PETER B. FLEMINGS

The University of Texas at Austin
2275 Speedway, Stop C1100
Austin, TX 78712-1677

pflemings@jsg.utexas.edu
512-475-8738

PUBLICATIONS

h-index: 42 (Google Scholar)
i10-index: 146, since 2017: 102 (Google Scholar)

***** indicates graduate student advisee
[+] indicates post-doc advisee or supervised staff
° indicates undergrad advisee
[3] indicates graduate student co-advisee

Books

Flemings, Peter B., 2021, A Concise Guide to Geopressure: Origin, Prediction, and Applications, Cambridge University Press. University Printing House, Cambridge CB2 8BS, United Kingdom, DOI: 10.1017/9781107326309.

Papers in Refereed Journals

1. [+]You, K., **Flemings, P.B**., Bhandari, A.R., Heidari, M., Germaine, J., 2022, The role of creep in geopressure development. Petroleum Geoscience, 28, petgeo 2021-064, https://doi.org/10.1144/petgeo2021-064
2. Zablocki, M., Germaine, J. T., Plumb, R., & **Flemings, P. B.** (2022). The impact of clay fraction on the strength and stress ratio (K0) in Gulf of Mexico mudrocks and quartz silt mixtures: implications for borehole stability and fracture gradient. Petroleum Geoscience, 28(2), petgeo2021-056.
3. Daigle, H., Fang, Y., Phillips, S.C., **Flemings, P. B.,** 2022, Pore structure of sediments from Green Canyon 955 determined by mercury intrusion. AAPG Bulletin, 106 (5), 1051-1069. https://doi.org/10.1306/02262120123
4. [+]Fang, Y., **Flemings, P. B**., Daigle, H., Phillips, S.C., O'Connell, J., 2022, Permeability of methane hydrate-bearing sandy silts in the deepwater Gulf of Mexico (Green Canyon Block 955). AAPG Bulletin, 106 (5), 1071-1100. https://doi.org/10.1306/08102121001
5. [+]Fang, Y., **Flemings, P. B**., Germaine, J.T, Daigle, H., Phillips, S.C., O'Connell, J., 2022, Compression behavior of hydrate-bearing sediments. AAPG Bulletin, 106 (5), 1101-1126. https://doi.org/10.1306/01132221002
6. Phillips, S.C., **Flemings, P. B.,** You, K., Waite, W., 2022, Thermodynamic insights into the production of methane hydrate reservoirs from depressurization of pressure cores. AAPG Bulletin, 106 (5), 1025-1049. https://doi.org/10.1306/08182120216
7. [+]Santra, S., **Flemings, P. B**., Heidari, M., You, K., 2022, Occurrence of high-saturation gas hydrate in a fault-compartmentalized anticline and the role of seal, Green Canyon, abyssal northern Gulf of Mexico. AAPG Bulletin, 106 (5), 981-1003. https://doi.org/10.1306/08182120149
8. Yoneda, J., Jin, Y., Muraoka, M., Oshima, M., Suzuki, K., Waite, W., **Flemings, P. B**., 2022, Comprehensive pressure core analysis for hydrate-bearing sediments from Gulf of Mexico Green Canyon Block 955, including assessments of geomechanical viscous behavior and nuclear magnetic resonance permeability. AAPG Bulletin, 106 (5), 1143-1177. https://doi.org/10.1306/04272120204
9. *Meazell, K., **Flemings, P. B**., 2022, The evolution of seafloor venting from hydrate-sealed gas reservoirs. Earth and Planetary Science Letters. Volume 579, 2022, 117336, ISSN 0012-821X https://doi.org/10.1016/j.epsl.2021.117336.

10. Crutchley, G. J., Mountjoy, J. J., Hillman, J. I. T., Turco, F., Watson, S., **Flemings, P. B**., et al., 2021, Upward-doming zones of gas hydrate and free gas at the bases of gas chimneys, New Zealand's Hikurangi margin. Journal of Geophysical Research: Solid Earth, 126, e2020JB021489. https://doi.org/10.1029/2020JB021489
11. [+]You, K., Summa, L., **Flemings, P. B**., Santra, M., & Fang, Y., 2021, Three-dimensional free gas flow focuses basin-wide microbial methane to concentrated methane hydrate reservoirs in geological system. Journal of Geophysical Research: Solid Earth, 126, e2021JB022793. https://doi.org/10.1029/2021JB022793
12. [+]You, K., **Flemings, P. B.,** 2021, Methane hydrate formation and evolution during sedimentation. Journal of Geophysical Research: Solid Earth, 126, e2020JB021235. https://doi.org/10.1029/2020JB021235
13. *Hooghvorst, JJ, Nikolinakou, MA, Harrold, TWD, Fernandez, O, **Flemings, P.B.,** Marcuello, A., 2021, Geologically constrained evolutionary geomechanical modelling of diapir and basin evolution: A case study from the Tarfaya basin, West African coast. Basin Res.; 33: 2049– 2068. https://doi.org/10.1111/bre.12547
14. +Heidari, M., Nikolinakou, M. A., Hudec, M.R, **Flemings, P.B.**, 2021, Impacts of vertical salt welding on pore pressure, stresses, and deformation near the weld. Marine and Petroleum Geology, 133: 105259. https://doi.org/10.1016/j.marpetgeo.2021.105259
15. +Bhandari, A., **Flemings, P.B**., Hofmann, R., 2021, The dependence of shale permeability on confining stress and pore pressure. Journal of Natural Gas Science and Engineering, 92: 104008. https://doi.org/10.1016/j.jngse.2021.104008
16. Daigle, H., Cook, A., Fang, Y., Bihani, A., Song, W., **Flemings, P. B**., 2020, Gas-driven tensile fracturing in shallow marine sediments. Journal of Geophysical Research: Solid Earth, 125, e2020JB020835. https://doi.org/10.1029/2020JB020835
17. +Heidari, M., Nikolinakou, M. A., & **Flemings, P. B.** ,2020, Modified Cam-Clay Model for Large Stress Ranges and Its Predictions for Geological and Drilling Processes. Journal of Geophysical Research: Solid Earth, 125, e2020JB019500. https://doi.org/10.1029/2020JB019500
18. *Meazell, K.P., **Flemings, P.B.**, Santra, M., Johnson, J.E., 2020, Sedimentology and stratigraphy of a deep-water gas hydrate reservoir in the northern Gulf of Mexico. AAPG Bulletin ; 104 (9): 1945–1969. doi: https://doi.org/10.1306/05212019027
19. [+]Santra, M., **Flemings, P.B.**, Scott, E., Meazell, K.P., 2020, Evolution of gas hydrate–bearing deep-water channel-levee system in abyssal Gulf of Mexico: Levee growth and deformation. AAPG Bulletin ; 104 (9): 1921–1944. https://doi.org/10.1306/04251918177
20. +Thomas, C., Phillips, S.C, **Flemings, P.B.,** Santra, M., Hammon, H., et al., 2020, Pressure coring operations during The University of Texas-Gulf of Mexico 2-1 (UT-GOM2-1) Hydrate Pressure Coring Expedition in Green Canyon Block 955, northern Gulf of Mexico. AAPG Bulletin ; 104 (9): 1877–1901. https://doi.org/10.1306/02262019036
21. Boswell, R., Collett, T.S., Cook, A., **Flemings, P.B.,** 2020, Introduction to Special Issue: Gas Hydrates in Green Canyon Block 955, deep-water Gulf of Mexico: Part I. AAPG Bulletin ; 104 (9): 1843–1846. https://doi.org/10.1306/bltnintro062320
22. [+]Fang, Y., **Flemings, P. B**., Daigle, H., Phillips, S.C, Meazell, K.P., You, K., 2020, Petrophysical properties of the Green Canyon Block 955 hydrate reservoir inferred from reconstituted sediments: Implications for hydrate formation and production. AAPG Bulletin ; 104 (9): 1997-2028. https://doi.org/10.1306/01062019165
23. **Flemings, P. B**., Phillips, S.C., Boswell, R., Collett, T.S., Cook, A., et al., 2020, Pressure coring a Gulf of Mexico deep-water turbidite gas hydrate reservoir: Initial results from The University of Texas–Gulf of Mexico 2-1 (UT-GOM2-1) Hydrate Pressure Coring Expedition. AAPG Bulletin ; 104 (9): 1847–1876. https://doi.org/10.1306/05212019052
24. *Murphy, Z. W., DiCarlo, D. A., **Flemings, P. B**., & Daigle, H., 2020, Hydrate is a nonwetting phase in porous media. Geophysical Research Letters, 47, e2020GL089289. https://doi.org/10.1029/2020GL089289
25. Chen, X.J., Espinoza, D.N., **Flemings, P.B**., Luo, J., Tisato, N., 2020, Pore-Scale Evidence of Ion Exclusion during Methane Hydrate Growth and Evolution of Hydrate Pore-Habit in Sandy Sediments, Marine and Petroleum Geology., Volume.117, 104340 https://doi.org/10.1016/j.marpetgeo.2020.104340

