CURRICULUM VITAE of Jürgen Schieber

(as of 11/18/2023)

Department of Geological Sciences
Indiana University
Bloomington, Indiana 47405

EDUCATION

B.Sc. (Vordiplom) in geology, 1978, University of Tübingen, Germany

Ph.D. in geology, 1985, University of Oregon, *Dissertation:* The Relationship between Basin Evolution and Genesis of stratiform Sulfide Horizons in Mid-Proterozoic Sediments of Central Montana (Belt Supergroup), 811pp.

ACADEMIC APPOINTMENTS

University of Oregon
1982-1985, Research & Teaching Assistant, Department of Geology
1986, Research Associate, Department of Geology

The University of Texas at Arlington
Department of Geology
1986-2002, Assistant to Full Professor

Indiana University
Department of Geological Sciences
2002-present , Associate to Full Professor

AWARDS AND HONORS

The University of Texas at Arlington:
2001, Distinguished Research Award

Society for Sedimentary Geology (SEPM)
2007, Best Oral Presentation at SEPM Annual Meeting

American Association of Petroleum Geologists (AAPG)
2008, EMD's President's Certificate for Excellence in Presentation

Robert Sheriff Distinguished Lecturer
Houston Geol. Society and University of Houston. November 16th, 2009.

Canadian Society of Petroleum Geologists
2011, Best Oral Presentation, CSPG 2011 Convention in Calgary

American Association of Petroleum Geologists (AAPG)
2014, Award of Excellence, Top 10 Poster Presentation

American Association of Petroleum Geologists (AAPG)
2014-2015, AAPG Distinguished Lecturer

Universität Wien (Austria)
2016, Spring Semester, Visiting Professor

American Association of Petroleum Geologists (AAPG)
2017, The Robert H. Dott, Sr. Memorial Award

University of Pretoria, South Africa
2019, August, Visiting Professor

American Association of Petroleum Geologists (AAPG)
2019, Kottlowski Memorial Award EMD Best Oral Paper

American Association of Petroleum Geologists (AAPG)
2019, Outstanding Educator Award

Society for Sedimentary Geology (SEPM)
2020, Best Paper Award, Journal of Sedimentary Research.

The Romanian Academy
2021, Ludovic Mrazec Prize

International Association of Sedimentologists (IAS)
2022, Sorby Medal

Fulbright American Scholar
2022, Work on Adriatic Mudbelt with Scientists from ISMAR

MEMBERSHIPS

American Geophysical Union (AGU)
International Association of Sedimentologists (IAS)
Society for Sedimentary Geology (SEPM)
Deutsche Geologische Vereinigung
Society for Geology Applied to Mineral Deposits
Geological Society of America

PROFESSIONAL EXPERIENCE

Mapping and Mineral Exploration

1977-1979, southwest Germany and northern Italy, Mapping
1979, Bavaria, Mineral Exploration, Saarberg Interplan, Uranium Exploration and Mining
1980-1984, Mineral Exploration and Research, Anaconda Minerals Co., Base Metal Exploration
1982, Australia, Anaconda Minerals Co., Base Metal Exploration

Research

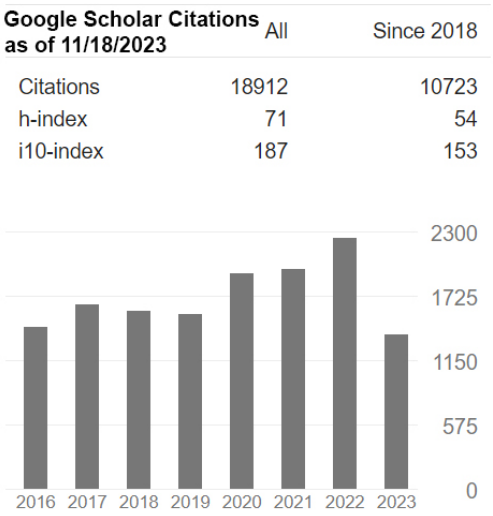
1985, northern Taiwan, Research
1987-1990, western Montana, northern Idaho, Research
1991, 2009, 2011, 2013, SW Germany, Research
1990-2015, eastern US and Great Basin Region, Research
2013-2022, South Africa, UK, Germany, Austria, China, Australia, and Romania, Research

Cruises

2004, BASIN CRUISE, RV New Horizon. Sampling bottom sediments in Santa Barbara and Santa Monica Basins, D. Valentine and A. Sessions (PI's)
2010, CalEchoes CRUISE, RV Melville, Sampling shelf-slope-bottom sediments in Santa Barbara Basin, M. Summers (PI)

Consulting

ExxonMobil Production Research Inc.; Fundamental Shale Research
The Timken Company; Microstructure of high performance ceramics
ChevronTexaco Inc.; Sealing Capacity of Shales
GATAN Inc., beta testing ion milling and CL equipment
Malcolm Pirnie, Inc., shale petrography, shale pore structure
Chesapeake Energy Corp., shale petrography
Wintershall AG, Germany, shale petrography
Talisman Energy, shale petrography
Pioneer Natural Resources Co., shale petrography
Schlumberger/TerraTek Inc., shale petrography
Nexen Inc., shale sedimentology
Whiting Petroleum Inc., shale sedimentology
Golder Associates, mudstone petrography
Santos Ltd., shale sedimentology and petrography
Statoil/Equinor, shale petrography & pore structure
Petrobras, shale sedimentology and petrography



RESEARCH INTERESTS

Core areas of interest are basin analysis and sedimentology, sedimentology of shales, shale diagenesis, and formation and preservation of shale porosity. Additional research areas include the nature of secular changes in shale facies, microbe-sediment interactions and microbial mats in fine grained clastics, and the sedimentary geology of Mars.

PUBLICATIONS

Refereed Journal Papers: **165** *Book Chapters*: **48** *Books Authored/Edited*: **4**
Book Reviews: **2** *Guidebooks & Guidebook Chapters*: **16**
Conference Abstracts: **376** *Publication Total:* **611**

These figures are a slight underestimate due to multiple co-authorships on Mars Science Lab publications that I still have to track down and compile.

