (wrote software, co-wrote manual)
- Flemings, P.B.**, Nelson, S.E., Grotzinger, J.P., 1996, Strata 2.1: A Stratigraphic Modeling Package Workbook. (wrote software, co-wrote manual)

#### **Manuscripts Submitted for Publication**

- Lee, T., Baker, S., **Flemings, P.B.**, (in review), Time-Lapse acoustic impedance inversion at Popeye field, Green Canyon 116, offshore Gulf of Mexico, Geophysics.
- Deshpande, A., **Flemings, P.B.**, (in review) Insights into the Nature of Lithologic Fluctuation from a Stochastic Sedimentation Model. *Journal of Sedimentary Research*.
- Carlson, J., **Flemings, P.B.**, (in review), Transport and Deposition of Heterogeneous Sized Sediment in a Non-Marine Sedimentary Basin, *Journal of Sedimentary Research*.

#### **Presented Abstracts**

1. Sawyer, D E, **Flemings, P.B.**, 2009, An Experimental Study of Pore Pressure in Fine Grained Retrogressive Subaqueous Landslides, *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract NH41C-1269.
2. Moore, J C, Conin, M, **Flemings, P B**, Urgeles, R, Iturrino, G J, 2009, Threshold of Breakout Formation: Stress Orientations and the Mechanics Borehole Failure, *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract NH31A-1096
3. You, Y, **Flemings, P.B.**, Mohrig, D.C., 2009, Failure Caused by Breaching in Subaqueous Sand, *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract NH43B-1316
4. Day-Stirrat, R J, **Flemings, P B**, Strong, H E, Schneider, J, Sawyer, D E, Schleicher, A M, 2009, The fabric of Mass Transport Deposits in the Ursa Basin, Gulf of Mexico, *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract T53C-1607
5. Martin, K M, Gulick, S P, **Flemings, P B**, Tudge, J, 2009, Implications for differences in LWD resistivity measurements in NanTroSEIZE boreholes within the Nankai Trough, Offshore Japan *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract T53C-1602
6. Schneider, J, Peets, C.S., **Flemings, P B.**, Day-Stirrat, R. J., 2009, Experimentally Derived Mechanical and Flow Properties of Fine-grained Soil Mixtures, *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract H23F-1024.
7. Lin, W., Doan, M., Moore, C., McNeill, L. C., Ito, T., Boutt, D. F., Hayman, N W., Kano, Y., **Flemings, P. B.**, Huftile, G., Byrne, T B, Saffer, D M, Araki, E., Moe, K, Kinoshita, M, Eguchi, N O, Takahashi, K., Toczko, S, Scientists, E., 2009, A preliminary result of stress orientation obtained from drilling induced tensile fractures and borehole breakouts at Site C0009 of Expedition 319, NanTroSEIZE: *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract T21C-1837
8. Boutt, D F, Kano, Y, **Flemings, P B**, Doan, M, Ito, T, Lin, W, Saffer, D M, Byrne, T B, McNeill, L C, Araki, E., Takahashi, K, Eguchi, N O , Toczko, S, Moe, K, Scientists, E, 2009, Downhole Hydrologic Testing in the Kumano Basin and Underlying Sediments: Results from NanTroSEIZE Expedition 319. *Eos Trans.AGU, 90(52)*, Fall Meet. Suppl., Abstract T21C-1837.

9. **Flemings, P B**, Kano, Y, Conin, M, Saffer, D M, Buchs, D M, Cukur, D, Huftile, G, Kawabata, K, Moore, C., Moe, K, Toczko, S, Toczko, S, McNeill, L C, Byrne, T B, Moore, G F, Expedition 319 S., Darnell, K, 2009, ARCHITECTURE AND ALONG-STRIKE VARIATION OF THE NANKAI MEGASPLAY FAULT: RESULTS FROM IODP EXPEDITION 319, *Eos Trans.AGU*, 90(52), Fall Meet. Suppl., Abstract T12A-03.
10. Kano, Y, Ito, T, Lin, W, **Flemings, P B**, Boutt, D F, Doan, M, McNeill, L C, Byrne, T, Saffer, D M, Araki, E, Eguchi, N O, Takahashi, K, Toczko, S, 2009, Hydraulic Fracture Measurements at Site C0009 of IODP Expedition 319, NanTroSEIZE, *Eos Trans.AGU*, 90(52), Fall Meet. Suppl. Abstract T21C-1833.
11. Saffer, D M, McNeill, L C, Byrne, T B, Araki, E, **Flemings, P B**, Conin, M, Eguchi, N O, Takahashi, K, Toczko, S, Boutt, D F, Doan, M, Kano, Y, Ito, T, Lin, W, 2009, Stress and Pore Pressure Measurement in IODP Riser Drilling: An Example from Expedition 319, Kumano Basin offshore SW Honshu, Japan. *Eos Trans.AGU*, 90(52), Fall Meet. Suppl. Abstract NH34A-07.
12. McNeill, L C, Saffer, D, Byrne, T, Araki, E, Eguchi, N O, Takahashi, K, Toczko, S, Hayman, N, Huftile, G., Moore, J C, Lin, W, Ito, T, Doan, M, **Flemings, P B**, Kano, Y, Boutt, D F, Conin, M, Sacks, A, 2009, In situ stress and deformation patterns across the Nankai Kumano basin and forearc: Results from IODP Expedition 319, *Eos Trans.AGU*, 90(52), Fall Meet. Suppl. Abstract NH34A-06.
13. Byrne, T B, McNeill, L C, Saffer, D, Araki, E, Eguchi, N O, Toczko, S, Takahashi, K, **Flemings, P B**, Kano, Y, Kameo, K, Buchs, D M, Jiang, S, Buret, C, Cukur, D, Schleicher, A M, Efimenko, N, Underwood, M, Moore, G F, Scientists, E, 2009, Evolution of the Miocene to Quaternary Nankai forearc from drilling results within the Kumano forearc basin (IODP Expedition 319), Fall Meet. Suppl. Abstract NH34A-06
14. Urgeles, R., Locat, J., Sawyer, D.E., **Flemings, P.B.**, Dugan, B., Binh, N.T.T. (2009): History of Pore Pressure Build Up and Slope Instability in Mud-Dominated Sediments of Ursa Basin, Gulf of Mexico Continental Slope. 4th Int. Symposium on Submarine Mass Movements and Their Consequences, Abstracts Book, pp. 26, Austin (TX), USA
15. **Flemings, P.B., 2009**, Methane Hydrates, "The Solidification of Methane Hydrate, Materials Science & Technology 2009, Pittsburgh, U.S., October, 2009
16. Strong, H.E., **Flemings, P.B.**, Sawyer, D.E., Germaine, J.T., Day-Stirrat, R., Schneider, J., American Association of Petroleum Geologists National Meeting, Denver Colorado, 2009.
17. **Flemings, P.B.**, You, Y., Sawyer, D., Schneider, J., 2008, Forward modeling pore pressure evolution in the Ursa Basin, offshore Louisiana, Gulf of Mexico, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract OS11A-1104.
18. Binh, N.T., Tokunaga, T., **Flemings, P.B.**, Sawyer, D.E., Urgeles, R., Nakamura, T., Koizumi, K., Nakajima, M., Kubota, M. Kameya, H., Taniue, M., 2008, A Study on the Generation and Preservation of Shallow Overpressures and the Effects on the Slope Instability in the Ursa Basin, deepwater Gulf of Mexico, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract H44B-03.
19. Song, I., Skarbek, R., Saffer, D., **Flemings, P.**, 314/315/316 Science Party, 2008, A Comparison of Compression Behavior of Mudrock Core Samples from the Nankai Margin, SW Japan and the Ursa Basin, Gulf of Mexico, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T31-1985.
20. Sawyer, D., **Flemings, P.B.**, Germaine, J.T., 2008, Formation of Submarine Debris Flows from Strain Weakening: Examples From the Ursa Basin, Northern Gulf of Mexico, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract H51F-0910.
21. Schneider, J., **Flemings, P.B.**, Dugan, B., Long, H., Germaine, J.T., Saffer, D.M., 2008, Porosity vs. Permeability Behavior of Shallow Mudstones in the Ursa Basin, Deepwater Gulf of Mexico, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract OS11A-1105.
22. Reilly, M., **Flemings, P.B.**, 2008, Implications of seafloor expulsion features of the Auger Basin, Deep Water Gulf of Mexico, Subsurface sediment mobilization and fluid flow Conference, London Geological Society.

23. Sawyer, D., **Flemings, P.B.**, 2008, Linking Seismic Facies, Physical Properties, and Depositional Processes in Mass Transport Deposits, Ursa Basin, Northern Gulf of Mexico, Geological Society of America National Meeting, Houston.
24. **Flemings, P.B.** and Long, H., 2008, Pressure Prediction in the Shallow Ursa Basin: Deepwater Gulf of Mexico, Geological Society of America National Meeting, Houston.
25. **Flemings, Peter B.**, Dugan, B.E., Sawyer, D.E., Schneider, J., Strong, H.S., 2008, Pore pressure penetrometers document high overpressure near the seafloor where multiple submarine landslides have occurred on the continental slope, offshore Louisiana, Gulf of Mexico, 33<sup>rd</sup> International Geological Congress, Oslo, Norway.
26. **Flemings, P.B.**, Rapid sedimentation drives overpressure and submarine landslides in the deepwater Gulf of Mexico: IODP Expedition 308, 33<sup>rd</sup> International Geological Congress, August 2008, Oslo, Norway.
27. Sawyer, D.E., **Flemings, P.B.**, Core-log-seismic integration of mass transport deposits in the shallow subsurface of the Ursa basin, northern Gulf of Mexico, 33<sup>rd</sup> International Geological Congress, August 2008, Oslo, Norway.
28. Urgeles, R.; Locat, J.; **Flemings, P.B.**; Dugan, B.; Binh, N.T.T.; Sawyer, D.E. (2008): Factors leading to slope instability in the Ursa Basin, gulf of Mexico continental slope, 33<sup>rd</sup> International Geological Congress, Abstract OSP03416L, Oslo, NORWAY
29. **Flemings, P.B.**, 2008, Future Directions in Basin Modeling, SPE Forum on Reservoir Geomechanics, Colorado Springs, Colorado.
30. **Flemings, Peter B.**, H. Long, J. Schneider, John T. Germaine, B. Dugan, Compressibility and Permeability Behavior of Shales at Low Effective Stresses, European Association of Geoscientists & Engineers Research Workshop, 'Compacting and Stressing Out Shales: from Geological to Production Timescales', Berlin, Germany.
31. Schneider, J., **Flemings, P.B.**, Dugan, B., Germaine, J.T., Jacoby, R., and the Shipboard Scientific Party, IODP Exp. 308, 2008, Pore Pressure Prediction Near the Seafloor in the Brazos-Trinity Basin, Gulf of Mexico, International Conference Overpressure 2008, University of Durham, England, April 6-9, 2008.
32. Bohn, C.W. , Reilly, M., Valenti, J., Seren, D., **Flemings, P.B.**, Ertekin, T., 2008, Fill to bypass in the N and O Sands, Auger Basin, Gulf of Mexico, AAPG 2008 Annual Convention, San Antonio, TX, April 20-23, 2008.
33. **Flemings, P.B.**, Liu, X., 2007, The Methane Hydrate Reservoir System, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract OS22A-01.
34. Hucks, A., **Flemings, P.B.**, Elsworth, D., Kinoshita, M., 2006, Hydraulic diffusivity and wellbore storage from pressure monitoring, Poster presented at the AGU Fall Meeting, San Francisco, CA, December 11-15, 2006.
35. Long, H., **Flemings, P.B.**, Dugan, B., Germaine, J.T., 2006, OS31D: Overpressure in shallow sediment at the Ursa Basin, Gulf of Mexico, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 11-15, 2006.
36. Urgeles, R.; Locat, J.; **Flemings, P.B.**; Behrmann, J.; John, C.M.; Expedition 308 Shipboard Scientific Party (2007). Mechanisms leading to overpressure and slope instability in the Gulf of Mexico continental slope. Presentation of communication, 2007 European Geoscience Union General Assembly. Geophysical Research Abstracts, Vol. 9, EGU2007-A-00457, 2007 , Viena, AUSTRIA.
37. Sawyer, D.E., Shipp, C., **Flemings, P.B.**, Behrmann, J., John, C., and the Shipboard Scientific party, IODP Exp. 308, 2006, Lateral Variations in Log, Core, and Seismic Attributes of a Mass Transport Deposit in the Mars-Ursa Region, Mississippi Canyon, Northern Gulf of Mexico, Poster Presentation at the American Association of Petroleum Geologists (AAPG) Annual Convention, Houston, TX, April 9-12, 2006.
38. **Flemings, P.B.**, Germaine, J., Long, H., Dugan, B., Sawyer, D., Behrmann, J.H., John, C., Shipboard Scientific Party, IODP Expedition 308, Measuring Temperature and Pressure with the Temperature Two Pressure (T2P) Probe in the Ursa Basin, Gulf of Mexico: Development of a New Pressure and