26. Daigle, H., Reece, J. S, **Flemings, P.B.**, 2020, A modified Swanson method to determine permeability from mercury intrusion data in marine muds, Marine and Petroleum Geology, Volume 113, article no. 104155, https://www.sciencedirect.com/science/article/pii/S0264817219306075
27. *Meyer, D.W., **Flemings, P.B.,** You, K., DiCarlo, D., 2020, Gas flow by invasion percolation through the hydrate stability zone, Geophysical Research Letters. https://doi.org/10.1029/2019GL084380
28. +Phillips, S.C., **Flemings, P.B.**, Holland, M.E., Schultheiss, P.J., Waite, W.F., Jang, J., Petrou, E.G., and Hammon, H., 2020. High concentration methane hydrate in a silt reservoir from the deepwater Gulf of Mexico, AAPG Bulletin, doi:10.1306/01062018280
29. *Darnell, K.N., **Flemings, P.B.**, DiCarlo, D., 2019, Nitrogen-Driven Chromatographic Separation During Gas Injection Into Hydrate-Bearing Sediments, Water Resources Research, online. doi:10.1029/2018WR023414
30. Ruarri, J., Day-Stirrat R.J., Bryndzia, L.T., Schleicher, A.M., Adriaens R., Hofmann, R., **Flemings P.B.** 2019, Hydration behavior by X-ray diffraction profile fitting of smectite-bearing minerals in a Plio-Pleistocene mudrock from Eugene Island, Gulf of Mexico; Marine and Petroleum Geology, Volume 102, pages 86-100, https://dx.doi.org/10.1016/j.marpetgeo.2018.12.008.
31. Daigle, H., Reece, J. S., **Flemings, P.B**., 2019, Evolution of the percolation threshold in muds and mudrocks during burial, Geophysical Research Letters., Volume 46, 8064-8073, doi:10.1029/2019GL083723.
32. +You, K., **Flemings, P.B**., Malinverno, A., Collett, T.S., Darnell, K., 2019, Mechanisms of methane hydrate formation in geological systems, Reviews of Geophysics, https://doi.org/10.1029/2018rg000638.
33. +Nikolinakou, M.A., **Flemings, P.B.**, Heidari, M., Hudec, M.R, 2019, Stress and deformation in plastic mudrocks overturning in front of advancing salt sheets; Implications for system kinematics and drilling, Rock Mechanics Rock Engineering. https://doi.org/10.1007/s00603-019-11852-2.
34. +Heidari, M., Nikolinakou, M. A., Hudec, M. R., **Flemings, P. B**., 2019, Influence of a reservoir bed on diapirism and drilling hazards near a salt diapir: a geomechanical approach. Petroleum Geoscience, *25*(3), 282–297. doi: https://doi.org/10.1144/petgeo2018-113.
35. +Phillips, S.C., **Flemings, P.B.**, You, K., Meyer, D.W., Dong, T., 2019, Investigation of in situ salinity and methane hydrate dissociation in coarse-grained sediments by slow, stepwise depressurization, Marine and Petroleum Geology, Volume 109, 2019, Pages 128-144, ISSN 0264-8172, https://doi.org/10.1016/j.marpetgeo.2019.06.015.
36. *Pinkston, F.W., **Flemings, P.B**., 2019, Overpressure at the macondo well and its impact on the deepwater horizon blowout. Scientific Reports (Nature Publisher Group), 9, 1-11. doi:http://dx.doi.org/10.1038/s41598-019-42496-0.
37. [+]Bhandari, A.R., **Flemings, P.B**., Ramiro-Ramirez, S., Hofmann, R., Polito, P.J., 2019, Gas and liquid permeability measurements in Wolfcamp samples, Fuel, Volume 236, Pages 1026-1036, ISSN 0016-2361, https://doi.org/10.1016/j.fuel.2018.09.038.
38. Day-Stirrat R.J., Bryndzia L.T., Schleicher A.M., Adriaens R., Hofmann R., **Flemings P.B.** 2019: Hydration behavior by X-ray diffraction profile fitting of smectite-bearing minerals in a Plio-Pleistocene mudrock from Eugene Island, Gulf of Mexico; Marine and Petroleum Geology; https://dx.doi.org/10.1016/j.marpetgeo.2018.12.008.
39. *Meyer, D.W., **Flemings, P.B**., DiCarlo, D., 2018, Effect of gas flow rate on hydrate formation within the hydrate stability zone, Journal of Geophysical Research: Solid Earth, 123, 6263–6276. https://doi.org/10.1029/2018JB015878.
40. Nole, M., Daigle, H., Cook, A.E., Malinverno, A., and **Flemings, P.B**., Burial-driven methane recycling in marine gas hydrate systems, Earth and Planetary Science Letters, Volume 499, pp. 197-204, October 2018.
41. [+]You, K., **Flemings, P.B**., 2018. Methane hydrate formation in thick sandstones by free gas flow, Journal of Geophysical Research: Solid Earth, 123, 4582–4600. https://doi.org/10.1029/2018JB015683.
42. [+] Nikolinakou, M.A., **Flemings, P.B.**, Heidari, M., Hudec, M.R, 2018, Stress and Pore Pressure in Mudrocks Bounding Salt Systems, Rock Mechanics Rock Engineering. https://doi.org/10.1007/s00603-018-1540-z.
43. *Gao, B., **Flemings, P.B.**, Nikolinakou, M.A., Saffer, D.M., Heidari, M., 2018, Mechanics of fold-and-thrust belts based on geomechanical modeling, Journal of Geophysical Research: Solid Earth, 123, 4454–4474. https://doi.org/10.1029/2018JB015434.
44. *Meyer, D.W., **Flemings, P.B.**, DiCarlo, D., You, K., Phillips, S.C., Kneafsey, T.J., 2018, Experimental investigation of gas flow and hydrate formation within the hydrate stability zone, Journal of Geophysical Research: Solid Earth, https://doi.org/10.1029/2018JB015748.

45. +Heidari, M., Nikolinakou, M.A., **Flemings, P.B.**, 2018 , Coupling geomechanical modeling with seismic pressure prediction, Geophysics, 83(5), B253-B267. https://doi.org/10.1190/geo2017-0359.1.
46. +Nikolinakou M.A., Heidari M., **Flemings, P.B**., Hudec M.R., 2018, Geomechanical modeling of pore pressure in evolving salt systems, Marine and Petroleum Geology, 93:272-286, doi:https://doi.org/10.1016/j.marpetgeo.2018.03.013.
47. [+]Bhandari, A.R., **Flemings, P.B.**, Hofmann, R., and Polito, P.J., 2018, Stress-dependent In-situ Gas Permeability in the Eagle Ford Shale: Transport in Porous Media. doi: 10.1007/s11242-018-1021-6.
48. **Flemings, P.B**., Saffer, D.M., 2018, Pressure and Stress Prediction in the Nankai Accretionary Prism: A Critical State Soil Mechanics Porosity-based approach, Journal of Geophysical Research, doi:10.1002/2017JB015025.
49. [+]You, K., **Flemings, P.B.**, 2018, Methane hydrate formation in thick sand reservoirs: 1. Short-range methane diffusion, Marine and Petroleum Geology, 89, 428-442, doi:http://dx.doi.org/10.1016/j.marpetgeo.2017.10.011.
50. Deirieh, A., Cook, Chang, I.Y., Whittaker, M.L., Weigand, S., Keane, D., Rix, J., Germaine, J.T., Joester, D., **Flemings, P.B.**, 2018, Particle arrangements in clay slurries: The case against the honeycomb structure, Applied Clay Science, doi:http://dx.doi.org /10.1016/j.clay.2017.11.010.
51. Hillman, J.I.T., Cook, A., Daigle, H., Nole, M., Malinverno, A., Meazell, K., **Flemings, P.B.**, 2017, Gas hydrate reservoirs and gas migration mechanisms in the Terrebonne Basin, Gulf of Mexico, Marine and Petroleum Geology, 86, 1357-1373, doi:http://dx.doi.org /10.1016/j.marpetgeo.2017.07.029.
52. [+]Luo, G., Hudec, M.R., **Flemings, P.B.**, [+]Nikolinakou, M.A., 2017, Deformation, stress, and pore pressure in an evolving supra-salt basin, Journal of Geophysical Research: Solid Earth, 122, doi:10.1002/2016JB013779.
53. *Darnell, K.N., **Flemings, P.B.**, DiCarlo, D., 2017, Subsurface injection of combustion power plant effluent as a solid-phase carbon dioxide storage strategy, Geophysical Research Letters., Volume 44, 5521-5530, doi:10.1002/2017Gl073663.
54. [+]Nikolinakou, M.A., [+]Heidari, M., Hudec, M.R., **Flemings, P.B.**, 2017, Initiation and growth of salt diapirs in tectonically stable settings: upbuilding and megaflaps, American Association of Petroleum Geologists Bulletin, V. 101, No. 6 (June 2017), pp. 887-905, doi:10.1306/09021615245.
55. *Gao, B., **Flemings, P.B.**, 2017, Pore pressure within dipping reservoirs in overpressured basins, Marine and Petroleum Geology, 80, 94-111, doi:http://dx.doi.org/10.1016/j.marpetgeo.2016.11.014.
56. Casey, B., Germaine, J.T., **Flemings, P.B.**, Fahy, B.P., 2016, In situ stress state and strength in mudrocks, Journal of Geophysical Research: Solid Earth, 121, doi:10.1002/2016JB012855.
57. [+]Heidari, M., [+]Nikolinakou, M.A., Hudec, M. R., **Flemings, P.B.**, 2016, Geomechanical analysis of a welding salt layer and its effects on adjacent sediments, Tectonophysics, v. 683, p. 172-181, doi:10.1016/j.tecto.2016.06.027.
58. Adams, A.L., Nordquist, T.J., Germaine, J.T., and **Flemings, P.B.**, 2016, Permeability Anisotropy and Resistivity Anisotropy of Mechanically Compressed Mudrocks, Canadian Geotechnical Journal, doi:10.1139/cgj-2015-0596.
59. *Cronin, M., **Flemings, P.B.**, [+]Bhandari, A., 2016, Dual-permeability microstratigraphy in the Barnett Shale, Journal of Petroleum Science and Engineering, Vol. 142, pp. 119-128, doi:10.1016/j.petrol.2016.02.003.
60. [+]You, K., DiCarlo, D., **Flemings, P.B.**, 2016, Impact of gravity on hydrate saturation in gas-rich environments, Water Resour. Res., Vol. 52, pp. 1265-1285, doi:10.1002/2015WR017975.
61. [+]Heidari, M., [+]Nikolinakou, M.A., **Flemings, P.B.**, Hudec, M.R., 2016, A simplified stress analysis of rising salt domes, Basin Research, doi:10.1111/bre.12181.
62. [+]Nikolinakou, M.A., **Flemings, P.B.**, Hudec, M.R, 2016, Modeling of shales in salt-hydrocarbon systems, Rock Mechanics Rock Engineering, v. 49, p. 699–705, doi 10.1007/s00603-015-0863-2.
63. *Darnell, K.N., **Flemings, P.B.**, 2015, Transient seafloor venting on continental slopes from warming-induced methane hydrate dissociation, Geophysical Research Letters, Vol. 42, 10,765–10,772, doi:10.1002/2015GL067012.
64. [+]You, K., DiCarlo, D., **Flemings, P.B.**, 2015, Quantifying hydrate solidification front advancing using method of characteristics, Journal of Geophysical Research: Solid Earth, 120, 6681-6697, doi: 10.1002/2015JB011985.