CUMULATIVE CAREER FUNDING: **$ 9,898,509**

JOURNALS

1. Schieber, J., 1986, Stratigraphic control of rare-earth pattern types in Mid-Proterozoic sediments of the Belt Supergroup, Montana, U.S.A.: Implications for basin analysis: Chem. Geol., v. 54, p. 135-148.
2. Schieber, J., 1986, The possible role of benthic microbial mats during the formation of carbonaceous shales in shallow Mid-Proterozoic basins: Sedimentology, v. 33, p. 521-536.
3. Schieber, J., and Katsura, K.T., 1986, Sedimentation in epithermal veins of the Bohemia mining district, Oregon, USA: Interpretations and significance: Mineralium Deposita, v. 21, p. 322-328.
4. Schieber, J., 1987, Storm-dominated epicontinental clastic sedimentation in the Mid-Proterozoic Newland Formation, Montana, U.S.A.: N. Jb. Geol. Paläont. Mh., v. 27, p. 417-439.
5. Schieber, J., 1988, Redistribution of rare earth elements during diagenesis of carbonate rocks from the Mid-Proterozoic Newland Formation, Montana, USA: Chemical Geology, v. 69, p. 111-126.
6. Schieber, J., 1988, Storm sands with swaley cross-stratification in the Lower Miocene Taliao Formation, Taiwan: Neues Jahrbuch für Geologie und Paläontologie Monatshefte, v. 28, p. 718-734.
7. Schieber, J., and Ellwood, B.B., 1988, The coincidence between macroscopic paleocurrent indicators and magnetic lineation in shales of the Precambrian Belt basin: Journal of Sedimentary Petrology, v. 58, p. 830-835.
8. Schieber, J., 1989, Facies and origin of shales from the Mid-Proterozoic Newland Formation, Belt basin, Montana, U.S.A.: Sedimentology, v. 36, p. 203-219.
9. Schieber, J., 1989, The origin of the Neihart Quartzite: A basal deposit of the Mid-Proterozoic Belt Supergroup, Montana, U.S.A.: Geological Magazine, v. 126, p. 271-281.
10. Schieber, J., 1989, Pyrite mineralization in microbial mats from the Mid-Proterozoic Newland Formation, Belt Supergroup, Montana, U.S.A.: Sedimentary Geology, v. 64, p. 79-90.
11. Strauss, H., and Schieber, J., 1990, A sulfur isotope study of pyrite genesis: The Mid-Proterozoic Newland Formation, Belt Supergroup, Montana: Geochimica et Cosmochimica Acta, v. 54, p. 197-204.
12. Schieber, J., 1990, Pyritic shales and microbial mats: Significant factors in the genesis of stratiform Pb-Zn deposits of the Proterozoic? Mineralium Deposita, v. 25, p. 7-14.
13. Schieber, J., 1990, Distribution of REE in the eastern Belt Supergroup: Implications for stratigraphic correlations and basin evolution: Chemical Geology, v. 81, p. 83-98.
14. Schieber, J., 1990, Significance of styles of epicontinental shale sedimentation in the Belt basin, Mid-Proterozoic of Montana, U.S.A.: Sedimentary Geology, v. 69, p. 297-312.
15. Schieber, J., 1991, The origin and economic potential of disseminated Pb-Zn mineralization in pyritic shale horizons of the Mid-Proterozoic Newland Formation, Montana, U.S.A.: Mineralium Deposita, v. 26, p. 290-297.
16. Schieber, J., 1992, Facies and deposition of a mixed terrigenous-carbonate suite in a Mid-Proterozoic epicratonic sea: The Newland Formation, Belt Supergroup, Montana, U.S.A. Neues Jahrbuch für Geologie und Paläontologie Abhandlungen, v. 184, p. 155-180.
17. Schieber, J., 1992, A combined petrographical-geochemical provenance study of the Newland Formation, Mid-Proterozoic of Montana. Geological Magazine, v. 129, p. 223-237.
18. Schieber, J., and Ellwood, B.B., 1993, Determination of basinwide paleocurrent patterns in a shale sequence via anisotropy of magnetic susceptibility (AMS): A case study of the Mid-Proterozoic Newland Formation, Montana. J. sediment. Petrol., v. 63, p. 874-880.
19. Schieber, J., 1994, Evidence for episodic high energy events and shallow water deposition in the Chattanooga Shale, Devonian, central Tennessee, U.S.A. Sedimentary Geology, v. 93, p. 193-208.
20. Schieber, J., 1995. Anomalous iron distribution in shales as a manifestation of non-clastic fluvial iron supply to sedimentary basins: Relevance for pyritic shales, base metal mineralization, and oolitic ironstone deposits. Mineralium Deposita, v. 30, p. 294-302.
21. Ellwood, B.B, Peter, D.E., Balsam, W., and Schieber, J., 1995. Magnetic and geochemical variations as indicators of paleoclimate and archeological site evolution: Examples from 41TR68, Fort Worth, Texas. Journal of Archeological Science, v. 22, p. 409-415.
22. Schieber, J., 1996. Early diagenetic silica deposition in algal cysts and spores: A source of sand in black shales? Journal of Sedimentary Research, v. 66, p. 175-183.
23. Schieber, J., 1998, Possible indicators of microbial mat deposits in shales and sandstones: Examples from the Mid-Proterozoic Belt Supergroup, Montana, U.S.A. Sedimentary Geology, v. 120, p. 105-124.
24. Schieber, J., 1999, Microbial Mats in Terrigenous Clastics: The Challenge of Identification in the Rock Record. Palaios, v. 14, p. 3-12.
25. Schieber, J., 1999, Distribution and deposition of mudstone facies in the Upper Devonian Sonyea Group of New York. Journal of Sedimentary Research, v. 69, p. 909-925.
26. Lobza, V., and Schieber, J., 1999, Biogenic sedimentary structures produced by worms in soupy, soft muds: Observations from the Chattanooga Shale (Upper Devonian) and experiments. Journal of Sedimentary Research, v. 69, p. 1041-1049.

27. Schieber, J., Krinsley, D., and Riciputi, L., 2000, Diagenetic origin of quartz silt in mudstones and implications for silica cycling. Nature, v. 406, p. 981-985.
28. Schieber, J., and Baird, G., 2001, On the origin and significance of pyrite spheres in Devonian black shales of North America. Journal of Sedimentary Research, v. 71, p. 155-166.
29. Schieber, J., 2001, Ways in which organic petrology could contribute to a better understanding of black shales. International Journal of Coal Geology, v. 47, p. 171-187.
30. Schieber, J. 2002, The Role of an Organic Slime Matrix in the Formation of Pyritized Burrow Trails and Pyrite Concretions. Palaios, v. 17, p. 104-109.
31. Schieber, J., 2002, Sedimentary Pyrite: A window into the microbial past. Geology, v. 30, p. 531-534.
32. Schieber, J., and Arnott, H. J., 2003, Nannobacteria as a by-product of enzyme-driven tissue decay. Geology, v. 31, p. 717-720.
33. Schieber, J., 2003, Simple gifts and hidden treasures – Implications of finding bioturbation and erosion surfaces in black shales. The Sedimentary Record, v. 1, p. 4-8.
34. Schieber, J., and Riciputi, L., 2004, Pyrite ooids in Devonian Black Shales record intermittent Sea level drop and shallow water conditions. Geology, v. 32, p. 305-308.
35. Schieber, J., and Riciputi, L., 2005, Pyrite-marcasite coated grains in the Ordovician Winnipeg Formation, Canada: An intertwined record of surface conditions, stratigraphic condensation, geochemical "reworking", and microbial activity. Journal of Sedimentary Research, v. 75, p. 905-918.
36. Sur, S., Schieber, J., and Banerjee, S., 2006, Petrographic observations suggestive of microbial mats from Rampur Shale and Bijaigarh Shale, Vindhyan basin, India. Journal of Earth Systems Science, v. 115, p. 61-66.
37. Milliken, K., Choh, S.-J., Papazis, P., and Schieber, J., 2007, "Cherty" stringers in the Barnett Shale are agglutinated foraminifera. Sedimentary Geology, v. 198, p. 221-232.
38. Schieber, J., 2007, Oxydation of Detrital Pyrite as a Cause for Marcasite Formation in Marine Lag Deposits from the Devonian of the Eastern US. Deep Sea Research II, v. 54, p. 1312-1326.
39. Ventura, G.T., Kenig, F., Reddy, C.M., Schieber, J., Frysinger, G., Nelson, R.K., Gaines, R.B., and Shaeffer, P., 2007, Molecular evidence of Late Archean archea and the presence of a subsurface hydrothermal biosphere. Proceedings of the National Academies of Sciences, v. 104, p. 14260-14265.
40. Schieber, J., Southard, J.B., and Thaisen, K.G., 2007, Accretion of mudstone beds from migrating floccule ripples. Science, v. 318, December 14, 2007, p. 1760-1763.
41. Basu, A., Patranabis-Deb, S., Schieber, J., and Dhang, P.C., 2008, Stratigraphic Position of the ~1000 Ma Sukhda Tuff (Chhattisgarh Supergroup) and the 500 Ma question. Precambrian Research, v. 167, p. 383-388.
42. Patranabis-Deb, S., Schieber, J., and Basu, A., 2009, Almandine Garnet Phenocrysts in a ~1Ga Old Rhyolitic Tuff from Central India. Geological Magazine, v. 146, p. 133-143.
43. Schieber, J., 2009, Discovery of Agglutinated Benthic Foraminifera in Devonian Black Shales and Their Relevance for the Redox State of Ancient Seas. Paleogeograpy, Paleoclimatology, Paleoecology, v. 271, p. 292-300.
44. Over, J.D., Lazar, R., Baird, G.C., Schieber, J., and Ettensohn, F.R, 2009, Protosalvinia Dawson and associated conodonts of the upper Trachytera zone, Famennian, Upper Devonian, in the eastern United Sates. Journal of Paleontology, v. 83, p. 70-79.
45. Schieber, J., and Southard, J.B., 2009, Bedload Transport of Mud by Floccule Ripples – Direct Observation of Ripple Migration Processes and their Implications. Geology, v. 37, p. 483-486.
46. Schieber, J., and Yawar, Z., 2009, A New Twist on Mud Deposition - Mud Ripples in Experiment and Rock Record. The Sedimentary Record, v. 7/2, p. 4-8.
47. Glamoclija, M., Steele, A., Fries, M., Schieber, J., Voytek, M.A., and Cockell, C.S., 2009, Association of anatase (TiO_2) and microbes: Unusual fossilization effect or a potential biosignature? Geol. Soc. Amer. Special Papers, v. 458, p. 965-975.
48. Schieber, J., Southard, J.B., and Schimmelmann, A., 2010, Lenticular Shale Fabrics Resulting from Intermittent Erosion of Muddy Sediments – Comparing Observations from Flume Experiments to the Rock Record. Journal of Sedimentary Research, v. 80, p. 119-128.
49. Bickford, M.E., Basu, A., Patranabis-Deb, S., Dhang, P.C., and Schieber, J., 2011, Depositional History of the Chhattisgarh Basin, Central India: Constraints from New SHRIMP Zircon Ages. The Journal of Geology, v. 119, p. 33-50.
50. Regberg, A., K. Singha, M. Tien, F. Picardal, Q. Zheng, J. Schieber, E. Roden, and S. L. Brantley (2011), Electrical conductivity as an indicator of iron reduction rates in abiotic and biotic systems, Water Resour. Res., 47, W04509, doi:10.1029/2010WR009551.
51. Schieber, J., 2011, Reverse Engineering Mother Nature – Shale Sedimentology from an Experimental Perspective. Sedimentary Geology, v. 238, p. 1-22.