- Temperature Probe for the IODP, Proceedings of the Offshore Technology Conference, Houston, Texas, May 1-4, 2006, OTC Paper #17957.
39. Gilhooly, W.P., Macko, S.A., **Flemings, P.B.**, IODP Expedition 308 Scientific Party, 2005, Application of Rhizon Porewater Samplers to Shipboard Operations, IODP Expedition 308, Northeast Gulf of Mexico, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  40. Sawyer, D.E., Shipp, C., **Flemings, P.B.**, Behrmann, J.H., John, C.M., Expedition 308 Scientific Party, 2005, Slope Failure Geometry and Physical Properties at IODP Sites U1322, U1323 and U1324, Ursa Basin, Northeast Gulf of Mexico, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  41. Dugan, B., **Flemings, P.B.**, Behrmann, J., John, C.M., Expedition 308 Shipboard Scientific Party, 2005, Hydrology of the Ursa Region, Northern Gulf of Mexico, IODP Expedition 308 Sites U1322 and U1324, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  42. Moore, C., Dugan, B., **Flemings, P.B.**, Iturrino, G., Sawyer, D., Behrmann, J., John, C., Expedition 308 Shipboard Scientific Party, 2005, Geological Consequences of Unequal Loading of Sedimentary Units, at Passive, Transform, and Convergent Margins, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  43. Yamamoto, Y., Sawyer, D. E., Behrmann, J.H., **Flemings, P.B.**, John, C.M., IODP 308 Expedition Shipboard Scientific Party, 2005, Fabric Contribution to Sediment Physical Properties in Gulf of Mexico: Preliminary Results of IODP Expedition 308, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  44. Franke, C., Helslop, D., Fu, Y., **Flemings, P.B.**, John, C., Behrmann, J., Expedition 308 Shipboard Scientific Party, 2005, Towards a Precise Age Model of IODP Holes U1319B and U1320B (Leg 308, Brazos-Trinity Basin IV, Gulf of Mexico) with Paleo and Rock Magnetic Methods, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  45. Long, H., **Flemings, P.B.**, Dugan, B., Germaine, J.T., Behrmann, J.H., John, C.M., 2005, In-Situ Pressure Measurements in the Ursa Basin, Northeast Gulf of Mexico, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  46. **Flemings, P.B.**, Dugan, B.E., Long, H., Germaine, J., Behrmann, J., John, C.M., Jones, C., 2005, Pressure, Temperature and Flow in the Ursa Basin Sediment Cover, Northeast Gulf of Mexico, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  47. Pirmez, C., Behrmann, J., **Flemings, P.B.**, John, C., IODP Expedition 308 Shipboard Scientific Party, 2005, Stratigraphic Evolution of Brazos-Trinity Basin IV, Western Gulf of Mexico: Preliminary Results of IODP Expedition 308, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  48. Adatte, T., John, C.M., **Flemings, P.B.**, Behrmann, J., Expedition 308 Scientific Party, 2005, Overview of the Evolution of Clay Mineralogy in the Gulf of Mexico: Implications for Regional Climate and Drainage History of the Mississippi and Brazos-Trinity Rivers, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  49. Aizawa, Y., Shimamoto, T., **Flemings, P.B.**, Behrmann, J.H., John, C.M., 2005, Estimation of Underground Permeability and Porosity of Slope Sediments in the Northern Gulf of Mexico, IODP Expedition 308, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  50. Urgeles, R., Locat, J., **Flemings, P.B.**, Behrmann, J., John, C., Expedition 308 Scientific Party, 2005, Triggering Mechanisms of Slope Instability Processes on the Gulf of Mexico Continental Slope: Preliminary Results From IODP Expedition 308, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
  51. Hucks, A., **Flemings, P.B.**, Becker, K., Kinoshita, M., 2005, Hydrologic Monitoring in the Nankai Accretionary Prism, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.

52. Suzuki, T., Kawamura, K., Ogawa, Y., **Flemings, P.B.**, Behrmann, J.H., John, C.M., Hirano, N., Abe, N., IODP, 2005, Paleocurrent Analysis and Physical Properties of Deep-Sea Mud Cores Collected from NW Pacific and Northern Gulf of Mexico, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
53. Gutierrez-Pastor, J., Pirmez, C., **Flemings, P.B.**, Behrmann, J.H., John, C.M., Expedition 308 Scientific Party, 2005, Sedimentologic and Geometric Characterization of Turbidites of Brazos-Trinity Basin IV in the Gulf of Mexico: Preliminary Results of IODP Expedition 308, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
54. Iturrino, G.J., Pirmez, C., Moore, J.C., Reichow, M.K., Dugan, B.E., Sawyer, D.E., **Flemings, P.B.**, Shipboard Scientific Party I, 2005, Deformation Analyses and Lithologic Characterization in Overpressured Basins Based on Logging while Drilling and Wireline Results from the Gulf of Mexico, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
55. Jiang, S., Gilhooly, W., Takano, Y., **Flemings, P.B.**, Behrmann, J., John, C., The Expedition 308 Shipboard Scientific Party, 2005, Pore Water Chemistry as Sensitive indicators for Fluid Flow in Brazos-Trinity Basin #4 and Ursa Basin, Northeast Gulf of Mexico (IODP Expedition 308), Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
56. Schneider, J., Moerz, T., Bartezko, A., Iturrino, G.J., Edeskar, T.M., **Flemings, P.B.**, Behrmann, J.H., John, C.M., Expedition 308 Shipboard Scientific Party, 2005, Examples of Mass Wasting and Hemipelagic Sedimentation of Brazos-Trinity Basin #4 and Ursa Basin, Northern Gulf of Mexico, Abstract presented at the AGU Fall Meeting, San Francisco, CA, December 5-9, 2005.
57. Dugan, B., Germaine, J.T., Winters, W.J., **Flemings, P.B.**, 2004, Laboratory Constraints and Models of Pressure, Hydrate, and Stability in Shallow Mississippi Canyon Sediments (MC855), Deepwater Gulf of Mexico, Abstract submitted to AAPG Annual Meeting, Dallas, TX, April 18-21, 2004.
58. Liu, X., **Flemings, P.B.**, 2005, Mechanism for free gas migration through South Hydrate Ridge hydrate system, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 13-17, 2004.
59. Long, H., **Flemings, P.B.**, Germaine, J.T., Chartier, M., 2005, Design of a Dual-Pressure Port Penetration Probe for Pore Pressure Measurements in Ocean Drilling, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 13-17, 2004.
60. Sawyer, D., **Flemings, P.B.**, 2005, Overpressure, Low Effective Stress, and Slope Failure in the Ursa Region, Deep-Water Gulf of Mexico, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 13-17, 2004.
61. **Flemings, P.B.**, Dugan, B., Rack, F.R., Schroeder, D., Tréhu, A., Germaine, J., & Shipboard Scientific Party, ODP Leg 204, 2003, Interpretation of Pore Pressure and Permeability at Hydrate Ridge with Piezoprobe and DVTP-P Penetrometers and Consolidation Experiments, EGS - AGU - EUG Joint Assembly, Nice, France, April 2003.
62. Liu, X., **Flemings, P.B.**, 2003, Two Dimensional Multi-Phase Flow Model of Blake Ridge Hydrate System, EGS - AGU - EUG Joint Assembly, Nice, France, April 2003.
63. Goldberg, D., Janik, A., Johnson, J.E., Moos, D., **Flemings, P.B.**, and ODP Leg 204 Shipboard Scientific Party, 2003, Stress Orientations and Estimated In Situ Strength of Gas Hydrate – Evidence from Borehole Breakouts at ODP Leg 204 Sites, Hydrate Ridge, EGS – AGU – EUG Joint Assembly, Nice, France, April 2003.
64. Finkbeiner, T., Zoback, M., **Flemings, P.B.**, Stump, B., 2003, In Situ Stress and Pore Pressure Dynamically Control Fault Seal Behavior of a Gulf of Mexico Reservoir, AAPG International Conference and Exhibition, Barcelona, Spain, Sept. 2003.
65. Seldon, B., **Flemings, P.B.**, Sawyer, D., 2003, Reservoir Pressure and Sea Floor Venting: Predicting trap integrity in a Gulf of Mexico deepwater turbidite minibasin, AAPG International Conference, Barcelona, Spain, September 2003.
66. Elsworth, D., Lee, D.S., Long, H., **Flemings, P.B.**, 2003, Penetration-Induced Pore Pressure Magnitudes – Methods to Determine Transport Parameters from Terrestrial and Marine Penetrometer Testing, International Conference on T-H-M-C Processes in Geosystems: Fundamentals, Modeling, Experiments and Applications, Stockholm, Sweden, October 2003.

67. Dugan, B., Germaine, J.T., Winters, W.J., **Flemings, P.B.**, 2003, Near-Seafloor Overpressure in the Deepwater Gulf of Mexico Interpreted from Laboratory Experiments, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 8-12, 2003.
68. Goldberg, D., Janik, A., Moos, D., Sheridan, J., **Flemings, P.B.**, Chevalier, J., Johnson, J.E., Weinberger, J., Shipboard Scientific Party, ODP Leg 204, 2003, Stress Orientations and Constraints on the Magnitudes of In-Situ Strength of Hydrate Bearing Sediments - Evidence from Borehole Breakouts at ODP Leg 204 Sites, Hydrate Ridge, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 8-12, 2003.
69. Liu, X., **Flemings, P.B.**, Shipboard Scientific Party, ODP Leg 204, 2003, Two Dimensional Multi-phase Flow Modeling of Hydrate Systems in Accretionary Complexes, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 8-12, 2003.
70. Long, H., **Flemings, P.B.**, Germaine, J.T., Elsworth, D., Tan, B., Rack, F.R., Shipboard Scientific Party, ODP Leg 204, 2003, Analysis of Dissipation Response for the Piezoprobe and DVTP-P on ODP Leg 204, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 8-12, 2003.
71. Tan, B., Germaine, J.T., **Flemings, P.B.**, Goldberg, D., Janik, A., Shipboard Scientific Party, ODP Leg 204, 2003, Consolidation Characteristics of Hydrate Saturated Sediments from ODP Site 1244, Hydrate Ridge, Cascadia Continental Margin, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 8-12, 2003.
72. Trehu, A.M., **Flemings, P.B.**, Shipboard Scientific Party, ODP Leg 204, 2003, Lithostatic Gas Pressures and Venting at Southern Hydrate Ridge, Abstract presented at AGU Fall Meeting, San Francisco, CA, December 8-12, 2003. Liu, X., **Flemings, P.B.**, Shipboard Scientific Party, ODP Leg 204, 2003, Two Dimensional Multi-phase Flow Modeling of Hydrate Systems in Accretionary Complexes, AGU Fall Meeting, San Francisco, CA, December 2003.
73. Long, H., **Flemings, P.B.**, Germaine, J.T., Elsworth, D., Tan, B., Rack, F.R., Shipboard Scientific Party, ODP Leg 204, 2003, Analysis of Dissipation Response for the Piezoprobe and DVTP-P on ODP Leg 204, AGU Fall Meeting, San Francisco, CA, December 2003.
74. Tan, B., Germaine, J.T., **Flemings, P.B.**, Goldberg, D., Janik, A., Shipboard Scientific Party, ODP Leg 204, 2003, Consolidation Characteristics of Hydrate Saturated Sediments from ODP Site 1244, Hydrate Ridge, Cascadia Continental Margin, AGU Fall Meeting, San Francisco, CA, December 2003.
75. Dugan, B., Germaine, J.T., Winters, W.J., **Flemings, P.B.**, 2003, Near-Seafloor Overpressure in the Deepwater Gulf of Mexico Interpreted from Laboratory Experiments, AGU Fall Meeting, San Francisco, CA, December 2003.
76. Goldberg, D., Janik, A., Moos, D., Sheridan, J., **Flemings, P.B.**, Chevalier, J., Johnson, J.E., Weinberger, J., Shipboard Scientific Party, ODP Leg 204, 2003, Stress Orientations and Constraints on the Magnitudes of In-Situ Strength of Hydrate Bearing Sediments - Evidence from Borehole Breakouts at ODP Leg 204 Sites, Hydrate Ridge, AGU Fall Meeting, San Francisco, CA, December 2003.
77. Trehu, A.M., **Flemings, P.B.**, Shipboard Scientific Party, ODP Leg 204, 2003, Lithostatic Gas Pressures and Venting at Southern Hydrate Ridge, AGU Fall Meeting, San Francisco, CA, December 2003
78. Elsworth, D., Lee, D.S., Long, H., **Flemings, P.B.**, 2003, Penetration-Induced Pore Pressure Magnitudes – Methods to Determine Transport Parameters from Terrestrial and Marine Penetrometer Testing, Abstract presented at the International Conference on T-H-M-C Processes in Geosystems: Fundamentals, Modeling, Experiments and Applications, Stockholm, Sweden, October 13-15, 2003.
79. Finkbeiner, T., Zoback, M., **Flemings, P.B.**, Stump, B., 2003, In Situ Stress and Pore Pressure Dynamically Control Fault Seal Behavior of a Gulf of Mexico Reservoir, Abstract presented at AAPG International Conference and Exhibition, Barcelona, Spain, Sept. 21-24, 2003.
80. Seldon, B., **Flemings, P.B.**, Sawyer, D., 2003, Reservoir Pressure and Sea Floor Venting: Predicting trap integrity in a Gulf of Mexico deepwater turbidite minibasin, Abstract presented at AAPG International Conference, Barcelona, Spain, September 21-24, 2003.