65. [+]Bhandari, A., **Flemings, P.B.**, [+]Polito, P.J., *Cronin, M.B., Bryant, S.L., 2015, Anisotropy and Stress Dependence of Permeability in the Barnett Shale, Transport in Porous Media, Vol. 108, Issue 2, pp 393-411, DOI 10.1007/s11242-015-0482-0.
66. Casey, B., Germaine, J.T., **Flemings, P.B.**, Fahy, B.P., 2015, Estimating Horizontal Stresses for Mudrocks under One-dimensional Compression, Marine and Petroleum Geology, 178-186, doi:10.1016/j.marpetgeo.2015.02.001.
67. **Flemings, P.B.**, Reece, J.S., Ditkof, J., Atkins, C.C., Sawyer, D., 2015, Data Report: Particle Size Analysis of Sediments in the Nankai Trough, IODP Expedition 319 Site C0009A. In Saffer, D., McNeill, L., Byrne, T., Araki, E., Toczko, S., Eguchi, N., Takahashi, K., and the Expedition 319 Scientists, Proc. IODP, 319: Tokyo (Integrated Ocean Drilling Program Management International, Inc.), doi:10.2204/iodp.proc.319.203.2015.
68. [+]You, K., Kneafsey, T.J., **Flemings, P.B.**, [+]Polito, P.J., Bryant, S.L., 2015, Salinity-Buffered Methane Hydrate Formation and Dissociation in Gas-Rich Systems, J. of Geophys. Res. Solid Earth, 120, 643-661, doi: 10.1002/2014JB011190.
69. Luo, G., **Flemings, P.B.**, Hudec, M.R., [+]Nikolinakou, M.A., 2015, The role of pore fluid overpressure in the substrates of advancing salt sheets, ice glaciers and critical-state wedges, Journal of Geophysical Research, DOI: 10.1002/2014JB011326.
70. *Merrell, M.P., **Flemings, P.B.**, Bowers, G.L., 2014, Subsalt Pressure Prediction in the Miocene Mad Dog Field, Gulf of Mexico, AAPG Bulletin, v. 98, no. 2, p. 315-340, doi:10.1306/06251312156.
71. [+]Nikolinakou, M.A., **Flemings, P.B.**, Hudec, M.R., 2014, Modeling stress evolution around a rising salt diapir, Marine and Petroleum Geology, v. 51, p. 230-238, doi: http://dx.doi.org/10.1016/j.marpetgeo.2013.11.021.
72. [+]Nikolinakou, M.A., Hudec, M.R., **Flemings, P.B.**, 2014, Comparison of evolutionary and static modeling of stresses around a salt diapir, Marine and Petroleum Geology, v. 57, no. 0, p. 537-545., 10.1016/j.marpetgeo.2014.07.002.
73. *Smith, A. J., **Flemings, P.B.**, Fulton, P. M., 2014, Hydrocarbon flux from natural deepwater Gulf of Mexico vents: Earth and Planetary Science Letters, v. 395, no. 0, p. 241-253, doi:10.1016/j.epsl.2014.03.055.
74. Smith, A. J., **Flemings, P.B.**, Liu, X., and Darnell, K., 2014, The evolution of methane vents that pierce the hydrate stability zone in the world's oceans: Journal of Geophysical Research: Solid Earth, DOI: 10.1002/2013JB010686.
75. *You, Y., **Flemings, P.B.**, and Mohrig, D., 2014, Mechanics of dual-mode dilative failure in subaqueous sediment deposits: Earth and Planetary Science Letters, v. 397, no. 0, p. 10-18, doi: 10.1016/j.epsl.2014.04.024.
76. *You, Y., **Flemings, P.B.**, Mohrig, D. and Germaine, J.T., 2014, How heterogeneity in the shear dilation of a deposit controls the mechanics of breaching slope failure, J. Geophys. Res. Earth Surf., 119, 2381–2395, doi:10.1002/2013JF002983.
77. Adams, A.L., Germaine, J.T., **Flemings, P.B.**, and Day-Stirrat, R.J., 2013, Stress induced permeability anisotropy of resedimented Boston Blue Clay, Water Resources Research, p. 11, doi: 10.1002/wrcr.20470.
78. Casey, B., Germaine, J.T., **Flemings, P.B.**, *[+]Reece, J.S., *Gao, B., *Betts, W., 2013, Liquid limit as a predictor of mudrock permeability, Marine and Petroleum Geology, v. 44, p. 256-263, doi: http://dx.doi.org/10.1016/j.marpetgeo.2013.04.008.
79. Day-Stirrat, R.J., **Flemings, P.B.**, *You, Y., and van der Pluijm, B.A., 2013, Modification of mudstone fabric and pore structure as a result of slope failure: Ursa Basin, Gulf of Mexico, Marine Geology, doi: http://dx.doi.org/10.1016/j.margeo.2013.05.003.
80. **Flemings, P.B.**, Polito, P.J., Pettigrew, T.L., Iturrino, G.J., Meissner, E., Aduddell, R., Brooks, D., Hetmaniak, C., Huey, D., Germaine, J.T., and IODP Expedition 342 Scientists, 2013, The Motion Decoupled Delivery System: A new deployment system for downhole tools is tested at Site U1402, New Jersey Margin, Scientific Drilling, v. 15, doi:10.2204/iodp.sd.15.07.2013.
81. Saffer, D.M., **Flemings, P.B.**, Boutt, D., Doan, M.L., Ito, T., McNeill, L., Byrne, T., Conin, M., Lin, W., Kano, Y., Araki, E., Eguchi, N., and Toczko, S., 2013, In Situ Stress and Pore Pressure in the Kumano Forearc Basin, offshore SW Honshu from Down-hole Measurements During Riser Drilling: Geochemistry, Geophysics, Geosystems, v. 14, p. 1454-1470, published May 2013.

82. *Sawyer, D.E, **Flemings, P.B.**, and [+]Nikolinakou, M., 2013, Continuous deep-seated slope failure recycles sediments and limits levee height in submarine channels, Geology, doi: 10.1130/g34870.1.
83. Boutt, D.F., Saffer, D., Doan, M., Lin, W., Ito, T., Kano, Y., **Flemings, P.B.**, McNeill, L.C., Byrne, T., Hayman, N.W., Moe, K.T., 2012, Scale dependence of in-situ permeability measurements in the Nankai accretionary prism: The role of fractures, Geophysical Research Letters, v. 39, p. L07302, doi: 10.1029/2012gl051216.
84. Day-Stirrat, R.J., **Flemings, P.B.**, *You, Y., Aplin, A.C., and van der Pluijm, B.A., 2012, The fabric of cosolidation in Gulf of Mexico mudstones, Marine Geology, v. 295–298, p. 77-85, doi: 10.1016/j.margeo.2011.12.003.
85. Foroozan, R., Elsworth, D., **Flemings, P.B.**, Bilotti, F., and Muhuri, S., 2012, The role of permeability evolution in fault zones on the structural and hydro-mechanical characteristics of shortening basins, Marine and Petroleum Geology, v. 29, p. 143-151, doi: 10.1016/j.marpetgeo.2011.08.007.
86. Hickman, S.H., Hsieh, P.A., Mooney, W.D., Enomoto, C.B., Nelson, P.H., Mayer, L.A., Weber, T.C., Moran, K, **Flemings, P.B.**, McNutt, M.K., 2012, Scientific basis for safely shutting in the Macondo Well after the April 20, 2010 Deepwater Horizon blowout, Proceedings of the National Academy of Sciences of the United States of America, v. 3, p. 3.
87. [+]Luo, G., [+]Nikolinakou, M.A., **Flemings, P.B.**, and Hudec, M.R., 2012a, Geomechanical modeling of stresses adjacent to salt bodies: Part 1 - Uncoupled models, American Association of Petroleum Geologists Bulletin, v. 96, p. 43-64.
88. [+]Luo, G., [+]Nikolinakou, M.A., **Flemings, P.B.**, and Hudec, M.R., 2012b, Near-salt stress and wellbore stability: A finite-element study and its application, American Rock Mechanics Association, v. 12-309, p. 9.
89. [+]Nikolinakou, M.A., [+]Luo, G., Hudec, M.R., and **Flemings, P.B.**, 2012, Geomechanical modeling of stresses adjacent to salt bodies: Part 2 Poroelastoplasticity and coupled overpressures, American Association of Petroleum Geologists Bulletin, v. 96, p. 65-85.
90. *[+]Reece, J.S., **Flemings, P.B.**, *Dugan, B., *Long, H., and Germaine, J.T., 2012, Permeability-porosity relationships of shallow mudstones in the Ursa Basin, Northern Deepwater Gulf of Mexico, Journal of Geophysical Research, doi: 10.1029/2012JB009438, 2012.
91. *Sawyer, D.E., **Flemings, P.B.**, Buttles, J., and Mohrig, D., 2012, Mudflow transport behavior and deposit morphology: Role of shear stress to yield strength ratio in subaqueous experiments, Marine Geology, v. 307–310, p. 28-39, doi: 10.1016/j.margeo.2012.01.009.
92. Thu, M.K., Ito, T., Lin, W., Doan, M.L., Boutt, D., Kawamura, Y., Khong, C.K., McNeill, L., Byrne, T., Saffer, D., Araki, E., Eguchi, N., Sawada, I., **Flemings, P.B.**, Kano, Y., Moore, C., Kinoshita, M., Tobin, H., 2012, Operational Review of the First Wireline In Situ Stress Test in Scientific Ocean Drilling, Scientific Drilling, v. 13, p. 35-39, doi: 10.2204/iodp.sd.13.06.2011.
93. *You, Y., **Flemings, P.B.**, and Mohrig, D., 2012, Dynamics of dilative slope failure, Geology, v. 40, p. 663-666, doi: 10.1130/g32855.1
94. Day-Stirrat, R.J., Schleicher, A., *Schneider, J., **Flemings, P.B.**, Germaine, J.T., and van der Pluijm, B., 2011, Preferred orientation of phyllosilicates: Effects of composition and stress on resedimented mudstone microfabrics, Journal of Structural Geology, v. 33, p. 1347-1358, doi: doi: 10.1016/j.jsg.2011.06.007.
95. *Liu, X.L., and **Flemings, P.B.**, 2011, Capillary effects on hydrate stability in marine sediments, Journal of Geophysical Research-Solid Earth, v. 116, doi: 10.1029/2010jb008143.
96. *Long, H., **Flemings, P.B.**, Germaine, J., and Saffer, D., 2011, Consolidation and overpressure near the seafloor in the Ursa Basin, Deepwater Gulf of Mexico, Earth and Planetary Science Letters, v. 305, p. 11-20, doi: 10.1016/j.epsl.2011.02.007.
97. Moore, J., Urgeles, R., Conin, M., **Flemings, P.B.**, and Iturrino, G., 2011, Threshold of borehole failure: Breaking in before breaking out, Mississippi fan, Gulf of Mexico, Geosphere, v. 7, p. 684-693, doi: 10.1130/ges00613.1.
98. *Schneider, J., **Flemings, P.B.**, Day-Stirrat, R.J., and Germaine, J.T., 2011, Insights into pore-scale controls on mudstone permeability through resedimentation experiments, Geology, v. 39, p. 1011-1014, doi: 10.1130/G32475.1.
99. [+]Song, I., Saffer, D.M., and **Flemings, P.B.**, 2011, Mechanical characterization of slope sediments: Constraints on in situ stress and pore pressure near the tip of the megasplay fault in the Nankai accretionary complex, Geochemistry Geophysics Geosystems, v. 12, doi: 10.1029/2011gc003556.