52. Picardal, F.W., Zaybak, Z., Chakraborty, A., Schieber, J., and Szewzyk, U., 2011, Microaerophilic, Fe(II)-dependent growth and Fe(II) oxidation by a Dechlorospirillum species. FEMS Microbiology Letters, v. 319, p. 51-57.
53. Schieber, J., 2011, Marcasite in Black Shales—a Mineral Proxy for Oxygenated Bottom Waters and Intermittent Oxidation of Carbonaceous Muds. Journal of Sedimentary Research, v. 81, p. 447-458.
54. Bickford[1] M. E., Abhijit Basu[2], Arunangshu Mukherjee[3], Jack Hietpas[1], Juergen Schieber[2], Sarbani Patranabis-Deb[4], Ranjan Ray[5], Rajeeva Guhey[6], Purbasha Bhattacharya[4], and Pratap Dhang[4], 2011. New U-Pb SHRIMP Zircon Ages of Tuffs in the Mesoproterozoic Chhattisgarh Basin, Peninsular India: The Significance of a 1 Ga Thermal-Magmatic Event. Journal of Geology, v. 119, p. 535-548.
55. Chakraborty, A., Roden, E.E., Schieber, J., and Picardal, F., 2011, Enhanced Growth of *Acidovorax* sp. Strain 2AN during Nitrate-Dependent Fe(II) Oxidation in Batch and Continuous-Flow Systems. Applied and Environmental Microbiology, v. 77, p. 8548-8556.
56. Roden, E.E., McBeth, J.M., Blöthe, M., Percak-Dennett, E.M., Fleming, E.J., Holyoke, R.R., Luther, G.W., Emerson, D., and Schieber, J., 2012, The microbial ferrous wheel in a neutral pH groundwater seep. Frontiers in Microbiology, v. 3., p. 1-18.
57. Kenneth S. Edgett · R. Aileen Yingst · Michael A. Ravine · Michael A. Caplinger ·Justin N. Maki · F. Tony Ghaemi · Jacob A. Schaffner · James F. Bell III ·Laurence J. Edwards ·Kenneth E. Herkenhoff · Ezat Heydari · Linda C. Kah ·Mark T. Lemmon · Michelle E. Minitti · Timothy S. Olson · Timothy J. Parker ·Scott K. Rowland · Juergen Schieber · Robert J. Sullivan · Dawn Y. Sumner ·Peter C. Thomas · Elsa H. Jensen · John J. Simmonds · Aaron J. Sengstacken ·Reg G. Willson ·Walter Goetz, 2012, Curiosity's Mars Hand Lens Imager (MAHLI) Investigation. Space Sci Rev., v. 170, p. 259-317; DOI 10.1007/s11214-012-9910-4
58. Mukherjee, A., Marion E. Bickford, M.E., Hietpas, J., Schieber, J. and Basu, A. 2012, Implications of a Newly Dated ca. 1000-Ma Rhyolitic Tuff in the Indravati Basin, Bastar Craton, India. Journal of Geology, v. 120, pp. 477-485 DOI: 10.1086/665796
59. Basu, A., Schieber, J., Patranabis–Deb, S., and Dhang, P.C., 2013, Recycled detrital quartz grains are sedimentary rock fragments indicating unconformities: examples from the Chhattisgarh Supergroup, Bastar craton, India. Journal of Sedimentary Research, v. 83, pp. 368–376.
60. Williams, R.M.E., J. P. Grotzinger, W. E. Dietrich, S. Gupta, D. Y. Sumner, R. C. Wiens, N. Mangold, M. C. Malin, K. S. Edgett, S. Maurice, O. Forni, O. Gasnault, A. Ollila, H. E. Newsom, G. Dromart, M. C. Palucis, R. A. Yingst, R. B. Anderson, K. E. Herkenhoff, S. Le Mouélic, W. Goetz, M. B. Madsen, A. Koefoed, J. K. Jensen, J. C. Bridges, S. P. Schwenzer, K. W. Lewis, K. M. Stack, D. Rubin, L. C. Kah, J. F. Bell III, J. D. Farmer, R. Sullivan, T. Van Beek, D. L. Blaney, O. Pariser, R. G. Deen, and MSL Science Team, 2013, Martian fluvial conglomerates at Gale Crater. Science, 31 May 2013, p. 1068-1072.
61. Stolper, E.M., M. B. Baker, M. E. Newcombe, M. E. Schmidt, A. H. Treiman, A. Cousin, M. D. Dyar, M. R. Fisk, R. Gellert, P. L. King, L. Leshin, S. Maurice, S. M. McLennan, M. E. Minitti, G. Perrett, S. Rowland, V. Sautter, R. C. Wiens, and MSL Science Team, 2013, The Petrochemistry of Jake_M: A Martian Mugearite. Science, 27 September 2013, online.
62. Meslin, P.Y., O. Gasnault, O. Forni, S. Schröder, A. Cousin, G. Berger, S. M. Clegg, J. Lasue, S. Maurice, V. Sautter, S. Le Mouélic, R. C. Wiens, C. Fabre, W. Goetz, D. Bish, N. Mangold, B. Ehlmann, N. Lanza, A.-M. Harri, R. Anderson, E. Rampe, T. H. McConnochie, P. Pinet, D. Blaney, R. Léveillé, D. Archer, B. Barraclough, S. Bender, D. Blake, J. G. Blank, N. Bridges, B. C. Clark, L. DeFlores, D. Delapp, G. Dromart, M. D. Dyar, M. Fisk, B. Gondet, J. Grotzinger, K. Herkenhoff, J. Johnson, J.-L. Lacour, Y. Langevin, L. Leshin, E. Lewin, M. B. Madsen, N. Melikechi, A. Mezzacappa, M. A. Mischna, J. E. Moores, H. Newsom, A. Ollila, R. Perez, N. Renno, J.-B. Sirven, R. Tokar, M. de la Torre, L. d'Uston, D. Vaniman, A. Yingst, and MSL Science Team, 2013, Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science 27 September 2013, online.
63. Bish, D.L., D. F. Blake, D. T. Vaniman, S. J. Chipera, R. V. Morris, D. W. Ming, A. H. Treiman, P. Sarrazin, S. M. Morrison, R. T. Downs, C. N. Achilles, A. S. Yen, T. F. Bristow, J. A. Crisp, J. M. Morookian, J. D. Farmer, E. B. Rampe, E. M. Stolper, N. Spanovich, and MSL Science Team, 2013, X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science 27 September 2013, online.
64. Blake, D.F., R. V. Morris, G. Kocurek, S. M. Morrison, R. T. Downs, D. Bish, D. W. Ming, K. S. Edgett, D. Rubin, W. Goetz, M. B. Madsen, R. Sullivan, R. Gellert, I. Campbell, A. H. Treiman, S. M. McLennan, A. S. Yen, J. Grotzinger, D. T. Vaniman, S. J. Chipera, C. N. Achilles, E. B. Rampe, D. Sumner, P.-Y. Meslin, S. Maurice, O. Forni, O. Gasnault, M. Fisk, M. Schmidt, P. Mahaffy, L. A. Leshin, D. Glavin, A. Steele, C. Freissinet, R. Navarro-González, R. A. Yingst, L. C. Kah, N. Bridges, K. W. Lewis, T. F. Bristow, J. D. Farmer, J. A. Crisp, E. M. Stolper, D. J. Des Marais, P. Sarrazin, and MSL Science Team. Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science 27 September 2013, Vol. 341, Issue 6153, 1239505, DOI: 10.1126/science.1239505
65. Webster, C.R., P.R. Mahaffy, S.K. Atreya, G.J. Flesch, K.A. Farley, and MSL Science Team, 2013, Low Upper Limit to Methane Abundance on Mars. *Science, 18 October 2013, p.355-357.*