81. Goldberg, D., Janik, A., Johnson, J.E., Moos, D., **Flemings, P.B.**, and ODP Leg 204 Shipboard Scientific Party, 2003, Stress Orientations and Estimated In Situ Strength of Gas Hydrate — Evidence from Borehole Breakouts at ODP Leg 204 Sites, Hydrate Ridge, Abstract presented at EGU Spring Meeting, Nice, France, 06 - 11 April, 2003.
82. **Flemings, P.B.**, Dugan, B.E., Rack, F.R., Schroeder, D., Trehu, A., Germaine, J., and Shipboard Scientific Party, ODP Leg 204, 2003, Interpretation of Pore Pressure and Permeability at Hydrate Ridge with Piezoprobe and DVTP-P Penetrometers and Consolidation Experiments, Abstract presented at EGU Spring Meeting, Nice, France, 06-11 April, 2003.
83. Liu, X., **Flemings, P.B.**, 2003, Two Dimensional Multi-phase Flow Model of Blake Ridge Hydrate System, Abstract presented at EGU Spring Meeting, Nice, France, 06-11 April 2003.
84. **Flemings, P.B.**, Liu, X., 2002, Fracture-dominated fluid flow in the gas hydrate system on Blake Ridge: fluid flux, permeability and gas column height, Fourth International Conference on Gas Hydrates, Yokohama, Japan.
85. **Flemings, P.B.**, 2002, Overpressures above the decollement at Nankai: ODP Sites 808 and 1174, AGU Fall Meeting 2002, San Francisco, CA.
86. Dugan, B.E., Olgaard, D.L., **Flemings, P.B.**, Gooch, M.J., 2002, Compaction State and Excess Fluid Pressure of Sediments From ODP Site 1073, US Mid-Atlantic Continental Margin, AGU Fall 2002 Meeting, San Francisco, CA.
87. **Flemings, P.B.**, 2002, Overpressures above the decollement at Nankai: ODP Sites 808 and 1174, Abstract presented at AGU Fall 2002 Meeting, San Francisco, CA, December 6-10, 2002.
88. Dugan, B.E., Olgaard, D.L., **Flemings, P.B.**, Gooch, M.J., 2002, Compaction State and Excess Fluid Pressure of Sediments from ODP Site 1073, US Mid-Atlantic Continental Margin, Abstract presented at AGU Fall 2002 Meeting, San Francisco, CA, December 6-10, 2002.
89. Morita, S., Aoike, K., Sawada, T., Ashi, J., Gulick, S.P., **Flemings, P.B.**, Kuramoto, S., Saito, S., Mikada, H., Kinoshita, M., 2002, Observations and Rock Analyses in a Kumano Mud Volcano in Nankai Accretionary Prism, Abstract presented at AGU Fall 2002 Meeting, San Francisco, San Francisco, CA, December 6-10, 2002.
90. Mikada, H., Kinoshita, M., Becker, K., Davis, E.E., Meldrum, R.D., **Flemings, P.B.**, Gulick, S.P., Matsubayashi, O., Morita, S., Goto, S., Misawa, N., Fujino, K., Toizumi, M., 2002, Scientific Cruise Report from KR02-10: Hydrogeological and Geothermotic study around the Nankai Trough, Abstract presented at AGU Fall 2002 Meeting, San Francisco, San Francisco, CA, December 6-10, 2002.
91. Liu, X., **Flemings, P.B.**, 2002, Stress-limited Gas Column Height in the Gas Hydrate System of Blake Ridge, Proceedings of the Fourth International Conference on Gas Hydrates, Yokohama, Japan, May 19-23, 2002.
92. Lui, X., **Flemings, P.B.**, 2001, Fracture-dominated Fluid Flow in Gas Hydrate System on Blake Ridge: Fluid Flux, Permeability and Gas Column Height, AGU Fall Meeting 2001, San Francisco, CA.
93. Dugan, B.E., **Flemings, P.B.**, 2001, Pleistocene to Present Stability of the Continental Slope, Offshore New Jersey, AGU Fall Meeting 2001, San Francisco, CA.
94. Liu, X., **Flemings, P.B.**, 2001, Overpressure and Fluid Flow on The Blake Ridge, AGU Spring Meeting 2001, Boston, MA.
95. Dugan, B., **Flemings, P.B.**, Liu, X., 2001, Sedimentation and Overpressure on Passive Continental Margins: Implications for Slope Stability, Drilling, and Gas Hydrates, AGU Spring Meeting 2001, Boston, MA.
96. **Flemings, P.B.**, Comisky, J., Liu, X., Lupa, J.A., 2001, Stress-Controlled Porosity in Overpressured Sands at Bullwinkle (GC65), Deepwater Gulf of Mexico, Offshore Technology Conference, Houston, TX.
97. **Flemings, P.B.**, Comisky, J., Liu, X., Lupa, J.A., 2001, Stress-Controlled Porosity in Overpressured Sands at Bullwinkle (GC65), Deepwater Gulf of Mexico, Offshore Technology Conference, Houston, TX.
98. Dugan, B., **Flemings, P.B.**, Liu, X., 2001, Sedimentation and Overpressure on Passive Continental

- Margins: Implications for Slope Stability, Drilling, and Gas Hydrates, AGU Spring Meeting 2001, Boston, MA.
99. Liu, X., **Flemings, P.B.**, 2001, Overpressure and Fluid Flow on The Blake Ridge, AGU Spring Meeting 2001, Boston, MA.
  100. Dugan, B.E., **Flemings, P.B.**, 2001, Pleistocene to Present Stability of the Continental Slope, Offshore New Jersey, AGU Fall Meeting 2001, San Francisco, CA.
  101. Liu, X., **Flemings, P.B.**, 2001, Fracture-dominated Fluid Flow in Gas Hydrate System on Blake Ridge: Fluid Flux, Permeability and Gas Column Height, AGU Fall Meeting 2001, San Francisco, CA.
  102. Finkbiener, T., Zoback, M.D., Stump, B.B., **Flemings, P.B.**, 2000, Stress, pore pressure, and dynamically constrained hydrocarbon columns in the South Eugene Island 330 Field, Gulf of Mexico, AAPG Annual Meeting, New Orleans, LA.
  103. **Flemings, P.B.**, Metzger, J.M., Poulsen, C.J., 2000, Middle Miocene vs. late Miocene-Pliocene Sequences of Offshore New Jersey: Controls of Long Term Sea Level Change on Stratigraphic Architecture, GSA 35<sup>th</sup> Annual Meeting, New Brunswick, NJ.
  104. Stump, B.B., **Flemings, P.B.**, 2000, Observation and theory of overpressures in dipping structures: implications for drilling [shallow water flow, circulation loss, fracture completion], Overpressure 2000 Conference, London, England.
  105. Stump, B.B., **Flemings, P.B.**, 2000, Overpressure and fluid flow in dipping structures of the offshore Gulf of Mexico (EI 330 field). Geofluids III – 2000, Barcelona, Spain.
  106. Dugan, B., **Flemings, P.B.**, 2000, The New Jersey margin: compaction and fluid flow, Geofluids III - 2000, Barcelona, Spain.
  107. **Flemings, P.B.**, Dugan, B., Lupa, J.A., 2000, Rapid Loading in Sedimentary Basins: Implications for State of Stress, Fluid Migration, Slope Stability, and Cold Seeps, Invited speaker, AGU Fall Meeting 2000, San Francisco, CA.
  108. Dugan, B., **Flemings, P.B.**, 2000, Rapid Sediment Loading, Lateral Fluid Flow, and Slope Stability on the US East Coast Margin, AGU Fall Meeting 2000, San Francisco, CA.
  109. Lupa, J.A., **Flemings, P.B.**, 2000, Flow Focusing in Turbidites on the Gulf of Mexico Slope, AGU Fall Meeting 2000, San Francisco, CA.
  110. **Flemings, P.B.**, Dugan, B., Lupa, J.A., 2000, Rapid Loading in Sedimentary Basins: Implications for State of Stress, Fluid Migration, Slope Stability, and Cold Seeps. Invited speaker, AGU Fall Meeting 2000, San Francisco, CA.
  111. Dugan, B., **Flemings, P.B.**, 2000, Rapid Sediment Loading, Lateral Fluid Flow, and Slope Stability on the US East Coast Margin. AGU Fall Meeting 2000, San Francisco, CA.
  112. Lupa, J.A., **Flemings, P.B.**, 2000, Flow Focusing in Turbidites on the Gulf of Mexico Slope. AGU Fall Meeting 2000, San Francisco, CA.
  113. Stump, B.B., **Flemings, P.B.**, 2000, Overpressure and fluid flow in dipping structures of the offshore Gulf of Mexico (EI 330 field). Geofluids III – 2000, Barcelona, Spain.
  114. Dugan, B., **Flemings, P.B.**, 2000, The New Jersey margin: compaction and fluid flow, Geofluids III - 2000, Barcelona, Spain.
  115. Stump, B.B., **Flemings, P.B.**, 2000, Observation and theory of overpressures in dipping structures: implications for drilling [shallow water flow, circulation loss, fracture completion]. Overpressure 2000 Conference, London, England.
  116. **Flemings, P.B.**, Metzger, J.M., Poulsen, C.J., 2000, Middle Miocene vs. late Miocene-Pliocene Sequences of Offshore New Jersey: Controls of Long Term Sea Level Change on Stratigraphic Architecture. GSA 35<sup>th</sup> Annual Meeting, New Brunswick, NJ.
  117. Finkbinder, T., Zoback, M.D., Stump, B.B., **Flemings, P.B.**, 2000, Stress, pore pressure, and dynamically constrained hydrocarbon columns in the South Eugene Island 330 Field, Gulf of Mexico. AAPG Annual Meeting, New Orleans, LA.
  118. Ashbaugh, J., **Flemings, P.B.**, 1999, Dynamic reservoir characterization of the ST295 field (offshore Louisiana): Reservoir simulation, acoustic modeling, and time-lapse seismic refines