100. Huuse, M., Jackson, C., Rensbergen, P., Davies, R.J., **Flemings, P.B.**, Dixon, R.J., 2010, Subsurface sediment remobilization and fluid flow in sedimentary basins: an overview, Basin Research, v. 22, p. 342-360, doi: 10.1111/j.1365-2117.2010.00488.x.
101. Huuse, M., Jackson, C., Rensbergen, P., Davies, R.J., **Flemings, P.B.**, Dixon, R.J., 2010, Subsurface sediment remobilization and fluid flow in sedimentary basins: preface, Basin Research, August 2010, V. 22, p. 341, doi:10.1111/j.1365-2117.2010.00487.x.
102. Lin, W., Doan, M., Moore, J.C., McNeill, L., Byrne, T.B., Ito, T., Saffer, D., Conin, M., Kinoshita, M., Sanada, Y., Moe, K.T., Araki, E., Tobin, H., Boutt, D., Kano, Y., Hayman, N.W., **Flemings, P.B.**, Huftile, G.J., Cukur, D., Buret, C., Schleicher, A.M., Efimenko, N., Kawabata, K., Buchs, D.M., Jiang, S., Kameo, K., Horiguchi, K., Wiersberg, T., Kopf, A., Kitada, K. Eguchi, N., Toczko, S., Takahashi, K., Kido, Y., 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, Geophysical Research Letters, v. 37, p. L13303, doi: 10.1029/2010gl043158.
103. *Reilly, M.J., and **Flemings, P.B.**, 2010, Deep pore pressures and seafloor venting in the Auger Basin, Gulf of Mexico, Basin Research, v. 22, p. 380-397, doi: 10.1111/j.1365-2117.2010.00481.x
104. *Liu, X., and **Flemings, P.B.**, 2009, Dynamic response of oceanic hydrates to sea level drop, Geophys. Res. Lett., v. 36, p. L17308, doi: 10.1029/2009gl039821.
105. *Sawyer, D.E., **Flemings, P.B.**, *Dugan, B., and Germaine, J.T., 2009 Retrogressive failures recorded in mass transport deposits in the Ursa Basin, Northern Gulf of Mexico, Journal of Geophysical Research, v. 114, doi: 10.1029/2008JB006159.
106. *Schneider, J., **Flemings, P.B.**, *Dugan, B., *Long, H., and Germaine, J.T., 2009, Overpressure and consolidation near the seafloor of Brazos-Trinity Basin IV, northwest deepwater Gulf of Mexico, Journal of Geophysical Research-Solid Earth, v. 114, doi: 10.1029/2008jb005922.
107. **Flemings, P.B.**, et al., 2008a, 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" (vol 269, pg 309, 2008), Earth and Planetary Science Letters, v. 274, p. 269-283, doi: 10.1016/j.epsl.2008.06.027.
108. **Flemings, P.B.**, et al., 2008b, 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, v. 269, p. 309-325, doi: 10.1016/j.epsl.2007.12.005.
109. *Sawyer, A.H., **Flemings, P.B.**, Elsworth, D., and Kinoshita, M., 2008, Response of submarine hydrologic monitoring instruments to formation pressure changes: Theory and application to Nankai advanced CORKs, J. Geophys. Res., v. 113, p. B01102, doi: 10.1029/2007jb005132.
110. *Liu, X.L., and **Flemings, P.B.**, 2007, Dynamic multiphase flow model of hydrate formation in marine sediments, Journal of Geophysical Research-Solid Earth, v. 112, doi: 10.1029/2005jb004227.
111. *Long, H., **Flemings, P.B.**, and Germaine, J.T., 2007, Interpreting in situ pressure and hydraulic properties with borehole penetrometers in ocean drilling: DVTPP and Piezoprobe deployments at southern Hydrate Ridge, offshore Oregon, J. Geophys. Res., v. 112, p. B04101, doi: 10.1029/2005jb004165.
112. *Sawyer, D.E., **Flemings, P.B.**, Shipp, C., and Winker, C., 2007, Seismic Geomorphology, Lithology, and Evolution of the Late Pleistocene Mars-Ursa Turbidite Region, Mississippi Canyon Area, Northern Gulf of Mexico, American Association of Petroleum Geologists Bulletin, v. 91, p. 215-234.
113. Behrmann, J.H., **Flemings, P.B.**, John, C.M., and Scientists, E., 2006, Rapid Sedimentation, Overpressure and Focused Fluid Flow, Gulf of Mexico continental margin, Scientific Drilling, Scientific Drilling, v. 3, p. 12-17, doi: 10.2204/iodp.sd.3.03.2006.
114. *Liu, X., and **Flemings, P.B.**, 2006, Passing gas through the hydrate stability zone at southern Hydrate Ridge, offshore Oregon, Earth and Planetary Science Letters, v. 241, p. 211-226, doi: 10.1016/j.epsl.2005.10.026.
115. Prather, B.E., Pirmez, C., O'Byrne, C. J., Winker, C., Mallarino, G., Droxler, A.W., **Flemings, P.B.**, Behrmann, J., John, C., Shipboard Scientific Party, 2006, Stratigraphic Evolution of Linked Basins within the Brazos-Trinity Slope System: Western Gulf of Mexico, Gulf Coast Association of Geological Societies Transactions, v. 56, p. 699-699.
116. *Enunwa, C.I., Razzano, J.L., III, Ramgulam, A., **Flemings, P.B.**, Ertekin, T., Karpyn, Z.T., 2005, Tahoe Field Case Study—Understanding Reservoir Compartmentalization in a Channel-Levee System: Gulf Coast Association of Geological Societies Transactions, v. 55, p. 152-162

117. *Seldon, B., and **Flemings, P.B.**, 2005, Reservoir pressure and seafloor venting: Predicting trap integrity in a Gulf of Mexico deepwater turbidite minibasin, AAPG Bulletin, v. 89, p. 193-209, doi: 10.1306/09170403122.
118. **Flemings, P.B.**, and *Lupa, J., 2004, Pressure Prediction in the Bullwinkle Basin through Petrophysics and Flow Modeling (Green Canyon 65, Gulf of Mexico), Marine and Petroleum Geology, v. 21, p. 1311-1322.
119. Janik, A., Goldberg, D, Moos, D, Sheridan, J, **Flemings, P.B.**, Germaine, J, Tan, B, 2004, Constraints on the strength of the gas hydrate-rich sediments from borehole breakouts–implications for slope stability near Hydrate Ridge on the US continental margin offshore Oregon, AAPG Bulletin, v. 88.
120. Trehu, A.M., **Flemings, P.B.**, Bangs, N.L., Chevallier, J., Gràcia, E., Johnson, J.E., Liu, C.S., *Liu, X., Riedel, M., Torres, M.E., 2004, Feeding methane vents and gas hydrate deposits at south Hydrate Ridge, Geophysical Research Letters, v. 31, doi: 10.1029/2004gl021286.
121. *Dugan, B., **Flemings, P.B.**, Olgaard, D.L., and Gooch, M.J., 2003, Consolidation, effective stress, and fluid pressure of sediments from ODP Site 1073, US mid-Atlantic continental slope, Earth and Planetary Science Letters, v. 215, p. 13-26.
122. **Flemings, P.B.**, *Liu, X.L., and Winters, W.J., 2003, Critical pressure and multiphase flow in Blake Ridge gas hydrates, Geology, v. 31, p. 1057-1060.
123. Mikada, H., et al., 2003, Hydrogeological and geothermal studies around Nankai trough (Nankai trough cruise report), , JAMSTEC J. Deep Sea Res, v. 22, p. 125 - 171.
124. *Swanston, A.M., **Flemings, P.B.**, *°Comisky, J.T., and *Best, K.D., 2003, Time-lapse imaging at Bullwinkle Field, Green Canyon 65, offshore Gulf of Mexico, Geophysics, v. 68, p. 1470-1484, doi: 10.1190/1.1620620.
125. *Yuvancic-Strickland, B., et al., 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.
126. *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, v. 2, p. 137-146.
127. **Flemings, P.B.**, *Stump, B.B., [3]Finkbeiner, T., and Zoback, M., 2002, Flow focusing in overpressured sandstones: Theory, observations, and applications, American Journal of Science, v. 302, p. 827-855, doi: 10.2475/ajs.302.10.827.
128. *Liu, X., and **Flemings, P.B.**, 2002, Stress-limited gas column height in the gas hydrate system of Blake Ridge, Proceeding of the Fourth International Conference on Gas Hydrate, v. 2, p. 807-812.
129. *Lupa, J., **Flemings, P.B.**, and Tennant, S., 2002, Pressure and trap integrity in the deepwater Gulf of Mexico, The Leading Edge, v. 21, p. 184-187.
130. *Cookman, J.L., and **Flemings, P.B.**, 2001, STORMSED1.0: hydrodynamics and sediment transport in a 2-D, steady-state, wind- and wave-driven coastal circulation model, Computers & Geosciences, v. 27, p. 647-674.
131. [3]Finkbeiner, T., Zoback, M., *Stump, B.B., and **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, p. 1007-1031.
132. *Burkhart, T., *Hoover, A.R., and **Flemings, P.B.**, 2000, Time-lapse (4-D) seismic monitoring of primary production of turbidite reservoirs at South Timbalier Block 295, offshore Louisiana, Gulf of Mexico, Geophysics, v. 65, p. 351-367.
133. *Dugan, B., and **Flemings, P.B.**, 2000a, The New Jersey margin: Compaction and fluid flow, Journal of Geochemical Exploration, v. 69, p. 477-481.
134. *Dugan, B., and **Flemings, P.B.**, 2000b, Overpressure and fluid flow in the New Jersey Continental Slope: implications for slope failure and cold seeps, Science, v. 289, p. 288-291.
135. *Metzger, J.M., et al., 2000, Late Miocene to Pleistocene sequences at the New Jersey outer continental shelf (ODP Leg 174A, Sites 1071 and 1072), Sedimentary Geology, v. 134, p. 149-180.
136. *Stump, B.B., and **Flemings, P.B.**, 2000, Overpressure and fluid flow in dipping structures of the offshore Gulf of Mexico (EI 330 field), Journal of Geochemical Exploration, v. 69, p. 23-28.