66. Leshin, L.A., P. R. Mahaffy, C. R. Webster, M. Cabane, P. Coll, P. G. Conrad, P. D. Archer Jr., S. K. Atreya, A. E. Brunner, A. Buch, J. L. Eigenbrode, G. J. Flesch, H. B. Franz, C. Freissinet, D. P. Glavin, A. C. McAdam, K. E. Miller, D. W. Ming, R. V. Morris, R. Navarro-González, P. B. Niles, T. Owen, R. O. Pepin, S. Squyres, A. Steele, J. C. Stern, R. E. Summons, D. Y. Sumner, B. Sutter, C. Szopa, S. Teinturier, M. G. Trainer, J. J. Wray, J. P. Grotzinger, and MSL Science Team, 2013, Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science 27 September 2013, online.
67. Farley, K.A., C. Malespin, P. Mahaffy, J. P. Grotzinger, P. M. Vasconcelos, R. E. Milliken, M. Malin, K. S. Edgett, A. A. Pavlov, J. A. Hurowitz, J. A. Grant, H. B. Miller, R. Arvidson, L. Beegle, F. Calef, P. G. Conrad, W. E. Dietrich, J. Eigenbrode, R. Gellert, S. Gupta, V. Hamilton, D. M. Hassler, K.W. Lewis, S. M. McLennan, D. Ming, R. Navarro-González, S. P. Schwenzer, A. Steele, E. M. Stolper, D. Y. Sumner, D. Vaniman, A. Vasavada, K. Williford, R. F. Wimmer-Schweingruber, and the MSL Science Team, 2013, In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 9 December 2013, online.
68. Minitti, M.E., Kah, L.C., Yingst, R.A., Edgett, K.S., Anderson, R.C., Beegle, L.W., Carsten, J.L., Deen, R.G., Goetz, W., Hardgrove, C., Harker, D.E., Herkenhoff, K.E., Hurowitz, J.A., Jandura, L., Kennedy, M.R., Kocurek, G., Krezoski, G.M., Kuhn, S.R., Limonadi, D., Lipkaman, L., Madsen, M.B., Olson, T.S., Robinson, M.L., Rowland, S.K., Rubin, D.M., Seybold, C., Schieber, J., Schmidt, M., Sumner, D.Y., Tompkins, D.V., Van Beek, J.K., Van Beek, T., 2013, MAHLI at the Rocknest sand shadow: Science and science-enabling activities, J. Geophys. Res. Planets, 118, 2338-2360.
69. Arvidson, R.E., P Bellutta, F Calef, AA Fraeman, J Garvin, O Gasnault, J Grant, J Grotzinger, V Hamilton, M Heverly, KA Iagnemma, J Johnson, N Lanza, S Le Mouelic, N Mangold, D Ming, M Mehta, RV Morris, H Newsom, N Renno, D Rubin, J Schieber, R Sletten, NT Stein, F Thuillier, AR Vasavada, J Vizcaino, RC Wiens, 2014, Terrain physical properties derived from orbital data and the first 360 sols of Mars Science Laboratory Curiosity rover observations in Gale Crater. J. Geophys. Res. Planets, 119, 1322-1344.
70. Bickford, M.E., Saha, D., Schieber, J., Kamenov, G., Russell, A., and Basu, A., 2013, New U-Pb Ages of Zircons in the Owk Shale (Kurnool Group) with Reflections on Proterozoic Porcellanites in India. Journal Geological Society of India, v. 82, p.207-216.
71. Schieber, J., Southard, J.B., Kissling, P., Rossman, B., and Ginsburg, R., 2013, Experimental Deposition of Carbonate Mud From Moving Suspensions: Importance of Flocculation and Implications For Modern and Ancient Carbonate Mud Deposition. Journal of Sedimentary Research, v. 83, p. 1025-1031.
72. Schieber, J., and Bennett, R., 2013, Bedload Transport of Mud Across a Wide, Storm-Influenced Ramp: Cenomanian–Turonian Kaskapau Formation, Western Canada Foreland Basin—Discussion. Journal of Sedimentary Research, v. 83, p. 1198-1199.
73. Wilson, R., and Schieber, J., 2014, Muddy prodeltaic hyperpycnites in the Lower Genesee Group of Central New York, USA: Implications for mud transport in epicontinental seas. Journal of Sedimentary Research, v. 84, p. 866-874.
74. Schieber, J., 2014, Traces In the Dark—Sedimentary Processes and Facies Gradients In the Upper Devonian–Lower Mississippian Upper Shale Member of the Bakken Formation, Williston Basin, North Dakota, U.S.A.—Discussion. Journal of Sedimentary Research, v. 84, p. 837-838.
75. Webster, C.R. et al., 2014, Mars methane detection and variability at Gale crater. Science, Dec 16 2014, p. 1-5.
76. Grotzinger, J.P. et al, 2014, A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science 343 (6169), 1242777.
77. Vaniman, D.T., et al., 2014, Mineralogy of a mudstone at Yellowknife Bay, Gale crater, Mars. Science 343 (6169), 1243480.
78. Ming, D.W., et al., 2014, Volatile and organic compositions of sedimentary rocks in Yellowknife Bay, Gale crater, Mars. Science 343 (6169), 1245267.
79. McLennan, S.M., et al., 2014, Elemental geochemistry of sedimentary rocks at Yellowknife Bay, Gale crater, Mars. Science 343 (6169), 1244734.
80. Hassler, D.M., et al., 2014, Mars' surface radiation environment measured with the Mars Science Laboratory's Curiosity Rover. Science 343 (6169), 1244797
81. Nguyen, M.N., Dultz, S., Picardal, F., Bui, A.T.K., Pham, Q.V., and Schieber, J., 2015, Release of potassium accompanying the dissolution of rice straw phytolith. Chemosphere, v. 119, p. 371-376.
82. Schieber, J., 2015, Discussion: "Mud dispersal across a Cretaceous prodelta: Storm-generated, wave-enhanced sediment gravity flows inferred from mudstone microtexture and microfacies" by Plint (2014), Sedimentology 61, 609–647. Sedimentology, v. 62, p. 389–393.
83. Lazar, O.R., Bohacs, K.M., Macquaker, J.H.S., Schieber, J., and Demko, T.M., 2015, Integrated approach for the nomenclature and description of the spectrum of fine-grained sedimentary rocks. Journal of Sedimentary Research, v. 85, p. 230-246.
84. Grotzinger, J.P., Crisp. J.A., Vasavada, A.R., and the MSL Science Team, 2015, Curiosity's Mission of Exploration at Gale Crater, Mars. Elements, v. 11, p. 19-26.

85. Kah., L.C., and the MSL Science Team, 2015, Images from Curiosity: A new look at Mars. Elements, v. 11, p. 27-32.
86. Wiens, R.C., Sylvestre, M., and the MSL Science Team, 2015, ChemCam: Chemostratigraphy by the First Mars Microprobe. Elements, v. 11, p. 33-38.
87. Gellert, R., Benton, C.C., and the MSL and MER Science Teams, 2015, In Situ Compositional Measurements of Rocks and Soils with the Alpha Particle X-ray Spectrometer on NASA's Mars Rovers. Elements, v. 11, p. 39-44.
88. Downs, R.T., and the MSL Science Team, 2015, Determining Mineralogy on Mars with the ChemMin X-Ray Diffractometer. Elements, v. 11, p. 45-50.
89. Mahaffy, P.R., Conrad, P.G., and the MSL Science Team, 2015, Volatile and Isotopic Imprints of Ancient Mars. Elements, v. 11, p. 51-56.
90. Grotzinger, J.P., S. Gupta, M. C. Malin, D. M. Rubin, J. Schieber, K. Siebach, D. Y. Sumner,K. M. Stack, A. R. Vasavada, R. E. Arvidson, F. Calef III, L. Edgar, W. F. Fischer, J. A. Grant, J. Griffes, L. C. Kah, M. P. Lamb, K. W. Lewis, N. Mangold, M. E. Minitti, M. Palucis, M. Rice, R. M. E. Williams, R. A. Yingst, D. Blake, D. Blaney, P. Conrad, J. Crisp, W. E. Dietrich, G. Dromart, K. S. Edgett, R. C. Ewing, R. Gellert, J. A. Hurowitz, G. Kocurek, P. Mahaffy, M. J. McBride, S. M. McLennan, M. Mischna, D. Ming, R. Milliken, H. Newsom, D. Oehler, T. J. Parker, D. Vaniman, 2015, Deposition, exhumation, and paleoclimate of an ancient lake deposit, Gale crater, Mars. Science, 9 October 2015, v. 350.
91. Li, Z., Bhattacharya, J., and Schieber, J., 2015, Evaluating along-strike variation using thin-bedded facies analysis, Upper Cretaceous Ferron Notom Delta, Utah. Sedimentology, v. 62, p. 2060-2089.
92. Li, Y., and Schieber, J., 2015, On the Formation of Phosphate Enriched Interval in the Chattanooga Shale (Upper Devonian) of Tennessee – A combined sedimentologic, petrographic, and geochemical study. Sedimentary Geology, v. 329, p. 40-61.
93. Stern, J.C., et al., 2015, Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the Curiosity rover investigations at Gale crater, Mars. Proceedings of the National Academy of Sciences, v. 112, p. 4245-4250.
94. Anderson, R.B., et al., 2015, ChemCam Results from the Shaler Outcrop in Gale Crater, Mars. Icarus, v. 249, p. 2-21.
95. Webster, C.R., et al., 2015, Mars methane detection and variability at Gale crater. Science, v. 347, p. 415-417.
96. Mahaffy, P.R., et al., 2015, The imprint of atmospheric evolution in the D/H of Hesperian clay minerals on Mars. Science, v. 347, p. 412-414.
97. Wilson, R., and Schieber, J., 2015, Sedimentary Facies and Depositional Environment of the Middle Devonian Geneseo Formation of New York, USA. Journal of Sedimentary Research, v. 85, p. 1393-1415.
98. Schieber, J., 2016, Experimental Testing of the Transport-Durability of Shale Lithics and its Implications for Interpreting the Rock Record. Sedimentary Geology, v. 331, p. 162-169.
99. Schieber, J., 2016, Mud-redistribution in epicontinental basins – Exploring likely processes. Marine and Petroleum Geology, v. 71, p. 119-133.
100. Moores, J.E., Schieber, J., et al., 2016, Transient Atmospheric Effects of the Landing of the Mars Science Laboratory Rover: The Emission and Dissipation of Dust and Carbazic Acid. Advances in Space Research, v. 58, p. 1066-1092.
101. Camp, W.K., Egenhoff, S., Schieber, J., Slatt, R.M., 2016, A Compositional Classification For Grain Assemblages In Fine-Grained Sediments and Sedimentary Rocks—Discussion. Journal of Sedimentary Research, v. 86 (1), p. 1-5.
102. Schimmelmann, A., Lange, C.B., Schieber, J., Francus, P., Ojala, A.E.K., Zolitschka, B., 2016, Varves in marine sediments: a review. Earth Science Reviews, v. 159, p. 215-246.
103. Schieber, J., Bish, D., Coleman, M., Reed, M., Hausrath, E.M., Cosgrove, J., Gupta, S., Minitti, M.E., Edgett, K.S., and Malin, M., 2017, Encounters with an Unearthly Mudstone: Understanding the First Mudstone Found on Mars. Sedimentology, v. 64, p. 311-358.
104. Rubin, D.M., A.G. Fairén, J. Martínez-Frías, J. Frydenvang, O. Gasnault, G. Gelfenbaum, W. Goetz, J.P. Grotzinger, S. Le Mouélic, N. Mangold, H. Newsom, D.Z. Oehler, W. Rapin, J. Schieber, R.C. Wiens, 2017, Fluidized-sediment pipes in Gale crater, Mars, and possible Earth analogs. Geology, v. 45, p. 7-10.
105. Bickford, M.E., Mishra, M., Mueller, P.A., Kamenov, G.D., Schieber, J., and Basu, A., 2017, U-Pb Age and Hf Isotopic Compositions of Magmatic Zircons from a Rhyolite Flow in the Porcellanite Formation in the Vindhyan Supergroup, Son Valley (India): Implications for Its Tectonic Significance. The Journal of Geology, v. 125, p. 367-379
106. Wilson, R., and Schieber, J., 2017, Sediment transport processes and lateral facies gradients across a muddy shelf: Examples from the Geneseo Formation of central New York, United States. AAPG Bulletin, V. 101, p. 423-431.
107. Malin, M. C., et al. (2017), The Mars Science Laboratory (MSL) Mast Cameras and Descent Imager: I. Investigation and Instrument Descriptions, Earth and Space Science, 4, doi:10.1002/2016EA000252.