- geologic model and illuminates dynamic behavior, SEG Annual Meeting, Houston, TX.
119. Dugan, B., **Flemings, P.B.**, 1999, Compaction of and Fluid Flow in Offshore New Jersey Slope Sediments (ODP Legs 150 and 174A): Implications for Geochemical Heterogeneity and Slope Stability, AGU Fall Meeting, San Francisco, CA.
  120. Dugan, B., **Flemings, P.B.**, 1999, Using ODP Data to Understand the Hydrodynamics of Fluid Flow Along Passive Continental Margins, COMPLEX (Conference on Multiple Platform Abstracts) Abstracts, p. 116, COMPLEX Meeting, Vancouver, VC, Canada.
  121. Dugan, B., **Flemings, P.B.**, Mountain, G., Elsworth, D., 1999, Overpressure on the New Jersey Continental Margin: Evidence from ODP Sites 903 and 1073, AGU Spring Meeting, Boston.
  122. Stump, B., **Flemings, P.B.**, 1998, Predicting Overpressure from Shale Porosity in Eugene Island 300, Offshore Louisiana. AAPG Annual Meeting, Salt Lake City, UT.
  123. Dugan, B., **Flemings, P.B.**, Mountain, G., Elsworth, D., 1999, Overpressure on the New Jersey Continental Margin: Evidence from ODP Sites 903 and 1073, AGU Spring Meeting, Boston.
  124. Dugan, B., **Flemings, P.B.**, 1999, Using ODP Data to Understand the Hydrodynamics of Fluid Flow Along Passive Continental Margins, COMPLEX (Conference on Multiple Platform Abstracts) Abstracts, p. 116, COMPLEX Meeting, Vancouver, VC, Canada.
  125. Dugan, B., **Flemings, P.B.**, 1999, Compaction of and Fluid Flow in Offshore New Jersey Slope Sediments (ODP Legs 150 and 174A): Implications for Geochemical Heterogeneity and Slope Stability, AGU Fall Meeting, San Francisco, CA.
  126. Ashbaugh, J., **Flemings, P.B.**, 1999, Dynamic reservoir characterization of the ST295 field (offshore Louisiana): Reservoir simulation, acoustic modeling, and time-lapse seismic refines geologic model and illuminates dynamic behavior, SEG Annual Meeting, Houston, TX.
  127. Finkbeiner, T., Zoback, M.D., Stump, B.B., **Flemings, P.B.**, 1998, In situ stress, pore pressure and hydrocarbon migration the South Eugene Island field, Gulf of Mexico, In: Alan Mitchell and Dominique Grauls (Eds.), Overpressures in petroleum exploration workshop proceedings, Memoire 22, Elf EP-Editions, Pau, France, p. 103-110.
  128. **Flemings, P.B.**, V. Siahaan, P.J. Hicks, and B.B. Stump, 1998, Secondary migration via fracture permeability in shales: illuminating the relationship between pressure and column height, In: Alan Mitchell and Dominique Grauls (Eds.), Overpressures in petroleum exploration workshop proceedings, Memoire 22, Elf EP-Editions, Pau, France, p. 111-116.
  129. **Flemings, P.B.**, Stump, B., Finkbeiner, T., Zoback, M., 1998, How Pressure, Stress, and Column Height Interact to Control Secondary Migration Within Geopressed Strata, Integration of Geologic Models for Understanding Risk in the Gulf of Mexico, Galveston, Texas.
  130. Hicks, P., **Flemings, P.B.**, Ashbaugh, J., Bennett, M., 1998, Numerical Modeling of secondary Migration in Faults, Integration of Geologic Models for Understanding Risk in the Gulf of Mexico, Galveston, Texas.
  131. Stump, B.B., **Flemings, P.B.**, Finkbeiner, T., and M.D. Zoback, 1998, Pressure differences between overpressured sands and bounding shales of the Eugene Island 330 field (offshore Louisiana, U.S.A.) with implications for fluid flow induced by sediment loading, In: Alan Mitchell and Dominique Grauls (Eds.), Overpressures in petroleum exploration workshop proceedings, Memoire 22, Elf EP-Editions, Pau, France, p. 83-92.
  132. Stump, B., **Flemings, P.B.**, 1998, Predicting Overpressure from Shale Porosity in Eugene Island 300, Offshore Louisiana, AAPG Annual Meeting, Salt Lake City, UT.
  133. **Flemings, P.B.**, Stump, B.B., Finkbeiner, T., Zoback, M.D., 1998, Pressure Differences Between Overpressured Sands and Bounding Shales of the Eugene Island 330 field (Offshore Louisiana, U.S.A.) with Implications for Drilling and Completion, extended abstract, presented at American Association of Drilling Engineers (AADE) Industry Forum entitled, "Pressure Regimes in Sedimentary Basins and Their Prediction", September 2-4, 1998, Del Lago Resort, Lake Conroe, TX.
  134. Stump, B.B., **Flemings, P.B.**, Karig, D.E., 1998, Gaining Insight into Pressure History with Shale Deformation Experiments, extended abstract, presented at American Association of Drilling

- Engineers (AADE) Industry Forum entitled, "Pressure Regimes in Sedimentary Basins and Their Prediction", September 2-4, 1998, Del Lago Resort, Lake Conroe, TX
135. **Flemings, P.B.**, Stump, B.B., Finkbeiner, T., Zoback, M.D., 1998, How Pressure, Stress and Column Height Interact to Control Secondary Migration Within Geopressured Strata, extended abstract presented at AAPG Hedberg Research Conference entitled, "Integration of Geologic Models for Understanding Risk in the Gulf of Mexico", September 20-24, 1998, Galveston, TX
  136. Hicks, P.J., **Flemings, P.B.**, Ashbaugh, J.P., Bennett, M.H., 1998, Numerical Modeling of Secondary Migration in Faults, extended abstract presented at AAPG Hedberg Research Conference entitled, "Integration of Geologic Models for Understanding Risk in the Gulf of Mexico", September 20-24, 1998, Galveston, TX
  137. **Flemings, P.B.**, Siahaan, V., Hicks, P.J., Ashbaugh, J., Stump, B. B., 1998, Secondary Migration via fracture permeability in shales: illuminating the relationship between Pressure, stress, and column height; *Pressures in Petroleum Exploration*, April 7-8, 1998, Pau, France, p. 111-116.
  138. Stump, B.B., **Flemings, P.B.**, Finkbeiner, T., Zoback, M.D., 1998, Pressure Differences Between Overpressured Sands and Bounding Shales of the Eugene Island 330 field (offshore Louisiana, U.S.A.) with Implications for Fluid Flow induced by Sediment Loading; *Overpressures in Petroleum Exploration*, April 7-8, 1998, Pau, France, p. 83 – 92
  139. Finkbeiner, T., Zoback, M.D., Stump, B. B., **Flemings, P.B.**, 1998, In Situ Stress, Pore Pressure, and Hydrocarbon Migration in the South Eugene Island Field, Gulf of Mexico; *Overpressures in Petroleum Exploration*, April 7-8, 1998, Pau, France, p. 103-110
  140. Cookman, J.L., Metzger, J.M. **Flemings, P.B.**, Slingerland, R.L., 1997, A Numerical Model of Sedimentation from Suspension in a Buoyant Plume, AGU Meeting, San Francisco, CA.
  141. Deshpande, A., **Flemings, P.B.**, 1997, Insights into the nature of lithologic fluctuation from a stochastic sedimentation model, GSA Today Meeting, Salt Lake City, UT.
  142. **Flemings, P.B.**, Burkhart, T., Hoover, A., Hicks, P., 1997, Impedance change in the K40 sand, South Timbalier 295, offshore Louisiana: Applications to 4D seismic analysis, SEG Annual Meeting, Dallas, TX.
  143. **Flemings, P.B.**, Hoover, A.R., Burkhart, T., and Nelson, S.E., 1996, A Case Study of Amplitudes in Drained Pay: The EI-330 LF Sand, In: Pacht, J.A., Sheriff, R.E., and Perkins, B.F., eds., *Stratigraphic Analysis Utilizing Geophysical, Wireline and Borehole Technology for Petroleum Exploration and Production: Gulf Coast Section Society of Economic Paleontologists and Mineralogists Foundation Seventeenth Annual Research Conference*, p. 99-110.
  144. Gordon, D., **Flemings, P.B.**, 1996, Compaction-Driven Fluid Flow in a Plio-Pleistocene Gulf Coast Growth Fault System, Offshore Gulf of Mexico, AGU Poster Session, Baltimore, MD.
  145. Gordon, D.S., **Flemings, P.B.**, 1996, One and Two Dimensional Modeling of Compaction Driven Fluid Flow in a Plio-Pleistocene Growth-Faulted Basin, Offshore Louisiana, GSA Annual Meeting, Denver, CO.
  146. Poulsen, C.J., Robinson, R.A.J., Spinelli, G., **Flemings, P.B.**, Miller, K., 1996, Variability of Shore-Normal Relative Sea Level Curves and Sediment Accumulation Patterns of Migrating Deltas. GSA Annual Meeting, Denver, CO.
  147. Rowan, M.B., Hart, B.S., Nelson, S.E., **Flemings, P.B.**, 1996, Four-dimensional evolution of a salt-related fault network: Eugene Island Block 330 field, Offshore Louisiana, AAPG Annual Meeting, San Diego, CA.
  148. **Flemings, P.B.**, Carlson, J., 1996, Transport and Deposition of Heterogeneous-Sized Sediment in a Non-Marine Sedimentary Basin, Numerical Experiments in Stratigraphy Poster Session, Lawrence, Kansas.
  149. **Flemings, P.B.**, Nelson, S.E., Poulsen, C., Spinelli, G., 1996, Integrated Approaches to Advanced Stratigraphy: Seismic Interpretation and STRATA modeling of the Neogene Baltimore Canyon Trough, Numerical Experiments in Stratigraphy Conference, Lawrence, Kansas.
  150. **Flemings, P.B.**, Zoback, M., Bishop, B., Anderson, R.N., 1996, State of Stress in a Plio-Pleistocene Gulf Coast Growth Fault: Implications for Fracture Driven Fluid Flow, AAPG Annual Meeting,

- San Diego, CA.
151. Burkhart, T., **Flemings, P.B.**, Hoover, A.R., Nelson, S.E., 1996, 4D Seismic Analysis of the LF-sand, EI-330 Field, Offshore Louisiana, AAPG Annual Meeting, San Diego, CA.
  152. Deshpande, A., **Flemings, P.B.**, Huang, J., 1996, Quantifying One and Two Dimensional Lateral Heterogeneities in Fluvio-Deltaic Reservoirs using 3-D Seismic Data, AAPG Annual Meeting, San Diego, CA.
  153. Deshpande, A., **Flemings, P.B.**, 1996, Quantifying 3-D Heterogeneity in Fluvial/Deltaic (Incised-Valley/ Lowstand Wedge) Environments with 3-D Seismic Data, GSA Annual Meeting, Denver, CO.
  154. Hart, B.S., **Flemings, P.B.**, Sibley, D., Bishop, B., 1994, Facies Architecture of a Shelf Margin Lowstand Complex, Eugene Island Block 330, Louisiana Offshore, AAPG Annual Meeting, Denver, CO.
  155. Rowan, M.G., Weimer, P, **Flemings, P.B.**, 1994, Deformation of an Amalgamated Salt Sheet: Controls on the Structural and Stratigraphic Evolution of the Eugene Island 330 Mini-basin, AAPG National Meeting, Denver, CO.
  156. **Flemings, P.B.**, Haggerty, S.J., Anderson, R.N., 1994, Capillary Pressure and Effective Stress: Potential Controls on Hydrocarbon Distribution and Migration in Eugene Island Block 330, AAPG Annual Meeting, Denver, CO.
  157. **Flemings, P.B.**, Zoback, M., Bishop, B.A., Hart, B.S., Anderson, R.N., 1994, In Situ Measurements of Pressure and Stress in the Pathfinder Well, Eugene Island, Gulf Mexico, AGU Annual Meeting, San Francisco, CA.
  158. Deshpande, A., **Flemings, P.B.**, 1994, Effective Stress, Porosity, and Abnormal Pressure in the Eugene Island Block 330 Field, AAPG Annual Meeting, Denver, CO.
  159. **Flemings, P. B.**, Anderson, R.N., Billeaud,, L., Losh, S., Zoback, M., 1994, Drilling Experiments through a Major Fault Zone in Eugene Island 330, Gulf of Mexico, VIIth International Symposium on the Observation of the Continental Crust Through Drilling, Santa Fe, NM.
  160. **Flemings, P.B.**, Carlson, J., Grotzinger, J.P., 1994, Equal Mobility, the Graded Stream, and Downstream Fining, AGU Annual Meeting, San Francisco, CA.
  161. Billeaud, L.B., Anderson, R.N., **Flemings, P.B.**, Losh, S., 1994, The Adventures of Drilling and Conducting Experiments Through a Major Fault Zone in Eugene Island 330, Offshore Louisiana, Gulf of Mexico. AAPG Annual Meeting, Denver, CO.
  162. Carlson, J., **Flemings, P.B.**, Grotzinger, J.P., 1994, Stratigraphic Simulation using an Improved Dual-Lithology Sediment Transport Model. AAPG Annual Meeting Poster Session, Denver, CO.
  163. Alexander, L.L., **Flemings, P.B.**, 1994, Architecture and Evolution of a Plio-Pleistocene Salt Withdrawal Mini-Basin: Eugene Island, Block 330, Offshore Louisiana, AAPG Annual Meeting, Denver, CO.
  164. **Flemings, P.B.**, Jordan, T.E., Reynolds, S.A., 1986, Flexural analysis of two broken foreland basins: the Late Cenozoic Bermejo basin and the Early Cenozoic Green River Basin, AAPG Annual Meeting, Atlanta, GA.
  165. **Flemings, P.B.**, Jordan, T.E., 1987, Synthetic stratigraphy of foreland basins, American Geophysical Union Annual Meeting, Baltimore, MD.
  166. **Flemings, P.B.**, Jordan, T.E., 1989, Synthetic stratigraphy, implications for deformation and rheology, International Geological Congress Meeting, Washington, D.C.
  167. **Flemings, P.B.**, Jordan, T.E., 1989, Reconstructing eustatic sea-level history from the age of stratigraphic sequence boundaries, Geological Society of America Meeting.
  168. **Flemings, P. B.**, 1989, Downstream fining by selective sediment transport in fluvial systems, American Geophysical Union Meeting.
  169. **Flemings, P.B.**, Jordan, T.E., 1990, Modeling stratigraphic sequences in clastic sedimentary basins. AAPG Annual Meeting, San Francisco, CA.
  170. Jordan, T.E., **Flemings, P.B.**, 1990, Analisis Teorico de la Estratigrafia de Cuencas de Antepais Durante Deformaciones Episodicas, Tercera Reunion Argentina de Sedimentologia, May 1990.