137. *Gordon, D.S., and **Flemings, P.B.**, 1999, Two-dimensional Modeling of Groundwater Flow in an Evolving Deltaic Environment, NES/SEPM Special Publication, v. 62, p. 301-312.
138. *Hoover, A.R., *Burkhart, T., and **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, p. 1624-1641.
139. Austin, JA, Christie-Blick, N, Malone, MJ, Berne, S, Borre, Mk, Claypool, G, Damuth, J, Delius, H, Dickens, G, **Flemings, P.B.**, 1998, Continuing the New Jersey Mid-Atlantic sea-level transect: Covering leg 174A of the cruises of the drilling vessel joides resolution, Halifax, Nova Scotia, to New York, New York, sites 1071-1073, 15 June-19 July 1997, Proceedings of the Ocean Drilling Program. Initial reports, v. 174, p. 1-324.
140. *Gordon, D.S., and **Flemings, P.B.**, 1998, Generation of overpressure and compaction-driven fluid flow in a Plio-Pleistocene growth-faulted basin, Eugene Island 330, offshore Louisiana, Basin Research, v. 10, p. 177-196, doi: 10.1046/j.1365-2117.1998.00052.
141. Poulsen, C.J., **Flemings, P.B.**, Robinson, R.A.J., and *Metzger, J.N., 1998, Three-dimensional stratigraphic evolution of the miocene Baltimore Canyon region: Implications for eustatic interpretations and the systems tract model, Geological Society of America Bulletin, v. 110, p. 1105-1122.
142. Rowan, M.G., [+]Hart, B.S., Nelson, S., **Flemings, P.B.**, and 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 and Petroleum Geology, v. 15, p. 309-328.
143. Deshpande, A., **Flemings, P.B.**, and Huang, J., 1997, Quantifying lateral heterogeneities in fluvio-deltaic sediments using three-dimensional reflection seismic data: Offshore Gulf of Mexico, Journal of Geophysical Research-Solid Earth, v. 102, p. 15,385-15,401.
144. [+]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, offshore Louisiana, AAPG Bulletin, v. 81, p. 380-397.
145. **Flemings, P.B.**, and Grotzinger, J.P., 1996, STRATA: Freeware for Solving Classic Stratigraphic Problems, GSA Today, v. 6, p. 1-7.
146. [+]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., Davis, T., and Louisiana, F., eds., AAPG Studies in Geology/SEG Geophysical Development Series Volume 42/5, p. 21-26.
147. Jordan, T.E., et al., 1996, Development of the Miocene Manantiales foreland basin, Principal Cordillera, San Juan, Argentina, Revista Geologica De Chile, v. 23, p. 43-79.
148. Rowan, M.G., Villamil, T., **Flemings, P.B.**, and Weimer, P., 1996, Use of cross-section restoration to determine paleobathymetry and sea-floor paleotopography in the Gulf of Mexico basin, Geology, v. 24, p. 299-302.
149. [3]Alexander, L.L., and **Flemings, P.B.**, 1995, Geologic Evolution of a Pliocene-Pleistocene Salt-Withdrawal Minibasin - Eugene-Island Block-330, Offshore Louisiana, AAPG Bulletin, v. 79, p. 1737-1756.
150. [+]Hart, B.S., **Flemings, P.B.**, and *Deshpande, A., 1995, Porosity and Pressure - Role of Compaction Disequilibrium in the Development of Geopressures in a Gulf-Coast Pleistocene Basin, Geology, v. 23, p. 45-48.
151. Anderson, R.N., et al., 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, p. 97-104.
152. Rothman, D.H., Grotzinger, J.P., and **Flemings, P.B.**, 1994, Scaling in Turbidite Deposition - Reply, Journal of Sedimentary Research Section a-Sedimentary Petrology and Processes, v. 64, p. 934-934.
153. 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.
154. Greenlee, S.M., Devlin, W.J., Miller, K.G., Mountain, G.S., and **Flemings, P.B.**, 1992, Integrated Sequence Stratigraphy of Neogene Deposits, New-Jersey Continental-Shelf and Slope - Comparison with the Exxon Model, Geological Society of America Bulletin, v. 104, p. 1403-1411.

155. **Flemings, P.B.**, and Nelson, S.N., 1991, Paleogeography of the Paleocene Wind River Basin, The Mountain Geologist, v. 28, p. 37-52.
156. Jordan, T.E., and **Flemings, P.B.**, 1991, Large-Scale Stratigraphic Architecture, Eustatic Variation, and Unsteady Tectonism - a Theoretical Evaluation, Journal of Geophysical Research-Solid Earth and Planets, v. 96, p. 6681-6699.
157. **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.
158. 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.
159. **Flemings, P.B.**, and Jordan, T.E., 1989, A Synthetic Stratigraphic Model of Foreland Basin Development, Journal of Geophysical Research-Solid Earth and Planets, v. 94, p. 3851-3866.

Book Chapters

1. *Bohn, C.W., **Flemings, P.B.,** and Slingerland, R.L., 2012, Accommodation Change During Bypass Across a Late-Stage Fan in the Shallow Auger Basin, *in* Prather, B.E., Deptuck, M.E., Mohrig, D., Hoorn, B.V., and Wynn, R.B., eds., Application of the Principles of Seismic Geomorphology to Continental-Slope and Base-of-Slope Systems: Case Studies from Seafloor and Near-Seafloor Analogues, Volume 99, SEPM (Society for Sedimentary Geology), p. 225-242, doi: 10.2110/pec.12.99.0225.
2. Urgeles, R., **Flemings, P.B.**, et al., 2010, 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., and Urgeles, R., eds., Submarine Mass Movements and Their Consequences, Volume 28: Advances in Natural and Technological Hazards Research: Dordrecht (The Netherlands), Spinger, p. 179-190, doi: 10.1007/978-90-481-3071-9_15.
3. *Dugan, B., and **Flemings, P.B.,** 2003, Measuring pore pressure in marine sediments with penetrometers: comparison of the piezoprobe and DVTP-P tools in ODP Leg 204, *in* Thompson, B.J., ed., Research Papers of the Link Foundation Fellows, Volume 3: Rochester, New York, The University of Rochester Press in Association with The Link Foundation p. 179-199. Research Papers of the Link Foundation Fellows
4. *Stump, B.B., **Flemings, P.B.,** Feinbeiner, T., and Zoback, M.D., 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., eds., Overpressures in Petroleum Exploration, Memoire 22, Elf EP Editions, p. 83-92.
5. **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* Thomas A. Mazza, C., and Richard C. Johnson, C., eds., Stratigraphic Analysis Utilizing Advanced Geophysical, Wireline and Borehole Technology for Petroleum Exploration and Production: 17th Annual, Volume 17, Society of Economic Paleontologists and Mineralogists, p. 99-109, doi: 10.5724/gcs.96.17.0099.
6. Jordan, T.E., and **Flemings, P.B.,** 1990, From Geodynamic Models to Basin Fill -- A Stratigraphic Perspective, *in* Cross, T., ed., Quantitative Dynamic Stratigraphy: New Jersey, Prentice Hall, Inc., p. 149-163.
7. Jordan, T.E., and **Flemings, P.B.,** 1988, Dating Thrust Fault Activity by Use of Foreland Basin Strata, *in* Kleinspehn, K., and Paola, C., eds., New Perspectives in Basin Analysis: New York, Springer-Verlag, p. 307-330.

Non-refereed Publications

1. **Flemings, P.B.**, and the IODP Expedition 308 Scientific Party, 2005, Expedition information: Expedition 308 Gulf of Mexico hydrogeology, JOI News, v. Fall/Winter 2005, p. 8-9.
2. **Flemings, P.B.**, Huffman, A.R., Bruce, R., Benoit, J., and Mayne, P., 2000, Geofluids of Passive Margins: At the Interface of the Practical and the Fundamental, JOI/USSAC Newsletter v. 13, p. 10-11.
3. Bishop, B., Wolfe, J., and **Flemings, P.B.**, 1994, Landmark Workstation on Offshore Rig Guides Drilling Decisions, UserNet: The Technical Newsletter for Landmark Users, p. 1-5.

4. Billeaud, L.B., Anderson, R.N., Flemings, P.B., and 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, p. 17-22.
5. Flemings, P.B., and Nelson, S.N., 1991, Paleogeographic evolution of the latest Cretaceous and Paleocene Wind River basin, The Mountain Geologist, v. 28, p. 37-52.

Conference Papers

1. Smith, L., Savage, A., Flemings, P. B., Colwell, F. S., Mikucki, J., & You, K. , May 16, 2022, Too Much Pressure: Effect of Sediment Compaction on Microbial Viability, 2022 Astrobiology Science Conference. AGU. Atlanta, GA
2. Cardona, A, Fang, Y, O'Connell, J, Flemings, P.B., Dec. 13-17, 2021, Validation of hydro-geomechanical properties in high pressure triaxial device for hydrate-bearing core analysis, AGU 2021 Fall Meeting, New Orleans, LA and virtual, 13-17 December 2021
3. Ramiro-Ramirez, S., Flemings, P. B., Bhandari, A.R., 2021, Sept. 21-23. Steady-State Liquid Permeability Measurements in Samples from the Bakken Formation, Williston Basin, USA., 2021 SPE Annual Technical Conference and Exhibition, Dubai, UAE, Sept. 21-23
4. Heidari, M., Nikolinakou, M. A., Flemings, P. B., & Hudec, M. R., 2021, June 18. Prediction of Pore Pressure and the Full Stress Tensor From Seismic Velocity Around a 3D Salt Dome in the Gulf of Mexico. 55th U.S. Rock Mechanics/Geomechanics Symposium, Virtual, 18-25 June 2021.
5. Nikolinakou, M. A., Heidari, M., Flemings, P. B., & Hudec, M. R., 2019, August 28. Geomechanical Modeling of Sediment Stress-Level Dependency With Application to a Salt System. 53rd U.S. Rock Mechanics Association/Geomechanics Symposium, New York City, NY, 23-26 June 2019.
6. Heidari, M., Nikolinakou, M. A., Flemings, P. B., & Hudec, M. R., 2019, August 28. Impacts of Stress-Level Dependency of Mudrock Mechanical Behavior on the Pore Pressure and Structural Style of Critical Tapers. 53rd U.S. Rock Mechanics Association/Geomechanics Symposium, New York City, NY, 23-26 June 2019.
7. Nikolinakou, M.A., Heidari, M., Hudec, M.R., Flemings, P.B., 2018, August 21. Geomechanical Modeling of Stress and Deformation Associated With Salt-Sheet Advance. American Rock Mechanics Association.
8. Heidari, M., Nikolinakou, M.A., Flemings, P., Hudec, M., 2018. Enhancing Modified Cam-Clay model for large stress range. ARMA 18–0790, 52nd U.S. Rock Mechanics/Geomechanics Symposium, Seattle, WA, 17-20 June 2018.
9. Flemings, P.B., Boswell, R., Collett, T. Cook, A., Divins, D, Frye, M., Guerin, G., Goldberg, D., Malinverno, A., Meazell, K., Morisson, J., Pettigrew, T., Philips, S., Santra, M., Sawyer, D.E., Shedd, W., Thomas, C. You, K., 2017, GOM2: Prospecting, Drilling and Sampling Coarse-Grained Hydrate Reservoirs in the Deepwater Gulf of Mexico, 9th International Conference on Gas Hydrates. Denver.
10. Nikolinakou, M.A., Heidari, M., Flemings, P.B., 2017, Pore-Pressure Prediction Beneath Salt Sheets, Presented at *51st US Rock Mechanics / Geomechanics Symposium*: San Francisco, CA, 25-27 June.
11. You, K., Flemings, P.B., 2016, Methane Hydrate Formation in Thick Sand Reservoirs: Long-range Gas Transport or Short-range Methane Diffusion?, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
12. You, K., Flemings, P.B., DiCarlo, D., 2016, Quantifying Hydrate Formation in Gas-rich Environments Using the Method of Characteristics, *Gordon Research Conference*, Galveston, TX, Feb 28 – Mar 4.
13. Phillips, S.C., You, K., Borgfeldt, T., Meyer, D.W., Dong, T., Flemings, P.B., 2016, Dissociation of Laboratory-Synthesized Methane Hydrate in Coarse-Grained Sediments by Slow Depressurization, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
14. Nikolinakou, M.A., Heidari, M., Hudec, M.R., Flemings, P.B., 2016, Stress, deformation and failure associated with salt-sheet emplacement, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
15. Nikolinakou, M.A., Heidari, M., Flemings, P.B., Hudec, M.R., 2016, Coupling flow and deformation in evolving salt basins, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
16. Nikolinakou, M.A., Heidari, M., Flemings, P.B., 2016, Pore-pressure prediction based on seismic velocities coupled with geomechanical modeling, *50th US Rock Mechanics/Geomechanics Symposium*, Houston, Texas, USA, 26-29 June.