108. Wilson, R., and Schieber, J. (2017), Association between wave- and current-aided hyperpycnites and flooding surfaces in shelfal mudstones: An integrated sedimentologic, sequence stratigraphic, and geochemical approach. Journal of Sedimentary Research, v. 87, p. 1143-1155.
109. Liu, B., Schieber, J., and Mastalerz, M. (2017), Combined SEM and reflected light petrography of organic matter in the New Albany Shale (Devonian-Mississippian) in the Illinois Basin: A perspective on organic pore development with thermal maturation. International Journal of Coal Geology, v. 184, p. 57-72.
110. Mastalerz, M. and Schieber, J. (2017), Effect of ion milling on the perceived maturity of shale samples: Implications for organic petrography and SEM analysis. International Journal of Coal Geology, v. 183, p. 110-119.
111. Yawar, Z., and Schieber, J. (2017), On the origin of silt laminae in laminated shales. Sedimentary Geology, v. 360, p. 22-34.
112. Wellington, D. et al., 2017, Visible to near-infrared MSL/Mastcam multispectral imaging: Initial results from select high-interest science targets within Gale Crater, Mars. American Mineralogist, v, 102, p. 1202-1217.
113. Li, Y., Schieber, J., Fan, T., Li, Z., and Zhang, J., (2017), Regional depositional changes and their controls on carbon and sulfur cycling across the Ordovician-Silurian boundary, northwestern Guizhou, South China. Palaeogeography, Palaeoclimatology, Palaeoecology, v. 485, p. 816-832.
114. Li, Z., and Schieber, J. (2018), Detailed facies analysis of the Upper Cretaceous Tununk Shale Member, Henry Mountains Region, Utah: Implications for mudstone depositional models in epicontinental seas. Sedimentary Geology, v. 364, p. 141-159.
115. Edgar, L. A., Gupta, S., Rubin, D. M., Lewis, K. W., Kocurek, G. A., Anderson, R. B., Bell, J. F., Dromart, G., Edgett, K. S., Grotzinger, J. P., Hardgrove, C., Kah, L. C., Leveille, R., Malin, M. C., Mangold, N., Milliken, R. E., Minitti, M., Palucis, M., Rice, M., Rowland, S. K., Schieber, J., Stack, K. M., Sumner, D. Y., Wiens, R. C., Williams, R. M. E. and Williams, A. J. (2018), Shaler: in situ analysis of a fluvial sedimentary deposit on Mars. Sedimentology, v. 65, p. 96-122.
116. Stein, N., J.P. Grotzinger, J. Schieber, N. Mangold, B. Hallet, H. Newsom, K.M. Stack, J.A. Berger, L. Thompson, K.L. Siebach, A. Cousin, S. Le Mouélic, M. Minitti, D.Y. Sumner, C. Fedo, C.H. House, S. Gupta, A.R. Vasavada, R. Gellert, R. C. Wiens, J. Frydenvang, O. Forni, P. Y. Meslin, V. Payré, and E. Dehouck, 2018, Desiccation cracks provide evidence of lake drying on Mars, Sutton Island member, Murray formation, Gale Crater. Geology, v. 46, p. 515-518. https://doi.org/10.1130/G40005.1.
117. Li, Yifan, Juergen Schieber, Tailiang Fan, Xiaojie Wei, 2018, Pore characterization and shale facies analysis of the Ordovician-Silurian transition of northern Guizhou, South China: The controls of shale facies on pore distribution. Marine and Petroleum Geology, v. 92, p. 697-718.
118. Stein, N., J.P. Grotzinger, J. Schieber, N. Mangold, B. Hallet, D.Y. Sumner, C. Fedo, 2018, Desiccation cracks provide evidence of lake drying on Mars, Sutton Island member, Murray formation, Gale Crater: Reply. Geology, v. 46, p. e450.
119. Mastalerz, M., L Wei, A Drobniak, A Schimmelmann, J Schieber, 2018, Responses of specific surface area and micro-and mesopore characteristics of shale and coal to heating at elevated hydrostatic and lithostatic pressures. International Journal of Coal Geology, v. 197, p. 20-30.
120. Li, Z., and Schieber, J., 2018, Composite Particles in Mudstones: Examples from the Late Cretaceous Tununk Shale Member of the Mancos Shale Formation. Journal of Sedimentary Research, v. 88, p. 1319-1344.
121. Smith, L.B., Schieber, J., and Wilson, R.D., 2019, Shallow-water onlap model for the deposition of Devonian black shales in New York, USA. Geology, v. 47/3, p. 279-283.
122. Liu, B., Schieber, J., Mastalerz, M., and Teng, J., 2019, Organic matter content and type variation in the sequence stratigraphic context of the Upper Devonian New Albany Shale, Illinois Basin. Sedimentary Geology, v. 383, p. 101-120.
123. Liu, B., Schieber, J., Mastalerz, M., 2019, Petrographic and Micro-FTIR Study of Organic Matter in the Upper Devonian New Albany Shale During Thermal Maturation: Implications for Kerogen Transformation. AAPG Memoir 120, p. 165-188.
124. Schieber, J., Miclaus, C., Seserman, A., Liu, B., and Teng, J., 2019, When a mudstone was actually a "sand": Results of a sedimentological investigation of the bituminous marl formation (Oligocene), Eastern Carpathians of Romania. Sedimentary Geology, v. 384, p. 12-28.
125. Hahm, J., et al., 2019, Lithologically controlled subsurface critical zone thickness and water storage capacity determine regional plant community composition. Water Resources Research, v. 55, p. 3028-3055.
126. Rapin, W., et al, 2019, An interval of high salinity in ancient Gale crater lake on Mars. Nature Geoscience, v. 12, p. 889-895, doi.org/10.1038/s41561-019-0458-8.
127. Minitti, M., et al., 2019, Distribution of primary and secondary features in the Pahrump Hills outcrop (Gale crater, Mars) as seen in a Mars Descent Imager (MARDI) "sidewalk" mosaic. Icarus, v. 328, p. 194-209.