171. Alexander, L.L., **Flemings, P.B.**, 1991, Sequence Stratigraphy and Pressure Distribution Along A Syn-Depositional Listric Fault-Eugene Island, Gulf of Mexico, Geological Society of America, San Diego, CA.
172. **Flemings, P.B.**, Ando, C., Carter, J.B., Ferdinand, K.J., Masek, J., Rassman, B., Rudolph, K., Shaw, C., 1992, Three dimensional stratigraphic geometry and subsidence history of Cretaceous strata, Colville Trough, Alaska, AAPG Annual Meeting, Calgary, Canada.
173. **Flemings, P.B.**, Alexander, L., Spiegleman, M., Anderson, R.N., 1992, Fluid expulsion from abnormally pressured strata along growth faults in the Eugene Island Block 331 Area, Gulf of Mexico. AAPG Annual Meeting, Calgary, Canada.

### **Papers Presented at Professional Meetings**

(Flemings' name in bold when he is presenter)

1. **Flemings, P.B.**, Alexander, L., Anderson, R.N., 1993, The Hydrostratigraphy of a Plio-Pleistocene Growth Fault: The Eugene Island Block 330 Field, GBRN Technical Meeting.
2. Rowan, M.G., Weimer, P., **Flemings, P.B.**, 1993, Eugene Island Block 330: Regional Stratigraphic and Structural Evolution, GBRN Technical Meeting.
3. Alexander, L.L., **Flemings, P.B.**, 1994, Architecture and Evolution of a Plio-Pleistocene Salt Withdrawal Mini-Basin: Eugene Island, South Addition, Block 330, Offshore Louisiana, GBRN/Pennzoil Technology Conference, Houston, TX.
4. Billeaud, L.B., Anderson, R.N., **Flemings, P.B.**, Losh, S., 1994, The Adventures of Drilling and Conducting Experiments Through a Major Fault Zone in Eugene Island 330, Offshore Louisiana, Gulf of Mexico, GBRN/Pennzoil Technology Conference, Houston, TX.
5. **Flemings, P.B.**, Haggerty, S.J., Anderson, R.N., 1994, Capillary Pressure and Effective Stress: Potential Controls on Hydrocarbon Distribution and Migration in Eugene Island Block 330, GBRN/Pennzoil Technology Conference, Houston, TX.
6. Deshpande, A., **Flemings, P.B.**, 1994, Effective Stress, Porosity, and Abnormal Pressure in the Eugene Island Block 330 Field, GBRN/Pennzoil Technology Conference, Houston, TX.
7. Hart, B.S., Flemings, P.B., Sibley, D., Bishop, B., 1994, Facies Architecture of a Shelf Margin Lowstand Complex, Eugene Island Block 330 Field, Louisiana Offshore, GBRN/Pennzoil Technology Conference, Houston, TX.
8. Rowan, M.G., Weimer, P., Flemings, P.B., 1994, Deformation of an Amalgamated Salt Sheet: Controls on the Structural and Stratigraphic Evolution of the Eugene Island 330 Mini-Basin, GBRN/Pennzoil Technology Conference Houston, TX.
9. Finkbeiner, T., Stump, B.B., Zoback, M.D., Flemings, P.B., 1996, Least Principal Stress, Pore Pressure and Overburden in Plio-Pleistocene Strata of the South Eugene Island 330 Field, Gulf of Mexico, GRI Pressure Compartmentalization Workshop, Stillwater, OK.
10. **Flemings, P.B.**, Hoover, A.R., Burkhart, T.D., Nelson, S.E., 1996, A Case Study of Amplitudes in Drained Pay: The EI-330 LF Sand, 4-D Semi-Annual Consortium Meeting, Houston, TX.
11. **Flemings, P.B.**, Stump, B.B., Karig, D., 1996, Pressure-Porosity Relationships from Field Experimental Data: Towards Predicting Overpressures in Plio-Pleistocene Gulf Coast Strata, GRI Pressure Compartmentalization Workshop, Stillwater, OK.
12. **Flemings, P.B.**, Zoback, M., Stump, B.B., Hicks, P., 1996, Pressure (Pp), Overburden (Sv), and Minimum Principal Stress (Shmin); Understanding Hydrocarbon Migration, GRI Pressure Compartmentalization Workshop, Stillwater, OK.
13. **Flemings, P.B.**, 2004, Overpressure and Fluid Flow Processes in the Deepwater Gulf of Mexico: IODP Proposal #589-Full3, Presentation for the IODP Industrial Liaisons Panel, Houston Texas, February, 2004.
14. **Flemings, P.B.**, Germaine, J., Long, H., Dugan, B., Sawyer, D., Behrmann, J.H., Ludwigs, A., John, C., Shipboard Scientific Party, IODP Expedition 308, 2006, Measuring Temperature and Pressure with the Temperature Two Pressure (T2P) Probe in the Ursa Basin, Gulf of Mexico: Development of

- a New Pressure and Temperature Probe for the IODP, Proceedings of the Offshore Technology Conference, Houston, Texas, May 1-4, 2006, OTC Paper #17957
15. Long, H. **Flemings, P.B.**, Germaine, J.T., Dugan, B., Shipboard Scientific Party, IODP Expedition 308, 2007, In Situ Pore Pressure at IODP Site U1324, Ursa Basin, Gulf of Mexico, Proceedings of the Offshore Technology Conference, Houston, Texas, April 30-May 3, 2007, OTC Paper #18772
  16. Dugan, B., **Flemings, P.B.**, Sawyer, D. Iturrino, G.J., Moore, J.C., Schneider, J., 2007, Physical Properties of Stacked Slumps in the Ursa Region, Northern Gulf of Mexico (IODP Expedition 308) Determined from Log, Core, and Seismic Data, Proceedings of the Offshore Technology Conference, Houston, Texas, April 30-May 3, 2007, OTC Paper #18704
  17. Moore, J.C., Iturrino, G.J., **Flemings, P.B.**, Hull, I., Gay, A., 2007, Fluid Migration and State of Stress above the Blue Unit, Ursa Basin: Relationship to the Geometry of Injectites, Proceedings of the Offshore Technology Conference, Houston, Texas, April 30-May 3, 2007, OTC Paper #18812-PP
  18. Sawyer, D.E., **Flemings, P.B.**, Dugan, B., 2007, Lateral Variations in Core, Log, and Seismic Attributes of a Mass Transport Complex in the Ursa Region, IODP Expedition 308, Northern Gulf of Mexico, Proceedings of the Offshore Technology Conference, Houston, Texas, April 30-May 3, 2007, OTC Paper #19098.

### **Participation in Seminars and Workshops**

- UT GeoFluids Industrial Affiliates Meeting, Austin, Tx. Feb. 2010
- Margins Successor Planning Workshop, San Antonio, Tx. Feb. 2010
- IODP Invest, Bremen, Germany, Sept, 2009
- UKIODP Scientific Ocean Drilling Symposium, London, May 2009 (invited speaker)
- Workshop on Seabed Sediment Pore Pressure: Genesis, Measurement and Implications for Design/Analysis, March 2009, Oslo, Norway (invited speaker).
- SPE / AAPG / SEG Pore Pressure Prediction, Monitoring, and Wellbore Stability Workshop, San Antonio, Texas, February 2009 (member organizing committee)
- PSU GeoFluids Consortium Meeting, Austin, TX, November 2008 (meeting organizer)
- IODP Collaborative Industry Drilling Workshop, Houston, Tx, June 2008
- IODP Engineering Development Panel Meeting, France, January 2008 (Panel Chair)
- PSU GeoFluids Consortium Meeting, Austin, TX, October 2007 (meeting organizer)
- IODP Science Planning Committee Meeting, August 2007, Santa Cruz, Ca, (Presenter)
- IODP GeoHazards Meeting, August, 2007, Portland, Or (Participant)
- IODP Gas Hydrates Observatory Meeting, July 2007, Portland, Or. (Presenter)
- IODP Engineering Development Panel Meeting, Japan, July 2007 (Panel Chair)
- Chevron Hydrocarbon Charge Workshop, April 2007, Houston, Texas (Presenter)
- IODP Science Planning Committee Meeting, March 2007, Osaka Japan, (Presenter)
- IODP Gulf of Mexico Scoping Project Meeting, Feb. 2007, Houston, Tx. (Presenter)
- IODP Engineering Development Panel Meeting, New York, January 2007 (Panel Chair)

PSU GeoFluids Consortium Meeting, Santa Cruz, CA, October 2006 (meeting organizer)

IODP Expedition 308 Post Cruise Science Meeting, Granada, Spain (Presenter)

IODP Science Planning Committee Meeting, August 2006, Bergen, Norway (Presenter)

12<sup>th</sup> German-American Frontiers of Science Symposium, Potsdam, Germany, June 2006 (speaker)

IODP Engineering Development Panel Meeting, Germany, June 2006 (Panel Chair)

IODP Engineering Development Panel Meeting, Japan, January 2006 (Panel Chair)

IODP EPSP Meeting, Honolulu, HI, December 2005 (presenter)

PSU GeoFluids Consortium Meeting, Galveston, TX, September 2005 (meeting organizer)

IODP EDP Panel Meeting, Boston, MA, September 2005 (Panel chair)

ODP Downhole Tools Workshop, Washington, D.C., May 2004 (workshop co-convener)

PSU GeoFluids Consortium Meeting, Santa Barbara, CA, April 2004 (meeting organizer)

JOIDES Pollution Prevention and Safety Panel Meeting, Barcelona, Spain, June 2002 (panel member)

ODP Leg 196 Post-Cruise Science Meeting, Kochi, Japan, May 2002 (invited participant)

PSU GeoFluids Consortium Meeting, Santa Cruz, CA, February 2003 (meeting organizer)

JOIDES Pollution Prevention and Safety Panel Meeting, Miami, FL, December 2001 (panel member)

Capital Hill Earth Science Week, Joint Oceanographic Institutions, House of Representatives, Washington, D.C., October 2001 (invited speaker)

Forum on Cooperation in Scientific Ocean Drilling: Forging Industry and Academic Partnerships, organized by the Industrial Liaison Working Group (an IODP planning group) and hosted by BP Exploration, Sunbury, UK, September. 6-7, 2001 (invited participant)

Deepwater Geohazard Workshop, Del Lago Conference Center in Montgomery, Texas, April 2001 (invited speaker)

PSU GeoFluids Consortium Meeting, Conoco offices, Houston, TX, March 2001 (meeting organizer)

GeoSystems Initiative Bullwinkle Research Seminar, Shell Exploration and Production Company offices, New Orleans, LA, March 2001 (meeting organizer)

Annual Penn State Time-Lapse Seismic Consortium Meeting, Texaco Offices, Briar Park, TX, March 2001 (meeting organizer)

Chevron Pore Pressure Workshop, Chevron Offices, New Orleans, LA, January 2001 (invited speaker, and led a workshop session)

Hubbert Quorum, Palo-Alto, CA, December 2000 (invited speaker)

PSU GeoFluids Consortium Meeting, Bellaire, TX, March 2000 (meeting organizer)

Workshop in GeoFluids of Overpressured Strata in the Gulf of Mexico, Houston, TX, March 2000. Sponsors: JOI-ODP, Conoco. (co-organizer/leader of conference)

PSU GeoFluids Consortium Annual Meeting, Houston, TX, February 1999 (meeting organizer)

GRI Consortium Meeting and Workshop, Houston, TX, June 1998 (meeting organizer)

GRI Pressure Compartmentalization Workshop, Stillwater, OK, November 1996 (invited participant, gave two presentations)

Global Basins Research Network (GBRN) Corporate Affiliates Meeting, Houston, TX, August 1995  
(invited participant, reported on progress in geopressure research)

Workshop on pressure/stress in the Gulf of Mexico, Penzoil Offices, Houston, TX, August 1994  
(organized and led seminar)

International Continental Scientific Drilling (ISCD) Workshop, Potsdam University, Potsdam, Germany,  
August 1993 (invited participant, co-wrote final report)