17. Meyer, D.W., You, K., Phillips, S., Flemings, P.B., DiCarlo, D., and Kneafsey, T., 2016, Methane hydrate formation in a saturated, coarse-grained sample through the induction of a propagating gas front, *Gordon Research Conference*, Feb 28 – Mar 4, Galveston, TX, United States.
18. Meazell, K., Flemings, P.B., 2016, Heat Flux and Fluid Flow in the Terrebonne Basin, Northern Gulf of Mexico, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
19. Meazell, K., Flemings, P.B., 2016, New insights into hydrate-bearing clastic sediments in the Terrebonne basin, northern Gulf of Mexico, *Gordon Research Conference*, Feb 28 – Mar 4, Galveston, TX, United States.
20. Lockhart, L.P., Flemings, P.B., Nikolinakou, M.A., Heidari, M., 2016, Pressure prediction in non-uniaxial settings based on field data and geomechanical modeling: a well example, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
21. Heidari, M., Peel, F., Nikolinakou, M.A., Hudec, M. R., Flemings, P.B., 2016, Sealing capacity of salt beneath a translating minibasin: the effect of base-salt geometry, *Applied Geodynamics Laboratory Industrial Associates Annual Review Meeting*, Austin, Texas, 10-11 Nov.
22. Heidari, M., Nikolinakou, M.A., Hudec, M. R., Flemings, P.B., 2016, Subsalt overpressure evolution during shortening: deformation, failure and rubble zones, *Applied Geodynamics Laboratory Industrial Associates Annual Review Meeting*, Austin, Texas, 10-11 Nov.
23. Heidari, M., Nikolinakou, M.A., Hudec, M. R., Flemings, P.B., 2016, Pore pressure and stresses around a salt diapir during its vertical welding, *Applied Geodynamics Laboratory Industrial Associates Annual Review Meeting*, Austin, Texas, 10-11 Nov.
24. Heidari, M., Nikolinakou, M.A., Flemings, P.B., 2016, A critical state model for mudrock behavior at high stress levels, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
25. Heidari, M., Nikolinakou M.A., Hudec, M. R., and Flemings, P.B., 2016, Geomechanical impacts of a welding salt layer on adjacent sediments, *50th US Rock Mechanics/Geomechanics Symposium*, Houston, Texas, USA, 26-29 June.
26. Gao, B., Flemings, P.B., Saffer, D., Nikolinakou, M.A., Heidari, M., 2016, Mechanics of Fold-and-Thrust Belt Systems Based on Geomechanical Modeling, *Subduction Zone Observatory Workshop*, Boise, Idaho, 29 Sept – 1 Oct.
27. Gao, B., Flemings, P.B., Saffer, D., Nikolinakou, M.A., Heidari, M., 2016, Mechanics of Fold-and-Thrust Belt Systems Based on Geomechanical Modeling, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec
28. Gao, B., Flemings, P.B., Nikolinakou, M.A., 2016, Stress and porosity in fold-and-thrust belt systems, *50th US Rock Mechanics/Geomechanics Symposium*, Houston, Texas, USA, 26-29 June.
29. Flemings, P.B., Saffer, D.M., 2016, Critically Tapered Wedges and Critical State Soil Mechanics: Porosity-based Pressure Prediction in the Nankai Accretionary Prism, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
30. Flemings, P.B., Ellis, S.M., Saffer, D.M., Ge, S., 2016, Models and Experiments that couple flow and deformation in the shallow crust, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
31. Darnell, K., Flemings, P.B., DiCarlo, D.A., 2016, Nitrogen-assisted Three-phase Equilibrium in Hydrate Systems Composed of Water, Methane, Carbon Dioxide, and Nitrogen, *AGU Annual Meeting*, San Francisco, Calif., 12-16 Dec.
32. You, K., Flemings, P.B., DiCarlo, D., 2015, Quantifying Hydrate Formation in Gas-rich Environments Using the Method of Characteristics, *AGU Annual Meeting*, San Francisco, Calif., 14-18 Dec.
33. Meyer, D., You, K., Borgfeldt, T., Flemings, P.B., DiCarlo, D., Kneafsey, T., 2015, Methane Hydrate Formation in a Saturated, Coarse-Grained Sample through the Induction of a Propagating Gas Front, *AGU Annual Meeting*, San Francisco, Calif., 14- 18 Dec.
34. Meazell, K., Flemings, P.B., 2015, Methane hydrate-bearing sediments in the Terrebonne basin, northern Gulf of Mexico, *AGU Annual Meeting*, San Francisco, Calif., 14-18 Dec.
35. Darnell, K., Flemings, P.B., 2015, Simulations of Carbon Dioxide Storage and Methane Production from Guest Molecule Exchange of Hydrates Using Reactive Transport Modeling and Gibbs Energy Minimization, *AGU Annual Meeting*, San Francisco, Calif., 14-18 Dec.
36. Borgfeldt, T., Flemings, P.B., Meyer, D., You, K., 2015, Experimental Dissociation of Methane Hydrates Through Depressurization, *AGU Annual Meeting*, San Francisco, Calif., 14-18 Dec.
37. *Meyer, D., **Flemings, P.B.**, 2014, Thermodynamic State of Hydrate-Bearing Sediments on Continental Margins around the World, Presented at *2014 Offshore Technology Conference*, Houston, TX, 5-8 May.

38. *Meyer, D.W. and **Flemings, P.B.**, 2014, Thermodynamic Stability of Gas Hydrates in the Krishna-Godavari Basin Inferred From Well Log Analysis, *2014 Offshore Technology Conference*: Houston, TX, U.S.A., p. 9, May 5-8.
39. [+]Nikolinakou, M.A., and **Flemings, P.B.**, 2013, Pore Pressure and Stress around Dipping Structures, *in* Hellmich, C., Pichler, B., and Adam, D., eds., *Poromechanics V: Proceedings of the Fifth Biot Conference on Poromechanics*: Vienna, Austria, American Society of Civil Engineers, p. 452-461, July 10-12, 2013, doi: doi:10.1061/9780784412992.054.
40. [+]Nikolinakou, M.A., Merrell, M., Luo, G., **Flemings, P.B.**, and Hudec, M.R., 2013, Geomechanical modeling of the Mad Dog salt, Gulf of Mexico, *47th US Rock Mechanics / Geomechanics Symposium*: San Francisco, CA, 23-26 June.
41. [+]Nikolinakou, M.A., and **Flemings, P.B.**, 2012, Stress changes at the crest of dipping structures, *46th US Rock Mechanics/Geomechanics Symposium*: Chicago, Paper # 254, June 24-27.
42. [+]Luo, G., [+]Nikolinakou, M.A., Hudec, M., and **Flemings, P.B.**, 2012, Near-salt stress and wellbore stability: A finite-element study and its application, *46th U.S. Rock Mechanics/Geomechanics Symposium*: Chicago, Paper # 309, June 24-27.
43. [+]Nikolinakou, M.A., [+]Luo, G., Hudec, M.R., and **Flemings, P.B.**, 2011 Geomechanical modeling of stresses and pore pressures in mudstones adjacent to salt bodies, *Proceedings of the 45th US Rock Mechanics/Geomechanics Symposium*: San Francisco, CA, p. 8, June 26 - 29.
44. *Smith, A.J., **Flemings, P.B.**, and Fulton, P.M., 2011, Observations and Models of Heat and Salt Generation in Deepwater Gulf of Mexico Vents, *Proceedings of the 7th International Conference on Gas Hydrates*: Edinburgh, Scotland, United Kingdom, p. 639 - 651, July 17 - 21.
45. Foroozan, R., Elsworth, D., **Flemings, P.B.**, Bilotti, F., and Muhuri, S., 2010, Controls of Permeability On the Mechanical Evolution of Shortening Basins, *44th US Rock Mechanics Symposium and 5th US-Canada Rock Mechanics Symposium*: Salt Lake City, Utah, June 27 - 30, 2010.
46. Urgeles, R., et al., 2009, History of Pore Pressure Build Up and Slope Instability in Mud-Dominated Sediments of Ursa Basin, Gulf of Mexico Continental Slope, presented at: *4th Int. Symposium on Submarine Mass Movements and Their Consequences*, Abstracts Book, pp. 26, Austin (TX), USA.
47. *Dugan, B., et al., 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, *2007 Offshore Technology Conference*, Volume OTC 17597: Houston, TX, April 30-May 3, 2007, OTC Paper #18704.
48. Iturrino, G.J., *Dugan, B.E., *Sawyer, D., **Flemings, P.B.**, and Moore, J.C., 2007, Interpretation of Downhole Measurements, Deformation Analyses, and Lithologic Characterization in the Ursa Basin, Gulf of Mexico, *Offshore Technology Conference*: Houston, Texas, 30 April-3 May 2007, 10.4043/19097-MS.
49. *Long, H., et al., 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.
50. Moore, J.C., Iturrino, G.J., **Flemings, P.B.**, Hull, I., and Gay, A., 2007, Fluid Migration and State of Stress Above the Blue Unit, Ursa Basin: Relationship to the Geometry of Injectites, *Offshore Technology Conference* Houston, Texas, 30 April-3 May 2007, DOI: 10.4043/18812-MS.
51. *Ramgulam, A., Ertekin, T., and **Flemings, P.B.**, 2007, Utilization of Artificial Neural Networks in the Optimization of History Matching, , *Latin American & Caribbean Petroleum Engineering Conference*: Buenos Aires, Argentina, Society of Petroleum Engineers April 15-18, 2007, 10.2118/107468-MS.
52. *Sawyer, D.E., **Flemings, P.B.**, *Dugan, B., and 308, S.S.I.E., 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, *Offshore Technology Conference* Houston, Texas, 30 April-3 May 2007, DOI: 10.4043/19098-MS.
53. **Flemings, P.B.**, et al., 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.
54. Elsworth, D., [3]Lee, D.S., *Long, H., and **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.