128. Li, Z., and Schieber, J., 2020, Application of sequence stratigraphic concepts to the Upper Cretaceous Tununk Shale Member of the Mancos Shale Formation, south-central Utah: Parasequence styles in shelfal mudstone strata. Sedimentology, v. 67, p. 118-151.
129. Li, Z., Schieber, J., and Bish, D., 2020, Decoding the origins and sources of clay minerals in the Upper Cretaceous Tununk Shale of south-central Utah: Implications for the pursuit of climate and burial histories. The Depositional Record, v. 6, p. 172-191, https ://doi.org/10.1002/dep2.93
130. Liu, B., Schieber, J., Mastalerz, M., Teng, J., 2020, Variability of rock mechanical properties in the sequence stratigraphic context of the Upper Devonian New Albany Shale, Illinois Basin. Marine and Petoleum Geology, v. 112, Article 104068, doi.org/10.1016/j.marpetgeo.2019.104068.
131. Rivera-Hernandez, F., et al., 2020, Grain Size Variations in the Murray Formation: Stratigraphic Evidence for Changing Depositional Environments in Gale Crater, Mars. JGR-Planets, v. 125, e2019JE006230, https://doi.org/10.1029/2019JE006230.
132. Schieber, J., et al, 2020. Engraved on the rocks –aeolian abrasion of Martian mudstone exposures and relation to modern wind patterns in Gale Crater, Mars. The Depositional Record, v. 6, https://doi.org/10.1002/dep2.110.
133. Rampe, E.B., et al., 2020, Mineralogy and geochemistry of sedimentary rocks and eolian sediments in Gale crater, Mars: A review after six Earth years of exploration with Curiosity. Geochemistry, v. 80 (2), Article 125605.
134. Hao, J., AH Knoll, F Huang, J Schieber, RM Hazen, I Daniel, 2020, Cycling phosphorus on the Archean Earth: Part II. Phosphorus limitation on primary production in Archean ecosystems. Geochimica et Cosmochimica Acta, v. 280, p. 360-377.
135. Liu, B., J Teng, M Mastalerz, J Schieber, 2020, Assessing the thermal maturity of black shales using vitrinite reflectance: Insights from Devonian black shales in the eastern United States. International Journal of Coal Geology, v. 220, Article 103426.
136. Liu, B., M Mastalerz, J Schieber, J Teng, 2020, Association of uranium with macerals in marine black shales: Insights from the Upper Devonian New Albany Shale, Illinois Basin. International Journal of Coal Geology, v. 217, Article 103351.
137. Choudhuri, A., J Schieber, S Sarkar, ME Bickford, A Basu, 2020, The "Lower Kaimur Porcellanite"(Vindhyan Supergroup) is of Sedimentary Origin and not Tuff. Journal of the Geological Society of India 95 (1), 17-24.
138. Qiu, Z., Liu, B., Dong, D., Lu, B., Yawar, Z., Chen, Z., Schieber, J., 2020, Silica diagenesis in the Lower Paleozoic Wufeng and Longmaxi Formations in the Sichuan Basin, South China: Implications for reservoir properties and paleoproductivity. Marine and Petroleum Geology, v. 121, article # 104594.
139. Nguyen, M.N., Dultz, S., Picardal, F., Kim Bui, A.T., Van Pham, Q., Schieber, J., 2020, Corrigendum to "Release of potassium accompanying the dissolution of rice straw phytolith" [Chemosphere 119 (2015) 371–376]. Chemosphere, v. 260, article # 128302.
140. Li, Z., Schieber, J., and Pedersen, P.K., 2021, On the origin and significance of composite particles in mudstones: Examples from the Cenomanian Dunvegan Formation. Sedimentology, v. 68, p. 737-754.
141. Schicker, A., Gier, S., Schieber, J., Krois, P., 2021, Diagenesis of the Malmian Mikulov Formation source rock, Vienna Basin: Focus on matrix and pores. Marine and Petroleum Geology, in press.
142. Schieber, J., Shao, X., Yawar, Z., Liu, B., 2021, Cryptic Burrow Traces in Black Shales – A Petrographic Rorschach Test or the Real Thing? Sedimentology, v. 68, p. 2707-2731.
143. Schieber, J., Shao, X., 2021, Detecting detrital carbonate in shale successions – Relevance for evaluation of depositional setting and sequence stratigraphic interpretation. Marine and Petroleum Geology, v. 130, 105130.
144. Pellgrini, C., Tesi, T., Schieber, J., Bohacs, K., et al. 2021, Fate of terrigenous organic carbon in muddy clinothems on continental shelves revealed by stratal geometries: Insight from the Adriatic sedimentary archive. Global and Planetary Change, v. 203, 103539.
145. Hart, B,S,, J. Schieber, J. Kalinec, 2021, Round up the Usual Suspects: Building the Case to Define Overpressure-Generation Mechanisms in Upper Cretaceous to Tertiary Shales Overlying the Eagle Ford Play. GeoGulf Transactions, Vol. 71 (2021), Pages 327-330.
146. Liu, B., Teng, J., Mastalerz, M., Schieber, J., Schimmelmann, A., and Bish, D., 2021. Compositional Control on Shale Pore Structure Characteristics across a Maturation Gradient: Insights from the Devonian New Albany Shale and Marcellus Shale in the Eastern United States Energy & Fuels, 35 (9), 7913-7929
147. Schieber, J., and Wilson, R., 2021. Burrows without a trace—How meioturbation affects rock fabrics and leaves a record of meiobenthos activity in shales and mudstones. Palaeontologische Zeitschrift, v. 95, pages 767–791.
148. Wilson, R., Schieber, J., and Stewart, C., 2021. The discovery of widespread agrichnia traces in Devonian black shales of North America: another chapter in the evolving understanding of a "not so anoxic" ancient sea. Palaeontologische Zeitschrift, v. 95, pages 661–681.

149. Liu, B., Mastalerz, M., Schieber, J., 2022. SEM petrography of dispersed organic matter in black shales: A review. Earth-Science Reviews, Volume 224, 103874.
150. Wilson, R., Schieber, J., Bohacs, K., 2022. Sequence Stratigraphic Reconstruction of the late Middle Devonian Geneseo Formation of NY, USA: Developing A Genetic Model for "Upper Devonian" Unconventional Targets in the Northern Appalachian Basin, NY. Marine and Petroleum Geology, 105547.
151. Teng, J., Liu, B., Mastalerz, M., and Schieber, J., 2022, Origin of organic matter and organic pores in the overmature Ordovician-Silurian Wufeng-Longmaxi Shale of the Sichuan Basin, China. Intern. J. Coal. Geol., v. 253, 103970.
152. Caravaca, G., Mangold, N., Dehouck, E., Schieber, J., Zaugg, L., Bryk, A.B., et al. (2022). From Lake to River: Documenting an Environmental Transition across the Jura/Knockfarril Hill Members Boundary in the Glen Torridon Region of Gale crater (Mars). Journal of Geophysical Research: Planets, 127, e2021JE007093. https://doi.org/10.1029/2021JE007093
153. Schieber, J., Bohacs, K., Coleman, M., Bish, D., Reed, Thompson, L., Rapin, W., Yawar, Z., 2022, Mars is a Mirror – Understanding the Pahrump Hills Mudstones from a Perspective of Earth Analogues. Sedimentology, v. 69, p. 2371-2435. https://doi.org/10.1111/sed.13024
154. Hallet, B., Sletten, R. S., Malin, M., Mangold, N., Sullivan, R. J., Fairén, A. G., Martínez, G., Baker, M., Schieber, J., Martin-Torres, J., and Zorzanoet, M.P. (2022). Active ground patterns near Mars' equator in the Glen Torridon region of Gale Crater. Journal of Geophysical Research: Planets, 127, e2021JE007126. https://doi.org/10.1029/2021JE007126
155. Li, Z., and Schieber, J., (2022). Correlative conformity or subtle unconformity? The distal expression of a sequence boundary in the Upper Cretaceous Mancos Shale, Henry Mountains Region, Utah, USA. Journal of Sedimentary Research, v. 92, p. 635-657.
156. Li, Z., Schieber, J. and Pedersen, P.K. (2022), Reply to the Discussion by Al-Mufti on "On the origin and significance of composite particles in mudstones: Examples from the Cenomanian Dunvegan Formation" by Li et al. (2021), Sedimentology, 68, 737–754. Sedimentology, 69: 2682-2688. https://doi.org/10.1111/sed.13021
157. Fedo, C. M., Bryk, A. B., Edgar, L. A., Bennett, K. A., Fox, V. K., Dietrich, W. E., et al. (2022). Geology and stratigraphic correlation of the Murray and Carolyn Shoemaker formations across the Glen Torridon region, Gale crater, Mars. Journal of Geophysical Research: Planets, 127, e2022JE007408. https://doi.org/10.1029/2022JE007408
158. Sullivan, R., Baker, M., Newman, C., Turner, M., Schieber, J., Weitz, C., et al. (2022). The aeolian environment in Glen Torridon, Gale crater, Mars. Journal of Geophysical Research: Planets, 127, e2021JE007174. https://doi.org/10.1029/2021JE007174
159. Schieber, J., Li, Z., Yawar, Z., Cao, X., Ashley, T. and Wilson, R. (2022), Kaolinite deposition from moving suspensions: The roles of flocculation, salinity, suspended sediment concentration and flow velocity/bed shear. Sedimentology. https://doi.org/10.1111/sed.13034
160. Otharán, G., Zavala, C., Schieber, J., Olivera, D., Martínez, M., Díaz, P., Yawar, Z., and Agüero, L. (2023). Unravelling the fabrics preserved inside early diagenetic concretions: Insights for the distribution, accumulation and preservation of organic-rich mud in the interior of epicontinental basins. Sedimentary Geology, v. 440, 106254, https://doi.org/10.1016/j.sedgeo.2022.106254.
161. Hart, B., Schieber, J., and Kalinec, J. (2023). Clay Diagenesis and Overpressure Development in Upper Cretaceous and Tertiary Shales of South Texas. Marine & Petrol. Geol., v. 147, 105978.
162. Liu, B., Mastalerz, M., and Schieber, J., 2023. Petrophysical property variations in overmature Marcellus Shale: Implications for gas storage and producibility. AAPG Bulletin, v. 107, p. 685–716.
163. Camp, W.K., Schieber, J., Mastalerz, M., and Nesheim, T.O. (2023). Organic Petrography of the Upper Ordovician Red River Kukersite Tight Oil and Gas Play, Williston Basin, North Dakota, U.S.A. AAPG Bulletin, AAPG Bulletin (2023) 107 (6): 989–1013.
164. Rapin, W., Dromart, G., Clark, B.C., Schieber, J., et al. (2023). Sustained wet-dry cycling on early Mars. Nature, v. 620, p. 299-302.
165. Pellegrini, C., Sammartino, I., Schieber, J., Tesi, T., et al. (2023). On depositional processes governing along-strike facies variations of fine-grained deposits: unlocking the Little Ice Age subaqueous delta clinoforms on the Adriatic shelf. In Press, Sedimentology.