Sequence Stratigraphy Workshop, Rutgers University, October 1991 (invited participant)

### **Speaking Engagements**

1. Dept. of Petroleum and GeoSystems Engineering, UT, 'The Formation of Methane Hydrates'. November 2008.
2. SPE 2008 Forum on Reservoir Geomechanics, Colorado Springs, Co, June 2008 (invited speaker)
3. European Association of Geoscientists & Engineers Research Workshop, 'Compacting and Stressing Out Shales: from Geological to Production Timescales', Berlin, Germany (invited speaker)
4. Dept. of Earth and Planetary Sciences, University of California, Santa Cruz. April 2008 (JOI Distinguished Lecture)
5. Dept. of Geosciences, Indiana University of Pennsylvania, Indiana, PA. March 2008 (JOI Distinguished Lecture)
6. Geology Dept. University of California, Davis. January 2008 (JOI Distinguished Lecture)
7. Geology Dept. Edinboro University, Edinboro, PA. November 2007 (JOI Distinguished Lecture)
8. Dept. Petroleum Engineering and Dept. of Geosciences, Louisiana State University, November 2007 (JOI Distinguished Lecture)
9. Earth Sciences Dept., University of Maine, Orono, ME. October 2007 (JOI Distinguished Lecture)
10. Geology Dept., Middlebury College, Middlebury, Vt. October 2007 (JOI Distinguished Lecture)
11. Earth Sciences Dept., University of Maine, Orono, ME. October 2007 (JOI Distinguished Lecture)
12. Chevron 2007 Hydrocarbon Charge Evaluation Workshop, Houston, Texas, April 2007 (invited speaker)
13. University of Texas, February 2007 (invited speaker, 2 lectures)
14. Department of Geosciences, Penn State University, Spring 2007 (Geodynamics Seminar)
15. British Petroleum, October 2006, London, (Invited Speaker)
16. 12<sup>th</sup> German-American Frontiers of Science Symposium, Potsdam, Germany, June 2006 (invited speaker)
17. Dept. of Earth Sciences, Dartmouth College, Hanover, NH April 2006 (AAPG Distinguished Lecture)
18. Dept. of Geology, University of Toronto, Toronto, Canada, April 2006 (AAPG Distinguished Lecture)
19. College of Oceanic and Atmospheric Sciences, Marine Geology, and Geophysics Department, Oregon State University, Corvallis, OR April 2006 (AAPG Distinguished Lecture)
20. Dept. of Geological Sciences, University of Oregon, Eugene, OR, April 2006 (AAPG Distinguished Lecture)

21. Dept. of Geology and Geophysics, University of Calgary, Calgary, Canada, April 2006 (AAPG Distinguished Lecture)
22. Department of Geology and Geological Engineering, University of North Dakota, Grand Forks, ND, April 2006 (AAPG Distinguished Lecture)
23. North Dakota Geological Society, Bismarck, ND, March 2006 (AAPG Distinguished Lecture)
24. Montana Geological Society, Billings, MT, March 2006 (AAPG Distinguished Lecture)
25. Department of Geology and Geophysics, University of Wyoming, Laramie, WY, March 2006 (AAPG Distinguished Lecture)
26. Northern California Geological Society, San Ramon, CA, March 2006 (AAPG Distinguished Lecture)
27. Department of Geology and Environmental Sciences, Lafayette College, Feb. 2006 (AAPG Distinguished Lecture)
28. Department of Geosciences, University of South Carolina, Columbia, S.C., October 2004 (departmental seminar)
29. Department of Geosciences, Texas A&M, College Station, TX, October 2003 (departmental seminar)
30. Department of Earth Sciences, Rice University, Houston, TX, April 2003 (departmental seminar)
31. Department of Geosciences, Penn State University, April 2003 (Geosciences Colloquium speaker)
32. JOIDES Pollution Prevention and Safety Panel Meeting, Barcelona, Spain, June 2002 (invited seminar)
33. Department of Civil and Environmental Engineering, MIT, Cambridge, MA, April 2002 (departmental seminar)
34. University of Rhode Island Graduate School of Oceanography, Narragansett, RI, March 2002 (Marine Geology & Geophysics Seminar)
35. Woods Hole Oceanographic Institution, Woods Hole, MA, March 2002 (Geodynamics seminar)
36. University of Edinburgh, Edinburgh, United Kingdom, May 2001 (invited speaker)
37. Pittsburgh Geological Society, Pittsburgh, PA, November 2000 (invited speaker)
38. Cornell University, October 1998 (invited speaker)
39. New Orleans Geologic Society, New Orleans, LA, October 1998 (invited speaker)
40. Department of Geosciences, Penn State University, February 1997 (Geodynamics Seminar)
41. Department of Geosciences, Penn State University, September 1996 (Hydroscience Brown Bag Seminar)
42. Department of Geography and Environmental Engineering, Johns Hopkins University, November 15, 1995 (departmental seminar)
43. Petroleum & Natural Gas 590 Seminar, Penn State University, November 1995 (invited speaker)
44. Society of Petroleum Engineers, Penn State University, February 1995, (invited guest speaker)
45. Department of Geosciences, Penn State University, October 1994 (Hydroscience Brown Bag Seminar)
46. Department of Earth and Planetary Sciences, University of New Mexico, September 1994, (presented two department-wide seminars)



47. Crosby Distinguished Lecturer, M.I.T., January 1994 (presented departmental seminar on geopressure)

### Field Expeditions

1997: ODP Leg 174A---New Jersey Margin (logging scientist)  
 2001: ODP Leg 196---Nankai Accretionary Prism  
 2002: ODP Leg 204---Hydrate Ridge (shore-based scientist)  
 2002: JAMSTEC KRO2-10 Cork Data Recovery Cruise  
 2003: JAMSTEC KRO3 Cork Data Recovery Cruise  
 2005: IODP Expedition 308---Gulf of Mexico Hydrogeology (co-Chief Scientist)  
 2009 IODP Expedition 319, Summer 2009 (Physical Properties Specialist)  
 2010 Pore Pressure Penetrometer Deployment, Boston, June 2010 (1 wk).

### Other Evidence of Research Accomplishments

Interviewed and research featured in article published in *The New York Times*, July 2000.  
 Interviewed and research featured in article published in *The Philadelphia Inquirer*, July 2000.  
 Interviewed and research featured in article published in *USA Today*, July 2000.  
 Interviewed for Discovery Channel program *Science News*, October 2000.  
 Interviewed and research featured in article published in *Penn State Intercom*, November 2000.

### Research Projects, Grants and Contracts

<u>Duration</u>	<u>Title</u>	<u>Source</u>	<u>Amount</u>
<b>Completed:</b>			
1991-1992	Stratigraphic Modeling Program	Chevron Petroleum Technology Company	\$25,000
1991-1992	Forward and Inverse Modeling of Two Cretaceous Foreland Basins: A Cooperative Research Program	National Science Foundation	\$113,313
1992-1993	Upgrades to Lamont's Marine Geo and Geophysics Workstation Network for Analysis, Visualization and Numerical Modeling with Large Datasets	National Science Foundation	\$140,067
1993-1994	Sequence Stratigraphic Interpretation and Stratigraphic Modeling Study of Two Neogene Passive Margins	Columbia Subcontract, American Chemical Society	\$25,091
1993-1995	Dynamic Enhanced Recovery Technologies	Columbia Subcontract, Department of Energy	\$875,546
1994	Global Basins Research Network	Industry Consortium	\$59,500
1994-1995	Flemings	Columbia University	\$1,000
1994-1997	Shell Foundation Faculty Career Initiation Fund	Shell Oil Company Foundation	\$75,000

1995	Simulation of Hydrocarbon Migration in Faulted Systems: Stage One	Exxon Production Research Company	\$20,000
1995-1996	Core Laboratories Fellowship	Core Laboratories	\$33,850
1995-1999	4D Seismic Interpretation of Three Fields in the Gulf of Mexico	Amoco, Chevron, Exxon, Pennzoil, Shell, Texaco, BP, Norsk Hydro, Unocal	\$450,000
1996	Simulation of Hydrocarbon Migration in Faulted Systems: Stage Two	Exxon Production Research Company	\$69,003
1996-1998	Demonstration of Stress Control on Entrapment of Gas in Geopressed Strata with Application to: Exploration (risking seal integrity) and Production (optimizing well bore stability and fracture completion approaches)	Gas Research Institute	\$757,171
1997	USSSP Participant, Leg 174A	Texas A&M Research Foundation, JOI/ODP	\$16,112
1997-1998	Post-Cruise Scientific Research Up-Front Funds	Texas A&M Research Foundation, JOI/ODP	\$3,000
1997-1999	Integrated Analysis of Miocene and Pleistocene Lowstand Wedges	Texas A&M Research Foundation, JOI/ODP	\$19,206
1997-1999	NSF Hydrodynamic	National Science Foundation	\$89,012
1998-2000	Three-Dimensional Characterization and Modeling of Mio-Pliocene Clinoforms, Offshore New Jersey: Depositional Processes, Stratigraphic Architecture, and Lithology Distribution	American Chemical Society, Petroleum Research Fund	\$60,000
1998-2001	GeoFluidsI Consortium	Amerada Hess, Arco/Vaster, BHP Petroleum, Burlington Resources, Chevron, Conoco, Phillips, Shell, Unocal	\$405,000
1998-2001	Petroleum GeoSystems Initiative	Shell Offshore Inc. and The Shell Foundation	\$350,000
1998-2001	Time-Lapse Seismic Consortium	Chevron, Conoco, Statoil, Texaco	\$180,000
2001	USSSP Participant, Leg 196	Texas A&M Research Foundation, JOI/ODP	\$19,186
2000-2002	Overpressure and Fluid Flow in New Jersey Continental Slope: Implications for Slope Stability and Cold Seeps	National Science Foundation	\$108,000
2001-2002	ODP Leg 196 Post-Cruise Science Funds	Texas A&M Research Foundation, JOI/ODP	\$25,594
2001-2004	GeoFluidsII Consortium	Amerada Hess, Anadarko, BP, BHP Petroleum, Burlington Resources,	\$648,000

2004	Downhole Tools in the Integrated Ocean Drilling Program: Goals, Techniques, Needs, and Strategies for Development	Chevron, Conoco, Devon Energy, Pan Canadian, Phillips, Shell, Unocal JOI	\$39,988
2002-2005	Petroleum GeoSystems Initiative	Shell Offshore Inc., The Shell Foundation and ChevronTexaco	\$300,000
9/6/02-7/11/05	ODP Leg 204 Post-Cruise Science: Constraining a soil model for Hydrate Ridge sediments through Triaxial Deformation Experiments, award no. F001698	Texas A&M Research Foundation, JOI/ODP	\$6,600
2005	JOI Cruise – Flemings	Joint Oceanographic Institute	\$65,762
2004-2007	Collaborative Research: Analysis and Development of a New Pressure Probe for the IODP	National Science Foundation	\$199,991
2007	G3: GeoMechanics, GeoFluids, & GeoHazards Initiative Support (with Marone, and Elsworth)	Energy Institute, The Pennsylvania State University	\$55,000
2004-2009	GeoFluidsIII Consortium	Amerada Hess, Anadarko, BP, BHP Petroleum, Chevron, ConocoPhillips, Devon Energy, Encana (withdrew), ExxonMobil, Shell, Unocal (bought by Chevron)	\$1,081,000
2005-2008	JOI Postcruise – Sawyer	Joint Oceanographic Institute	\$23,467
2005-2008	JOI Postcruise – Long	Joint Oceanographic Institute	\$21,353
2005-2008	JOI Postcruise – Flemings	Joint Oceanographic Institute	\$29,011
2006-2008	Overpressure and Slope Stability in the Deepwater Gulf of Mexico	American Chemical Society, Petroleum Research Fund	\$80,000
2007	Overpressure and Slope Stability in the Deepwater Gulf of Mexico	American Chemical Society, Petroleum Research Fund Supplement for Underrepresented Minority Research	\$5,000

**In Progress:**

2008-2010	A motion decoupled hydraulic delivery system for the IODP	Integrated Ocean Drilling Program Management Internationala	\$534,000
2009-2010	UT GeoFluids—Industrial Consortium	Industry	\$513,536
2009-2010	IODP Expedition 319 - NANTROSEIZE Stage 2 Riser/Riserless Observatory aboard the D/V Chikyu	CORE	\$64,386