55. **Flemings, P.B.**, *°Comisky, J.T., *Liu, X., and *Lupa, J., 2001, Stress-Controlled Porosity in Overpressured Sands at Bullwinkle (GC65), Deepwater Gulf of Mexico, *Proceedings of the Offshore Technology Conference*: Houston, Texas, 30 April-3 May 2001, DOI: 10.4043/13103-MS.
56. [3]Finkbeiner, T., Zoback, M.D., *Stump, B.B., and **Flemings, P.B.**, 1998, In situ stress, pore pressure and hydrocarbon migration the South Eugene Island field, Gulf of Mexico, *in* Mitchell, A., and Grauls, D., eds., *Overpressures in petroleum exploration workshop proceedings*: Pau, France, p. 103-110, Memoire 22, Elf EP-Editions.
57. **Flemings, P.B.**, [3]Siahaan, V., Hicks, P.J., and *Stump, B.B., 1998, Secondary migration via fracture permeability in shales: illuminating the relationship between pressure and column height, *in* Mitchell, A., and Grauls, D., eds., *Overpressures in petroleum exploration workshop proceedings*: Pau, France, p. 111-116, Memoire 22, Elf EP-Editions.
58. *Stump, B.B., **Flemings, P.B.**, Ashbaugh, J., and [3°]Bennett, M.H., 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* Mitchell, A., and Grauls, D., ed., *Overpressures in petroleum exploration workshop proceedings*: Pau, France, p. 83-92, Memoire 22, Elf EP-Editions.
59. Anderson, R.N., et al., 1997, 4D time-lapse monitoring in the South Timbalier 295 Field, Gulf of Mexico, *Offshore Technology Conference*: Houston, Texas, 5 May-8 May 1997, DOI: 10.4043/8312-MS.

In-House Publications

1. **Flemings, P.B.**, 2007, 2006-2007 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
2. **Flemings, P.B.**, 2006, 2005-2006 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
3. **Flemings, P.B.**, 2005, 2004-2005 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
4. **Flemings, P.B.**, 2004, 2003-2004 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
5. **Flemings, P.B.**, 2003, 2002-2003 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
6. **Flemings, P.B.**, 2002, 2001-2002 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
7. **Flemings, P.B.**, 2001, 2000-2001 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
8. **Flemings, P.B.**, 2000, 1999-2000 Industrial Support, Penn State University, Department of Geosciences Report on Fellowships and Scholarships
9. **Flemings, P.B.**, and Anandakrishnan, S., 1997, New Geoscience Class Prepares Students for Oil Industry Careers, *Earth & Mineral Sciences Bulletin*
10. Anderson, R.N., et al., 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*
11. **Flemings, P.B.**, 1995, Elvis Oil Wins Penn State Gulf of Mexico Lease Sale, *EMS Bulletin*
12. **Flemings, P.B.**, Zoback, M., Bishop, B., and Anderson, R.N., 1995, State of Stress in the Pathfinder Well, *GBRN Data Volume 1994*
13. [+]Hart, B.S., *Deshpande, A., and **Flemings, P.B.**, 1995, Formation Pressures in the Pathfinder Well, *GBRN Data Volume 1994*
14. Anderson, R.N., et al., 1991, Sedimentary Basins as Thermo-chemical Reactors, *The Lamont-Doherty Geological Observatory 1991 Report*, p. 68-76

Reports

1. **Flemings, P.B.,** Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, 2018. UT-GOM2-1 Hydrate Pressure Coring Expedition Hole GC 955 H002. In Flemings, P.B., Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, Proceedings of the UT-GOM2-1 Hydrate Pressure Coring Expedition: Austin, TX (University of Texas Institute for Geophysics, TX). https://dx.doi.org/10.2172/1648313

2. **Flemings, P.B**., Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, Proceedings of the UT-GOM2-1 Hydrate Pressure Coring Expedition, Austin, TX (University of Texas Institute for Geophysics, TX), https://dx.doi.org/10.2172/1646019
3. **Flemings, P.B.**., Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, 2018. UT-GOM2-1 Hydrate Pressure Coring Expedition Summary. In Flemings, P.B., Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, Proceedings of the UT-GOM2-1 Hydrate Pressure Coring Expedition, Austin, TX (University of Texas Institute for Geophysics, TX). https://dx.doi.org/10.2172/1647223.
4. **Flemings, P.B.**, Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, 2018. UT-GOM2-1 Hydrate Pressure Coring Expedition Methods. In Flemings, P.B., Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, Proceedings of the UT-GOM2-1 Hydrate Pressure Coring Expedition: Austin, TX (University of Texas Institute for Geophysics, TX). https://dx.doi.org/10.2172/1647226
5. **Flemings, P.B.**, Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, 2018. UT-GOM2-1 Hydrate Pressure Coring Expedition Hole GC 955 H005. In Flemings, P.B., Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, Proceedings of the UT-GOM2-1 Hydrate Pressure Coring Expedition: Austin, TX (University of Texas Institute for Geophysics, TX). https://dx.doi.org/10.2172/1648318
6. **Flemings, P.B**., Phillips, S.C, Collett, T., Cook, A., Boswell, R., and the UT-GOM2-1 Expedition Scientists, 2018, UT-GOM2-1 Hydrate Pressure Coring Expedition Report: Austin, TX, University of Texas Institute for Geophysics, Online
7. **Flemings, P.B**., Germaine, J.T., Nikolinakou, M.A., Heidari, M., Deirieh, A., Gao, B., Ge, C., Lockhart, L., Parry, A., Picardo, N., Pinkston, F. W. M., Ranjpour, D., Zablocki, M., 2017, UT GeoFluids annual report to Industrial Associates for 2019: slide set 10, The University of Texas at Austin, Institute for Geophysics, annual report prepared for Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Pemex, Repsol, Shell, Statoil, (21 presentations/13 posters), Online
8. **Flemings, P.B**., Germaine, J.T., Nikolinakou, M.A., Heidari, M., Deirieh, A., Gao, B., Ge, C., Lockhart, L., Parry, A., Picardo, N., Pinkston, F. W. M., Ranjpour, D., Zablocki, M., 2017, UT GeoFluids annual report to Industrial Associates for 2018: slide set 9, The University of Texas at Austin, Institute for Geophysics, annual report prepared for Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Pemex, Repsol, Shell, Statoil, (21 presentations/13 posters), Online
9. **Flemings, P.B**., Germaine, J.T., Nikolinakou, M.A., Heidari, M., Deirieh, A., Gao, B., Ge, C., Guiltinan, E., Hanley, A.J., Lockhart, L., Parry, A., Picardo, N., Pinkston, F. W. M., Ranjpour, D., Zablocki, M., 2017, UT GeoFluids annual report to Industrial Associates for 2017: slide set 8, The University of Texas at Austin, Institute for Geophysics, annual report prepared for Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Pemex, Repsol, Shell, Statoil, (21 presentations/13 posters), Online
10. **Flemings, P.B.**, Germaine, J.T., Day-Stirrat, R., Deirieh, A., Gao, B., Ge, C., Hanley, A., Harrold, T., Heidari, M., Lockhart, L., Marjanovic, J., , Nikolinakou, M., Nordquist, T., Pinkston, W., Polito, P., Ranjpour, D., Worman, S., 2016, UT GeoFluids annual report to Industrial Associates for 2016: slide set 7, The University of Texas at Austin, Institute for Geophysics, annual report prepared for *Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Murphy Oil, Repsol, Shell, Statoil,* (22 presentations/11 posters), Online
11. **Flemings, P.B.**, Germaine, J.T., Casey, B., Darnell, K., Deirieh, A., Gao, B., Ge, C., Harrold, T., Hauser, M.R., Heidari, M., Marjanovic, J., Meyer, D., Nikolinakou, M., Nordquist, T., Parker, J., Polito, P., Sanford, J., You, K., 2015, UT GeoFluids annual report to Industrial Associates for 2015: slide set 6, The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for *Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Murphy Oil, Repsol, Schlumberger, Shell, Statoil, Total* (24 presentations/9 posters), Online
12. **Flemings, P.B.**, Germaine, J.T., Adams, A., Casey, B., Cronin, M., Darnell, K., Deirieh, A., Fahy, B., Gao, B., Ge, C., Hauser, M.R., Heidari, M., Luo, G., Marjanovic, J., Meyer, D., Nikolinakou, M., Nordquist, T., Sanford, J., You, Y., 2014, UT GeoFluids annual report to Industrial Associates for 2014: slide set 5,The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for *Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Schlumberger, Shell, Statoil, Total* (24 presentations), Online

13. **Flemings, P.B.**, Germaine, J.T., Adams, A., Alberty, M., Betts, W., Bhandari, A.R., Casey, B., Coleff, D., Deirieh, A., Fahy, B., Gao, B., Hermanrud, C., Hurd, G., Luo, G., Marjanovic, J., Merrell, M., Meyer, D., Nikolinakou, M., Reece, J.S., and You, Y., 2013, UT GeoFluids annual report to Industrial Associates for 2013: slide set 4,The University of Texas at Austin, Bureau of Economic Geology, *annual report prepared for Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Schlumberger, Shell, Statoil, Total* (27 presentations), Online
14. *[+]Reece, J.S., **Flemings, P.B.**, and Germaine, J.T., 2013, Data Report: Permeability, compressibility, and microstructure of resedimented mudstone from IODP Expedition 322, Site C0011, In: Saito, S., Underwood, M.B., Kubo, Y., and the Expedition 322 Scientists, Proc. IODP, 322: Tokyo (Integrated Ocean Drilling Program Management International, Inc.), doi:10.2204/iodp.proc.322.205.2013.
15. Dooley, T. P., Jackson, M.P.A., Hudec, M. R., Nikolinakou, M.A., Jackson, C. A., Weijermars, R., Luo, G., and **Flemings, P.B.**, 2012, Applied Geodynamics Laboratory annual report to industrial associates 2012, slide set 31: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for Anadarko, Apache, BHP Billiton, BP, CGGVeritas, Chevron, Cobalt, ConocoPhillips, EcoPetrol, ENI, ExxonMobil, Fugro, Global Geophysical, Hess, ION Geophysical, Korea National Oil Corporation, McMoRan, Maersk, Marathon, Murphy, Nexen, Noble, Petrobras, PGS, Repsol-YPF, Samson, Saudi Aramco, Shell, Statoil, TGS-Nopec, Talisman, Total, WesternGeco, and Woodside, CD-ROM.
16. **Flemings, P.B.**, Germaine, J.T., Adams, A., Betts, W., Casey, B., Cronin, M., Day-Stirrat, R., Gao, B., Greeley, D., Horan, A., Katahara, K., Luo, G., Marjanovic, J., Merrell, M., Nikolinakou, M., Polito, P., Schneider, J., Smith, A., and You, Y., 2012, UT GeoFluids annual report to Industrial Associates for 2012: slide set 3,The University of Texas at Austin, Bureau of Economic Geology, *annual report prepared for Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Schlumberger, Shell, Statoil, Total* (23 presentations), Online
17. **Flemings, P.B.**, John, C.M., and Behrmann, J.H., 2012, Expedition 308 synthesis: overpressure, consolidation, and slope stability on the continental slope of the Gulf of Mexico., *in* **Flemings, P.B.**, Behrmann, J.H., John, C.M., and Expedition 308 Scientists, eds.,Integrated Ocean Drilling Program Management International, Inc., *Proc. IODP, 308*
18. Dooley, T., Jackson, M.P.A., Hudec, M. R., Nikolinakou, M.A., Luo, G., Norton, I., **Flemings, P.B.,** Mueller, K., and Snedden, J., 2011, Applied Geodynamics Laboratory annual report to Industrial Associates for 2011, slide set 30: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for Anadarko, Apache, BHP Billiton, BP, CGGVeritas, Chevron, Cobalt, ConocoPhillips, EcoPetrol, ENI, ExxonMobil, Fugro, Global Geophysical, Hess, IMP, Ion, Korea National Oil Corporation, McMoRan, Maersk, Marathon, Murphy, Nexen, Noble, Petrobras, PGS, Repsol-YPF, Samson, Saudi Aramco, Shell, Statoil, TGS-Nopec, Total, WesternGeco, and Woodside, CD-ROM.
19. **Flemings, P.B.**, Germaine, J.T., Adams, A., Betts, W., Braunscheidel, M., Casey, B., Day-Stirrat, R., Gao, B., Heppard, P., Horan, A., Luo, G., Marjanovic, J., Merrell, M., Nikolinakou, M., Sawyer, D., Sayers, C., Schneider, J., Smith, A., and You, Y., 2011, UT GeoFluids annual report to Industrial Associates for 2011: slide set 2,The University of Texas at Austin, Bureau of Economic Geology, *annual report prepared for Anadarko, BHP, BP, Chevron, ConocoPhillips, ExxonMobil, Hess Corp, Schlumberger, Shell, Statoil, Total* (26 presentations), Online
20. Dooley, T., et al., 2010, Applied Geodynamics Laboratory annual report to Industrial Associates for 2010: slide set 29,The University of Texas at Austin, Bureau of Economic Geology, *prepared for Anadarko, BHP Billiton, BP, CGGVeritas, Chevron, Cobalt, ConocoPhillips, Devon, ENI, ExxonMobil, Fugro, Global Geophysical, GX Technology, Hess, IMP, INEXS, Maersk, Marathon, Mariner, Murphy, Nexen, Noble, Pemex, Petrobras, PGS, Repsol-YPF, Samson, Saudi Aramco, Shell, StatoilHydro, TGS-Nopec, Total, WesternGeco, and Woodside*, CD-ROM
21. **Flemings, P.B.**, Germaine, J.T., Basin, T., Braunscheidel, M., Darnell, K., Day-Stirrat, R., Hudec, M.R., Luo, G., Nikolinakou, M., Sawyer, D.E., Schneider, J., and You, Y., 2010, UT GeoFluids annual report to Industrial Associates for 2010: slide set 1,The University of Texas at Austin, Bureau of Economic Geology, *annual report prepared for Anadarko, BHP, BP, Chevron, ConocoPhillips, Devon, ExxonMobil, Hess Corp, Schlumberger, Shell* (22 presentations), Online