BOOK CONTRIBUTIONS

166. Schieber, J., 1987, Small scale sedimentary iron deposits in a Mid-Proterozoic basin: Viability of iron supply by rivers: In: Precambrian Iron Formations, (Ed. by P.W.U. Appel), p. 267-295, Theophrastus Publishers S.A., Athens.

167. Schieber, J., 1991, Sedimentary structures, textures, and depositional settings of shales from the Lower Belt Supergroup, Mid-Proterozoic, Montana, U.S.A.: In: Microstructure of Fine-Grained Sediments: From Mud to Shale, (eds. R.H. Bennett, W.R. Bryant, M.H. Hulbert), p. 101-108, Springer Verlag.
168. Schieber, J., 1994, Paleoflow patterns and macroscopic sedimentary features in the Late Devonian Chattanooga Shale of Tennessee: Differences between the Appalachian Basin and the American Craton. Canadian Society of Petroleum Geologists, Memoir 17, p. 763-772.
169. Schieber, J., 1994, Reflection of deep vs shallow water deposition by small scale sedimentary features and microfabrics of the Chattanooga Shale in Tennessee. Canadian Society of Petroleum Geologists, Memoir 17, p. 773-784.
170. Lobza, V., Schieber, J., and Nestell, M.E., 1994, The influence of sea level changes and possible pycnocline shifts on benthic communities in the Finis Shale (Virgilian) near Jacksboro, north-central Texas. Canadian Society of Petroleum Geologists, Memoir 17, p. 927-947.
171. Schieber, J., 1998. Sedimentologic, geochemical, and mineralogical features of the Belt Supergroup and their bearing on the lacustrine vs marine debate. *In* Belt Symposium III, R.B. Berg (ed.), Montana Bureau of Mines and Geology Special Publication 112, p. 177-189.
172. Schieber, J., Zimmerle, W., and Sethi, P., eds., 1998, **Shales and Mudstones, vol 1***: Basin Studies, Sedimentology and Paleontology (384pp)*, **vol 2***: Petrography, Petrophysics, Geochemistry, and Economic Geology (296pp).* Schweizerbart'sche Verlagsbuchhandlung, Stuttgart.
173. Schieber, J., and Zimmerle, W., 1998, The history and promise of shale research. In: J. Schieber, W. Zimmerle, and P. Sethi (editors), Shales and Mudstones (vol. 1): Basin Studies, Sedimentology and Paleontology, Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, p. 1-10.
174. Schieber, J. 1998, Deposition of Mudstones and Shales: Overview, Problems, and Challenges. In: J. Schieber, W. Zimmerle, and P. Sethi (editors), Shales and Mudstones (vol. 1): Basin Studies, Sedimentology and Paleontology, Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, p. 131-146.
175. Schieber, J., 1998, Sedimentary features indicating erosion, condensation, and hiatuses in the Chattanooga Shale of Central Tennessee: relevance for sedimentary and stratigraphic evolution. In: J. Schieber, W. Zimmerle, and P. Sethi (editors), Shales and Mudstones (vol. 1): Basin Studies, Sedimentology and Paleontology, Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, p. 187-215.
176. Schieber, J., 1998, The organic dimension: The many uses of paleontology. In: J. Schieber, W. Zimmerle, and P. Sethi (editors), Shales and Mudstones (vol. 1): Basin Studies, Sedimentology and Paleontology, Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, p. 297-299.
177. Schieber, J., and Zimmerle, W., 1998, Petrography of shales: A survey of Techniques. In: J. Schieber, W. Zimmerle, and P. Sethi (editors), Shales and Mudstones (vol. 2): Petrography, Petrophysics, Geochemistry, and Economic Geology. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, p. 3-12.
178. Sethi, P., and Schieber, J., 1998, Economic Aspects of Shales, an Overview. In: J. Schieber, W. Zimmerle, and P. Sethi (editors), Shales and Mudstones (vol. 2): Petrography, Petrophysics, Geochemistry, and Economic Geology. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, p. 237-253.
179. Schieber, J., 1998, Developing a Sequence Stratigraphic Framework for the Late Devonian Chattanooga Shale of the southeastern US: Relevance for the Bakken Shale. In: J.E. Christopher, C.F. Gilboy, D.F. Paterson, and S.L. Bend (eds.), Eight International Williston Basin Symposium, Saskatchewan Geological Society Special Publication No. 13, p. 58-68.
180. Schieber, J., 2003, Black Shales. In: Gerard V. Middleton et al. (eds.), Encyclopedia of Sediments and Sedimentary Rocks, Kluwer Scientific Publishers, p. 83-85.
181. Schieber, J., 2003, Depositional Fabric of Mudstones. In: Gerard V. Middleton et al. (eds.), Encyclopedia of Sediments and Sedimentary Rocks, Kluwer Scientific Publishers, p. 203-207.
182. Schieber, J., 2004, Microbial Mats in the Siliciclastic Rock Record: A Summary of Diagnostic Features. In: P.G. Eriksson, W. Altermann, D. Nelson, W.U. Mueller, O. Catuneanu, and K. Strand (editors), The Precambrian Earth: Tempos and Events, Developments in Precambrian Geology, Elsevier, p. 663-672.
183. Schieber, J., and Over, J., 2005, Sedimentary Fill of the Late Devonian Flynn Creek Crater: A Hard Target Marine Impact. In: Over, D.J., Morrow, J.R., and Wignall, P.B., eds., Understanding Late Devonian and Permian-Triassic Biotic and Climatic Events: Towards an Integrated Approach, Elsevier, p. 51-69.
184. Schieber, J., Bose, P.K., Eriksson, P.G., Banerjee, S., Sarkar, S., Altermann, W., and Catuneau, O., (Eds.), 2007, **Atlas of microbial mat features preserved within the clastic rock record**, Volume 2 of Atlases in Geoscience, Elsevier, 311 p.
185. Schieber, J., Bose, P.K., Eriksson, P.G., Banerjee, S., Sarkar, S., Alterman, W., and Catuneau, O., 2007, Prologue: An Introduction to Microbial Mats. Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 1-4.