**Pending:****Submitted**

2006	A new pressure probe deployment system for the IODP	NSF	Not funded
2007	Slope Stability, Gas Venting, and Three Phase Stability in Marine Methane Hydrates	NSF	Not Funded
2008	The Cape Fear Slide: Geomechanics, Timing, and Tsunamogenic Potential of the Largest Submarine Slope Failure on the U.S. Margin (Hornbach-PI)	NSF	Not Funded
2009	Predicting Gas Phase Mobility in Tight Gas Sandstones to Optimize Stimulation	RPSEA in response to RFP2008UN001	Not Funded
2009	The Cape Fear Slide: Geomechanics, Timing, and Tsunamogenic Potential of the Largest Submarine Slope Failure on the U.S. Margin (Hornbach-PI)	NSF	\$~500,000 Not Funded
2009	Failure Caused By Breaching In Subaqueous Sand	NSF	\$ 225,046 Not Funded

## Grants and Contracts for Facility Improvement

<u>Duration</u>	<u>Title</u>	<u>Source</u>	<u>Amount</u>
1997-1999	Applied Geophysical Instructional Facility	Chevron, Conoco, Dupont, Kerr McGee, Shell, Texaco	\$118,000
1997-1999	Applied Geophysical Instructional Facility	IBM	\$303,390
1999-2002	Applied Geophysical Instructional Facility	Conoco	\$52,000
1997-present	Applied Geophysical Instructional Facility	Landmark Graphics Corporation	\$4,713,940
1999-present	Applied Geophysical Instructional Facility	Shell	\$40,000
2000-2001	Geoscience Instrumentation and Facilities	National Science Foundation	\$158,047
2005	Upgrading of Linux Computing Facility for Research in Climate-Change, Glacier Dynamics and Fluid Flow	National Science Foundation	\$44,087

## Student Funding Acquired

<u>Duration</u>	<u>Title</u>	<u>Source</u>	<u>Amount</u>
1996-present	ExxonMobil Fellowship in Quantitative Geosciences	ExxonMobil	\$20,000/yr
1998-2001	Chevron GeoSystems Fellowship	Chevron	\$16,000/yr
1998-2001	Texaco GeoSystems Fellowship	Texaco	\$55,000/yr
1998-2005	Shell GeoSystems Fellowship	Shell	\$60,000/yr
2001-2005	ChevronTexaco GeoSystems Fellowship	ChevronTexaco	\$60,000/yr
2001-2004	Amerada Hess GeoSystems Graduate Scholarship	Amerada Hess	\$10,000/yr
2001-2005	BP Graduate Fellowship	BP	\$15,000/yr
2003-2004	ConocoPhillips GeoPressure Fellowship	ConocoPhillips	\$29,000
2004-present	ConocoPhillips GeoPressure Fellowship	ConocoPhillips	\$20,000/yr
2004-present	ConocoPhillips Graduate Fieldwork Fellowship	ConocoPhillips	\$10,000/yr
2004-2005	Student Fellowship to Xiaoli Liu, Modeling of Hydrate Systems	JOI-USSAC	\$25,000
2005-2006	Newfield Undergraduate and Graduate Fellowships	Newfield	\$2,000
2005-2006	Chevron GeoSystems Fellowship	Chevron	\$15,000
2005-2006	Shell GeoSystems Fellowship	Shell	\$30,000
2005-present	Chevron Undergraduate Diversity Fellowship	Chevron	\$1,000/yr
2005-present	BP Fort Valley State University Fellowship	BP	\$15,000/yr
2005-present	Chevron Fort Valley State University Fellowship	Chevron	\$15,000/yr
2006-present	Devon Energy Fort Valley State University Fellowship	Devon Energy	\$20,000/yr
2006-present	Marathon Oil Fort Valley State University Fellowship	Marathon Oil	\$30,000/yr
2006-present	ExxonMobil Fort Valley State University Fellowship	ExxonMobil	\$25,000/yr
2006-present	Shell Oil Fort Valley State University Fellowship	Shell Oil Company	\$30,000/yr
2006-present	Chevron GeoSystems Fellowship	Chevron	\$30,000/yr

2006-present Shell GeoSystems Fellowship Shell \$60,000/yr

### New Programs Developed

Fall 1999 Petroleum GeoSystems Masters Degree Initiative  
 2006 Geohazards, Geomechanics, and GeoFluids Initiative (with Elsworth, Marone, Saffer)

### New Facilities Developed

Fall 1997 Applied Geophysical Instructional Facility (AGIF)  
 Fall 1998 Industry Projects Office  
 Fall 1998 Petroleum GeoSystems Initiative Office  
 Fall 1998 Petroleum GeoSystems Research Laboratory

### Computer Software Developed

1996-1997 Strata: Basin Modeling Tool  
*see* - Flemings, P.B., and Grotzinger, J.P., 1996, STRATA: Freeware for Solving Classic Stratigraphic Problems. *GSA Today*, vol. 6, no. 12, p. 1-7.  
 1998-present STORMSED1.0  
*see* - Cookman, J., Flemings, P.B., 2001, STORMSED1.0: Hydrodynamics and Sediment Transport in a 2-D Steady-State, Wind- and Wave-Driven, Coastal Circulation Model, *Computers and Geosciences* 27 (6): 647-674.  
 2001-present PSTAR  
 2001-present Overburden Evaluator  
 2001-present PSU-FRAC

## EDUCATIONAL ACTIVITIES

### Supervision of Student Research

#### Graduate Thesis Research (As primary advisor)

Name	Degree Sought	Status
1. Tucker Burkhardt	M.S. (Geosciences)	Completed 1997
2. Anil Deshpande	Ph.D. (Geosciences)	Completed 1997
3. David Gordon	M.S. (Geosciences)	Completed 1997
4. Andrew Hoover	M.S. (Geosciences)	Completed 1997
5. Beth Stump	M.S. (Geosciences)	Completed 1998
6. Janette Cookman	M.S. (Geosciences)	Completed 1999
7. John Metzger	M.S. (Geosciences)	Completed 1999
8. Nathan Kaleta	M.S. (Geosciences)	Completed 2001
9. Jacek Lupa	M.S. (Geosciences)	Completed 2001
10. Alastair Swanston	M.S. (Geosciences)	Completed 2001
11. Kevin Best	M.S. (EGEE)	Completed 2002
12. Joseph Comisky	M.S. (Geosciences)	Completed 2002
13. Brandon Dugan	Ph.D. (Geosciences)	Completed 2003
14. Eric Kuhl	M.S. (EGEE)	Completed 2003
15. Tin Wai Lee	M.S. (Geosciences)	Completed 2003
16. Ben Seldon	M.S. (Geosciences)	Completed 2003
17. Beth Strickland	M.S. (Geosciences)	Completed 2003

18. Aaron Janssen	M.S. (Geosciences)	Completed 2004
19. Xiaoli Liu	Ph.D. (Geosciences)	Completed 2006
20. Chekwube Enunwa	M.S. (Geosciences)	Completed 2005
21. Umüt Gokcesu	M.S. (EGEE)	Completed 2005
22. Derek Sawyer	M.S. (Geosciences)	Completed 2005
23. Joseph Razzano	M.S. (Geosciences)	Completed 2006
24. Asha Ramgulam	M.S. (EGEE)	Completed 2006
25. Louanne Christopher	M.S. (Geosciences)	Completed 2006
26. Hui Long	Ph.D. (EGEE)	Completed 2007
27. Audrey Hucks Sawyer	M.S. (Geosciences)	Completed 2007
28. Doruk Seren	M.S. (EGEE)	Completed 2008
29. Derek Sawyer	Ph.D. (Geosciences UT)	In Progress
30. Julia Schneider	Ph.D. (Geosciences UT)	In Progress
31. Matthew Reilly	M.S. (Geosciences)	Completed 2008
32. Charles Bohn	M.S. (Geosciences)	Completed 2008
33. Joseph Valenti	M.S. (Geosciences)	Completed 2009
34. Hilary Strong	M.S. (Geosciences UT)	Completed 2009 (ExxonMobil)
35. Yao You	Ph.D. (Geosciences UT)	In Progress
46. William Betts	M.S. (U.T.)	In Progress

#### **Graduate Thesis Research (As co-advisor)**

<b>Name</b>	<b>Degree Sought</b>	<b>Status</b>
1. Laurel Alexander	Ph.D. – at MIT	Completed 1995
2. Matt Bennett	M.S. (EGEE)	Completed 1996
3. Jennifer Carlson	Ph.D. – at MIT	Completed 1996
4. Thomas Finkbeiner	Ph.D. (Geosciences)	Completed 1998
5. Dae Sung Lee	M.S. (EGEE)	Completed 2001
6. Victor Siahaan	Ph.D. (EGEE)	Completed 2002
7. Tiancong Hong	M.S. (Geosciences)	Completed 2004
8. Michael Braunscheidel	M.S. (Geosciences)	In Progress

#### **Post-doctoral and Visiting Scholars Supervised**

Matthew VanWie, 5/1999-8/1999 (supported by Flemings)  
Bruce Hart, Post-Doctoral Scientist, 6/1994-6/1996 (supported by Flemings)  
Insun Song, Research Associate, 10/2006-present (Penn State)  
Maria-Katerina Nikolinakou, Post-Doctoral Scientist, 8/2009-present (UT)  
Gang Luo, Post Doctoral Scientist, 8/2009-present (UT)

#### **Membership on Graduate Degree Candidates' Committee**

<b>Name</b>	<b>Degree Sought</b>	<b>Status</b>
1. Mohammed Al-Mugheiry	M.S. (Geosciences)	Completed 1995
2. Wei He	Ph.D. (Geosciences)	Completed 1996
3. David McConaughy	M.S. (Geosciences)	Completed 1997
4. Ruth Robinson	Ph.D. (Geosciences)	Completed 1997
5. Lee Colarusso	M.S. (Geosciences)	Completed 1998
6. Tim White	Ph.D. (Geosciences)	Completed 1999
7. Robert Dias	Ph.D. (Geosciences)	Completed 2000

8. Dimitri Abbado	M.S. (Geosciences)	Completed 2001
9. Ian Brewer	Ph.D. (Geosciences)	Completed 2001
10. Laura Savalli	M.S. (Geosciences)	Completed 2003
11. Nikolai Pedentchouk	M.S. (Geosciences)	Completed 2004
12. Dae Sung Lee	Ph.D. (EGEE)	Completed 2006
13. Douglas Edmunds	M.S. (Geosciences)	Completed 2006
14. Alex McKiernan	Ph.D. (Geosciences)	Completed 2006
15. Kritika Trakoolngam	M.S. (EGEE)	Completed 2006
16. Michael Fitzgerald	M.S. (EGEE)	Completed 2007
17. Kylara Martin	Ph.D.	In Progress

### Undergraduate Thesis Research (As primary advisor)

Name	Degree Sought	Status
1. Matt Bennett	B.S. (Geosciences)	Completed 1994
2. Brent Criswell	B.S. (Geosciences)	Completed 1994
3. Edward Carpanetti	B.S. (Geosciences)	Completed 1995
4. Randy Geis	B.S. (Geosciences)	Completed 1997
5. Ryan Shatt	B.S. (Geosciences)	Completed 1997
6. Patrick Walsh	B.S. (Geosciences)	Completed 1998
7. Joseph Comisky	B.S. (Geosciences)	Completed 1999
8. Kyle Straub	B.S. (Geosciences)	Completed 2002
9. Cody Jones	B.S. (Geosciences)	Completed 2006
10. Josh Dixon	B.S. (Geosciences)	Completed 2007

### Undergraduate Advising (As thesis committee member or co-advisor)

J. Aileo, J. Bona, R. Brennan, E. DeRoos, T. Heil, A. Kondas, T. Lippman, L. Mark, J. Mihalcik, M. Panettieri, D. Pinkus, G. Price, E. Scott, D. Whitmire

### Technical Staff Supervised

John Miley, Systems Administrator, 5/97-3/01 (supported by Geosc. Dept. (75%) and Flemings (25%))  
 James Ashbaugh, Research Assistant, 1/98-8/00 (supported by Flemings)  
 Heather Nelson, Project Assistant, 8/98-present (supported by Flemings)  
 Nancy Levitsky, Staff Assistant, 8/98-1/00 (supported by Geosc. Department (50%) and Flemings (50%))  
 Michael Manes, Research Assistant, 6/99-8/99 (supported by Flemings)  
 Rachel Altemus, Staff Assistant, 5/00-6/03 (supported by Geosc. Dept. (50%) and Flemings (50%))  
 Tom Canich, Systems Administrator, 3/01-9/07 (supported by Geoscience Department (50%), Dr. Ohmoto (25%) and Flemings (25%))  
 Frank Kachurak, Systems Administrator, 4/01-11/03 (supported by Geoscience Department and Dr. Ohmoto, supervised by Flemings)  
 Stefanie McCormick, Staff Assistant, 8/03-4/05 (supported by Geoscience Department (50%) and Flemings (50%))  
 Christina Conley, Systems Administrator, 3/04-11/04 (supported by Geoscience Department and Dr. Ohmoto, supervised by Flemings)