22. *Dugan, B., and Germaine, J.T., 2009, Data Report: Strength Characteristics of Sediments from IODP Expedition 308, Sites U1322 and U1324, *in* **Flemings, P.B.**, John, C., and the Expedition 308 Scientists, eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*, v. 308
23. Jackson, M.P.A., Dooley, Tim, Hudec, M. R., Wagner, Bryce, McDonnell, Angela, **Flemings, P.B.**, Luo, Gang, Nikolinakou, M.A., and Loucks, R. G., 2009, Applied Geodynamics Laboratory annual report to Industrial Associates for 2009: slide set 28: The University of Texas at Austin, Bureau of Economic Geology, annual report prepared for Anadarko, BHP Billiton, BP, CGGVeritas, Chevron, Cobalt, ConocoPhillips, Devon, ENI, ExxonMobil, Fugro, GX Technology, Hess, IMP, Maersk, Marathon, Mariner, Murphy, Nexen, Noble, Pemex, Petrobras, PGS, Repsol-YPF, Samson, Saudi Aramco, Shell, StatoilHydro, TGS-Nopec, Total, WesternGeco, and Woodside, CD-ROM.
24. 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, eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*, v. 308
25. Nelson, H., **Flemings, P.B.**, Germaine, J.T., and *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.**, Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*, v. 308
26. 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, eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*, v. 308
27. *Long, H., **Flemings, P.B.**, *Dugan, B., Germaine, J.T., and Ferrell, D., 2008, Data Report: Penetrometer Measurements of In situ Temperature and Pressure on IODP Expedition 308, *in* **Flemings, P.B.**, Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*, v. 308
28. *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.**, and John, C., eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*, v. 308
29. *Sawyer, D.E., Jacoby, R., **Flemings, P.B.**, 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, eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*
30. Tan, B., Germaine, J.T., and **Flemings, P.B.**, 2006, Data Report: Consolidation and Strength Characteristics of Sediments from ODP Site 1244, Hydrate Ridge, Cascadia Continental Margin, *in* Tréhu, A.M., Bohrmann, G., Torres, M.E., and Colwell, F.S., eds.,Integrated Ocean Drilling Program Management International, Inc., *Proceedings of the Integrated Ocean Drilling Program*, v. 204, p. 1-148
31. **Flemings, P.B.,** Behrmann, I., Davies, T., John, C., and the Expedition 308 Project Team, 2005, Gulf of Mexico Hydrogeology Overpressure and fluid flow processes in the deepwater Gulf of Mexico: slope stability, seeps, and shallow-water flow, Integrated Ocean Drilling Program Expedition 308 Scientific Prospectus
32. **Flemings, P.B.**, Behrmann, J., John, C., and the Expedition 308 Scientists, 2005, Overpressure and fluid flow processes in the deepwater Gulf of Mexico: slope stability, seeps, and shallow-water flow, Integrated Ocean Drilling Program, *IODP Preliminary Report: College Station, TX*, p. 109
33. **Flemings, P.B.,** Ertekin, T., and McCormick, S., 2005, Petroleum GeoSystems Initiative 2003-2005 Annual Report, p. 92
34. *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, *in* Thompson, B.J., ed., *Energy, Simulation-Training, Ocean Engineering and Instrumentation: Research Papers of the Link Foundation Fellows*, v. 3

35. *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
36. **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
37. **Flemings, P.B.**, Ertekin, T., and Altemus, R., 2002, Petroleum GeoSystems Initiative 2001-2002 Annual Report, p. 92
38. Mikada, H., K. Becker, J. C. Moore, A. Klaus, G. L. Austin, N. L. Bangs, S. Bourlange, J. Broilliard, W. Brückmann, E. R. Corn, E. E. Davis, **P.B. Flemings**, D. S. Goldberg, S. S. Gulick, M. B. Hansen, N. Hayward, D. J. Hills, S. Hunze, M. Ienaga, H. Ishiguro, M. Kinoshita, R. D. Macdonald, L. McNeill, S. Obana, O. S. Hong, S. Peacock, T. L. Pettigrew, S. Saito, T. Sawa, N. Thaiprasert, H. J. Tobin & H. Tsurumi, 2002, Volume 196 Initial Reports: Deformation and Fluid Flow Processes in the Nankai Trough Accretionary Prism: Logging While Drilling and Advanced CORKs,Ocean Drilling Program, Texas A&M University, Proc. ODP, Init. Repts., v. 196
39. *Stump, B.B., and **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* Huffman, A.R., and Bowers, G.L., eds., *Pressure regimes in sedimentary basins and their prediction, AAPG Memoir*, v. 76, p. 131-144
40. **Flemings, P.B.**, Ertekin, T., and Altemus, R., 2001, Petroleum GeoSystems Initiative 2000-2001 Annual Report, p. 197
41. **Flemings, P.B.**, Ertekin, T., Ashbaugh, J., and Altemus, R., 2000, Petroleum GeoSystems Initiative 1999-2000 Annual Report, p. 85
42. Change, C., and **Flemings, P.B.**, 1998, Mechanical Properties of the Lentic Sand in Eugene Island 330 Field (Offshore Louisiana),Gas Research Institute, *Topical Report Number 6 (November 1, 1997-June 1, 1998)*, v. GRI 99/0241
43. *Dugan, B., and **Flemings, P.B.**, 1998, Pore Pressure Prediction from Stacking Velocities in the Eugene Island 330 Field (offshore Louisiana),Gas Research Institute, *Topical Report Number 6 (November 1, 1997-June 1, 1998)*, v. GRI 98/0303
44. [3]Finkbeiner, T., Zoback, M., and **Flemings, P.B.**, 1998, Characterization of the Full Stress Tensor in Eugene Island Block 330, *Offshore Gulf of Mexico, GRI-98/0072*, p. 41
45. *Stump, B.B., and **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*, p. 42
46. [3]Finkbeiner, T., *Stump, B.B., Zoback, M., and **Flemings, P.B.**, 1996, Pressure (Pp), Overburden (Sv), and Minimum Horizontal Stress (Shmin) in Eugene Island Block 330, *GRI-96/0285*, p. 31
47. [+]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., Davis, T., and Louisiana, F., eds.,AAPG Studies in Geology/SEG Geophysical Development Series v. 42/5, p. 21-26
48. Hicks, P.J., [3°]Bennett, M.H., and **Flemings, P.B.**, 1996a, Numerical Simulations of Fluid Flow in Faults: First Quarterly Report of Stage II, *Report to Exxon Production Research Company*, p. 27
49. Hicks, P.J., [3°]Bennett, M.H., **Flemings, P.B.**, Shaw, C.A., and Symington, W.A., 1996b, Numerical Simulations of Fluid Flow in Faults: Final Report of State 1, *Report to Exxon Production Research Company, EPR.28EX.96*, p. 78
50. Shaw, C.J., Symington, W.A., **Flemings, P.B.**, and Hicks, P.J., 1996, Numerical Simulations of Fluid Flow in Faults: Implications of Stage I Results, *Report to Exxon Production Research Company, EPR29EX.96*, p. 15
51. Rowan, M.G., Weimer, P., Budhijanto, F., and **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*, p. 122

Service Bulletins Manuals, and Circulars

1. *Darnell, K., Andrews, M., **Flemings, P.B.**, Germaine, J.T., Polito, P., Brooks, D., 2012, The Temperature 2 Pressure Probe (T2P): Technical Manual.
2. *Darnell, K., Andrews, M., **Flemings, P.B.**, Germaine, J.T., Polito, P., Brooks, D., 2012, The Temperature 2 Pressure Probe (T2P): Deployment Manual.
3. *Darnell, K., Andrews, M., **Flemings, P.B.**, and Germaine, J.T., 2010, The Temperature 2 Pressure Probe (T2P): A User's Manual from Lab to Sea.
4. **Flemings, P.B.**, Grotzinger, J.P., Morris, J.E., 1996, Strata 2.1: A Stratigraphic Modeling Package User's Manual. (wrote software, co-wrote manual)
5. **Flemings, P.B.**, Nelson, S.E., Grotzinger, J.P., 1996, Strata 2.1: A Stratigraphic Modeling Package Workbook. (wrote software, co-wrote manual)