Damian Futrick, Systems Administrator, 11/04-9/07 (supported by Geoscience Department and Dr. Ohmoto, supervised by Flemings)  
 Judi Hite, Staff Assistant, 8/05-10/05 (supported by Geoscience Department (50%) and Flemings (50%))  
 Christie Rosenhoover, Staff Assistant, 2/06-9/07 (supported by Geoscience Department (50%) and Flemings (50%))  
 Insun Song, Post-Doctoral Associate, 4/07-present (supported by Flemings (50%) and Demian Saffer (50%))  
 Ryan Jacoby, Research Assistant, 9/06-5/07 (supported by Flemings)  
 LaMichelle Arnold, Undergraduate Research Assistant, 10/06-9/07 (supported by Flemings (50%) and Geoscience Department (50%))  
 Andrew Peterson, Undergraduate Research Assistant, 5/06-03/07 (supported by Flemings)  
 Mark Andrews, Research Associate, 9/2008-present  
 Kris Darnell, Research Associate, 9/2009-8/2010

### Teaching Honors

- 1996 Received the Pennsylvania State University, College of Earth and Mineral Sciences Matthew J. and Anne C. Wilson Outstanding Teaching Award
- 2003 Received the Pennsylvania State University, College of Earth and Mineral Sciences G. Montgomery and Marion Mitchell Award for Innovative Teaching

### Courses Taught

Semester	Course	Credits	Course Title	Approx. Enrollment
Spring 1994	Geosc 497g	3	Field Stratigraphy (50%)	7
	Geosc 454	3	The Geology of Oil and Gas	13
Fall 1994	Geosc 497b	3	Advanced Stratigraphy	2
Spring 1995	Geosc 454	3	The Geology of Oil and Gas	12
Fall 1995	Geosc 497b	3	Advanced Stratigraphy	10
Spring 1996	Geosc 596a	3	3-D Seismic Processing	3
	Geosc 454	3	The Geology of Oil and Gas	15
Fall 1996	Geosc 497b	3	Advanced Stratigraphy	8
Spring 1997	Geosc 454	3	The Geology of Oil and Gas	21
	Geosc 597d	3	Field Stratigraphy (50%)	10
Fall 1997	Geosc 497k	3	Multichannel Seismic Processing and Interpretation (50%)	13
Spring 1998	Geosc 597d	3	Field Stratigraphy (50%)	4
	Geosc 454	3	The Geology of Oil and Gas	23
Fall 1998	Geosc 497k	3	Multichannel Seismic Processing and Interpretation (50%)	5
	Geosc 497b	3	Advanced Stratigraphy	10

Spring 1999	Geosc 454	3	The Geology of Oil and Gas	17
Fall 1999	Geosc 558	3	Multichannel Seismic Processing and Interpretation (50%)	9
Spring 2000	Geosc 598a	1	Petroleum GeoSystems Seminar	4
	Geosc 454	3	The Geology of Oil and Gas	22
	Geosc 597d	3	Field Stratigraphy (50%)	13
Fall 2000	Geosc 598a	3	Petroleum Geosystems	5
	Geosc 479	3	Advanced Stratigraphy	7
Spring 2001	Geosc 597g	3	Geofluid Mechanics (50%)	7
	Geosc 454	3	The Geology of Oil and Gas	15
Fall 2001	Geosc 598a	3	Petroleum Geosystems (50%)	11
	Geosc 598b	1	Petroleum GeoSystems Seminar	4
	Geosc 598c	3	Geofluids Seminar	8
Spring 2002	Geosc 454	3	The Geology of Oil and Gas (10%)	9
	Geosc 558	3	Multichannel Seismic Processing and Interpretation (10%)	9
Spring 2003	Geosc 479	3	Advanced Stratigraphy	
Fall 2003	Geosc 558	3	Multichannel Seismic Processing and Interpretation (50%)	14
	Geosc 598b	1	Petroleum GeoSystems Seminar	4
Spring 2004	Geosc 454	3	The Geology of Oil and Gas	14
	Geosc 572	3	Field Stratigraphy (50%)	13
	Geosc 597	1	Geofluids Seminar	5
	Geosc 598A	3	Petroleum GeoSystems (50%)	11
Fall 2004	Geosc 479	3	Advanced Stratigraphy (50%)	12
	Geosc 558	3	Multichannel Seismic Processing and Interpretation (50%)	12
Spring 2005	Geosc 454	3	The Geology of Oil and Gas	18
Fall 2005	Geosc 597	1	Geofluids Seminar	7
Spring 2006	Geosc 454	3	The Geology of Oil and Gas	26
	Geosc 572	3	Field Stratigraphy (50%)	12
	Geosc 597I	1	Geofluids Seminar (20%)	8
Fall 2006	Geosc 497	3	Advanced Stratigraphy (50%)	8
	Geosc 558	3	Multichannel Seismic Processing and Interpretation (50%)	8
	Geosc 598A	1	Petroleum GeoSystems Seminar	5
	Geosc 597C	1	GeoFluids/Mudrock Seminar	5
Spring 2007	Geosc 454	3	The Geology of Oil & Gas	26
	Geosc 597K	1	Petroleum GeoSystems Seminar	4
	Geosc 598F	1	G3 Seminar (50%)	5

Fall 2007	Geosc 558	1	Petroleum GeoSystems Seminar	5
Spring 2008	Geo 391	3	Guadalupe Mountain Stratigraphy	12
Fall 2008	Geo 391	1	Earth Surface and Hydro. Seminar	5
Spring 2009	Geo 391	3	Crustal GeoFluids	15
Spring 2009	Geo 391	1	Earth Surface and Hydro. Seminar	6
Fall 2009	Geo 391	1	Earth Surface and Hydro. Seminar	5
Spring 2010	Geo 330K	3	Energy Exploration	130

### **New Courses Developed**

Geosc 572	Field Stratigraphy, Spring 1994, (with Patzkowsky)
Geosc 479	Advanced Stratigraphy, Fall 1994
Geosc 558	Multi-Channel Seismic Processing and Interpretation, Spring 1997
Geosc 598a	Reservoir GeoSystems, Fall 1999
Geosc Special Topics	Geofluids Seminar, Fall 2000
Geosc Special Topics	G3: GeoMechanics, GeoFluids, GeoHazards Seminar, Fall 2005
Geo391	Crustal GeoFluids

### **Established Courses Revised**

Geosc 454	The Geology of Oil and Gas, Spring 1994
Eceem 490	Finance: Applications for Energy and Minerals, Spring 2001
Geo330K	Energy Exploration

### **Field Trips Led:**

Spring 2008: Graduate Student Field trip to Guadalupe Mountains  
Spring 2009: Crustal Fluids Field trip for my graduate course to California.

## SERVICE TO THE UNIVERSITY, PUBLIC AND PROFESSION

### Service to Penn State

#### Service to the Department

1994-1995	Rover, Graduate Student Candidacy Exams
1997	Chair, Search Committee for Hydroscience faculty position
1998-2000	Member, Search Committee for Geodynamics faculty position
1998-2001	Chair, Department Computing Committee
1999	Member, Search Committee for Crustal Geophysics faculty position
2000-2001	Member, Search Committee for Seismology faculty position
2001	Member, Search Committee for Geophysics faculty position
2003-2007	Chair, Department Computing Committee
2003-2004	Member, Executive Committee
2003-2004	Member, Promotion and Tenure Committee
2003-2004	Member, Broad Search Faculty Search Committee

#### Service to the College

1999-2007	Co-Director, Petroleum GeoSystems Initiative
1999-2007	Co-Chair, Petroleum GeoSystems Curriculum Committee
2000	Member, Computing Committee
2003	Chair, Strategic Planning Committee for the Alliance for Earth Sciences, Engineering, and Development in Africa (AESEDA)
2003-2004	Member, AESEDA Leadership Committee
2004-2005	Co-Chair, Deike Basement Renovation Committee

### Service to University of Texas

#### Service to the Department & Jackson School of Geosciences

2009-2009	Member, IT Search Committee (DGS)
2009-2009	Chair, Energy Theme Search Committee (Jackson School)
2007-2009	Member, Energy Theme Search Committee (Jackson School)
2007-2009	Member, Departmental Endowed Position Committee (Dept.)
2008-2009	Member, UTIG Director Search Committee (UTIG)
2008-2009	Chair, Schoch Building Move Committee (DGS)
2008-2009	Chair, Ad Hoc Department Computing Committee (DGS)
2009-present	Member Endowment Committee (Jackson School)
2009	Chair Sed Erg (Jackson School)
2009-present	Member Appointments Comm. (Jackson School)
2009-present	Member: Endowment Comm. (Jackson School)
2009-present	Chair Graduate Studies Comm.

### Service to the Public

#### Service to Business and Industry

1998	Leader, Gas Research Industry Workshop, teaching methods to predict overpressure in sedimentary basins
1995-1998	Co-Director, Lamont-Penn State 4-D Seismic Consortium
1998-2001	Director, Penn State Time-Lapse Seismic Consortium

1998-2001	Director, Penn State GeoFluids Consortium
1999	Participant, Ocean Drilling Program (ODP)-Industry workshop. Mandate: find common scientific problems of interest to both industry and scientific community
1999-present	Manager, GeoFluids and GeoSystems Office
1999-2007	Liaison, Departmental Industry Recruiting Program
2002-2004	Director, GeoFluidsII Consortium
2004-present	Director, GeoFluidsIII Consortium
2009-present	Co-hosted Fort Valley State University undergraduates for U.T. visit (January, 2009)
2008	Visited Fort Valley State University (HBCU) as part of Career Energy Day (March 2008)
2008	Hosted Fort Valley State University undergraduates for U.T. visit (April, 2008)
2009	Director UT GeoFluids Consortium (Annual Meeting hosts ~75 industry specialists)
2010	Director UT GeoFluids Consortium (Annual Meeting hosts ~75 industry specialists)

### **Service to Government Agencies**

2001	Invited Speaker, House of Representatives, Washington, DC, presented poster on ocean drilling in passive margins to understand crustal fluid flow as part of “Earth Science Week”
2010	Informal Advisor to Energy Secretary Stephen Chu’s Science team on the BP Macondo Well.

### **Service to the Profession**

#### **Professional Journal Editorships**

1993-1997	Associate Editor, <i>Journal of Sedimentary Research</i>
1996-present	Associate Editor, <i>Basin Research</i>
2003-present	Associate Editor, <i>Geofluids</i>

#### **Service to Professional Organizations**

1993	Chair, SEPM Finance, mid-year meeting
1997	Logging Scientist, Ocean Drilling Program Cruise, Leg 174A
1997-2000	Member, Scientific Measurements Panel of the Ocean Drilling Program, evaluates and strengthens ability of the JOIDES Resolution to make scientific measurements
1999	Participant, Ocean Drilling Program (ODP)-Industry workshop. Mandate: find common scientific problems of interest to both industry and scientific community
1999	Participant, National Science Foundation Special Sedimentary Geosciences Workshop
1999-2002	Member, JOI Pollution Prevention and Safety Panel, evaluates safety of Ocean Drilling Program sites
2000	Chair, American Association of Petroleum Geologists Session in Geopressure and Trap Integrity
2001	Co-Chair American Geophysical Union Session in Dynamics of Gas Hydrate Reservoirs and Similar Shallow Marine Flow Systems
2001	Logging/CORK Specialist, Ocean Drilling Program Cruise, Leg 196

2001-2002	Member, Interim Science Steering and Evaluation Panel for the Environment, guides the scientific groundwork for International Ocean Drilling Program
2002	ACORK specialist, Ocean Drilling Program data recovery cruise
2003	Shipboard Scientist, JAMSTEC KR03-05 data recovery cruise, Yokohama, Japan, May 2003
2003	Served as Shorebased Scientists for ODP Leg 204
2003-2006	Served as member of the AAPG Research Committee
2004	Convener, Downhole Tools Workshop (JOI-USSAC supported workshop)
2005	Co-Chief Scientist, IODP Expedition 308, Gulf of Mexico Hydrogeology
2005-2008	Chairperson, IODP Engineering Development Panel
2008-	Member Colorado School of Mines Department of Geological Engineering Review Committee
2009-	Member IODP Board of Governors
2010-	Member Science Proposal Writing Committee—Margins
2010-	Vice Chair 1 <sup>st</sup> Research Conference in Gas Hydrates
2010-	Member GeoPrisms Steering Committee

**Proposals Reviewed for:**

American Chemical Society, Department of Energy, Petroleum Research Fund, The National Science Foundation, NSERC