186. Eriksson, P.G., Schieber, J., Bouougri, G., Gerdes, G., Porada, H., Banerjee, S., Bose, P.K., and Sarkar, S., 2007, Classification of Structures left by Microbial Mats in their Host Sediments. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 39-52.
187. Schieber, J., 2007, Mat Features in Sandstones - Diagenetic Features Related to Mat Metabolism and Decay. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 72-75.
188. Schieber, J., 2007, Microbial Mats on Muddy Substrates – Examples of Possible Sedimentary Features and Underlying Processes. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 117-134.
189. Schieber, J., 2007, Microbial Mat Features in Terrigenous Clastics of the Belt Supergroup, Mid-Proterozoic of Montana, USA. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 158-170.
190. Patranabis-Deb, S., Schieber, J., Chaudhuri, A.K., 2007, Microbial Mat Features in Mudstones of the Mesoproterozoic Somanpalli Group, Pranhita-Godavari Basin, India. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 171-180.
191. Schieber, J., Sur, S., and Banerjee, S., 2007, Benthic Microbial Mats in Black Shale Units from the Vindhyan Supergroup, Middle Proterozoic of India: The Challenges of Recognizing the Genuine Article. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 189-197.
192. Schieber, J., 2007, Ripple Patches in the Cretaceous Dakota Sandstone near Denver, Colorado, a Classical Locality for Microbially Bound Tidal Sand Flats. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 222-224.
193. Schieber, J., 2007, Benthic Microbial Mats as an Oil Shale Component: Green River Formation (Eocene) of Wyoming and Utah. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 225-232.
194. Schieber, J., and Glamoclija, M., 2007, Microbial Mats Built by Iron Bacteria: A Modern Example from Southern Indiana. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 233-244.
195. Schieber, J., 2007, Flume Experiments on the Durability of Sandy Microbial Mat Fragments During Transport. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 248-257.
196. Schieber, J., 2007, Paleogeography of Microbial mats in Terrigenous Clastics – Environmental Distribution of Associated Sedimentary Features and the Role of Geologic Time. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, 267-275.
197. Schieber, J., Gerdes, G., Eriksson, P.G., Sarkar, S., Bose, P.K., Banerjee, S., Catuneanu, O., and Altermann, W., 2007, Chapter 10 – Conclusions. In: Atlas of microbial mat features preserved within the clastic rock record, J. Schieber et al. (Eds.), Elsevier, p. 285-288.
198. Schieber, J., 2011, Iron Sulfide Formation. Encyclopedia of Geobiology, Springer Verlag, J. Reitner & V. Thiel (Eds.), p. 486-502.
199. Schieber, J., 2011, Shales. Encyclopedia of Geobiology, Springer Verlag, J. Reitner & V. Thiel (Eds.), p. 785-791.
200. Schieber, J., 2011, Shifting paradigms in shale sedimentology –The implications of recent flume studies for interpreting shale fabrics and depositional environments. In: Gas Shale of the Horn River basin, D.A. Leckie and J.E. Barclay (Eds.), Canadian Society of Petroleum Geologists, Calgary, p. 109-114.
201. Schieber, J., 2011, Shale microfabrics and pore development – An overview with emphasis on the Importance of depositional processes. In: Gas Shale of the Horn River basin, D.A. Leckie and J.E. Barclay (Eds.), Canadian Society of Petroleum Geologists, Calgary, p. 115-119.
202. Schieber, J., 2012, Styles of agglutination in benthic foraminifera from modern Santa Barbara Basin sediments and fossil analogs in Devonian and Mississippian black shales. In: Anoxia: Paleontological strategies and evidence for eukaryote survival. Springer Verlag, New York, p. 575-589.
203. Schieber, J., 2013, SEM Observations on Ion-milled Samples of Devonian Black Shales from Indiana and New York: The Petrographic Context of Multiple Pore Types. AAPG Memoir 102, p. 153-172.
204. Ulmer-Scholle, D.S., Scholle, P.A., Schieber, J., and Raine, R.J., 2015, **A Color Guide to the Petrography of Sandstones, Siltstones, Shales and Associated Rocks**. AAPG Memoir 109, 505 pp.
205. Patchen, D.G., and Carter, K.M. (eds), 2015, **A Geologic Playbook for Utica Shale Appalachian Basin Exploration**. Appalachian Oil & natural Gas Consortium, West Virgina University. 205 p. JS contributed App 8B, SEM images of ion milled samples. Entire playbook download: www.wvgs.wvnet.edu/utica/playbook/pb_12.aspx

206. Lazar, R., Bohacs, K.M., Schieber, J., Macquaker, J., and Demko, T., 2015, **Mudstone Primer: Lithofacies variations, diagnostic criteria, and sedimentologic/stratigraphic implications at the lamina to bedset scale**. SEPM Concepts in Sedimentology and Paleontology #12, 198 pp.
207. Schieber, J., Lazar, R., Bohacs, K., Klimentidis, B., Ottmann, J., Dumitrescu, M., 2016, An SEM Study of Porosity in the Eagle Ford Shale of Texas – Pore Types and Porosity Distribution in a Depositional and Sequence Stratigraphic Context. AAPG Memoir 110, p. 153-172.
208. Wilson, R.D., Schieber, J., 2016. The Influence of Primary and Secondary Sedimentary Features on Reservoir Quality: Examples from the Geneseo Formation of New York, U.S.A. In: Olson, T. (Ed.), Imaging Unconventional Reservoir Pore Systems. AAPG Memoir Vol. 112, pp. 167–184.
209. Liu, B., Schieber, J., Mastalerz, M., 2019, Petrographic and Micro-FTIR Study of Organic Matter in the Upper Devonian New Albany Shale During Thermal Maturation: Implications for Kerogen Transformation. AAPG Memoir 120, p. 165-188.
210. Lazar, O. R., K. M. Bohacs, J. Schieber, J. H. S. Macquaker, and T. M. Demko, 2023, Mudstone nomenclature, in K. M. Bohacs and O. R. Lazar, eds.,Sequence stratigraphy: Applications to fine-grained rocks: AAPG Memoir 126, p. 21–34.
211. Lazar, O. R., K. M. Bohacs, J. Schieber, J. H. S. Macquaker, and T. M. Demko, 2023, Tools and techniques for studying mudstones, in K. M. Bohacs and O. R. Lazar, eds., Sequence stratigraphy: Applications to fine-grained rocks: AAPG Memoir 126, p. 35–88.
212. Lazar, O. R., K. M. Bohacs, J. Schieber, J. H. S. Macquaker, and T. M. Demko, 2023, Laminae, laminasets, beds, and bedsets, in K. M. Bohacs and O. R. Lazar, eds., Sequence stratigraphy: Applications to fine-grained rocks: AAPG Memoir 126, p. 89–106.
213. Lazar, O. R., and J. Schieber, 2023, New Albany Shale, Illinois Basin, USA—Devonian carbonaceous mudstone accumulation in an epicratonic sea: Stratigraphic insights from outcrop and subsurface data, in K. M. Bohacs and O. R. Lazar, eds., Sequence stratigraphy: Applications to fine-grained rocks: AAPG Memoir 126, p. 249–294.

BOOK REVIEWS

214. (2007) The Deposition of Organic-Carbon-Rich Sediments: Models, Mechanisms, and Consequences, edited by Nicholas B. Harris, 2005, SEPM Special Publication 82. Book review for Palaios, DOI: 10.2110/PALO.2007.BR016.
215. (2007) Mud and Mudstones: Introduction and Overview, by Paul E. Potter, J. Barry Maynard, and Pedro J. Depetris, 2005, Springer Verlag. Book review for Palaios, DOI: 10.2110/PALO.2007.BR021.

GUIDEBOOKS

216. Schieber, J., and Lazar, R.O., 2004, (eds.) Devonian Black Shales of the Eastern U.S.: New Insights into Sedimentology and Stratigraphy from the Subsurface and Outcrops in the Illinois and Appalachian Basins. Field Guide for the 2004 Great Lakes Section SEPM Annual Field Conference. Indiana Geological Survey Open File Study 04-05, 90pp.
217. Lazar, O.R., and Schieber, J., 2004, Summary of observations from a 40-Meter cored interval of the New Albany Shale in well 1-3 Kavanaugh, Daviess County, Indiana. *In:* Devonian Black Shales of the Eastern U.S.: New Insights into Sedimentology and Stratigraphy from the Subsurface and Outcrops in the Illinois and Appalachian Basins. Field Guide for the 2004 Great Lakes Section SEPM Annual Field Conference, J. Schieber and O.R. Lazar (eds.), Indiana Geological Survey Open File Study 04-05, p. 1-6.
218. Schieber, J., and Lazar, R.O., 2004, Road Log and Stop Descriptions. *In:* Devonian Black Shales of the Eastern U.S.: New Insights into Sedimentology and Stratigraphy from the Subsurface and Outcrops in the Illinois and Appalachian Basins. Field Guide for the 2004 Great Lakes Section SEPM Annual Field Conference, J. Schieber and O.R. Lazar (eds.), Indiana Geological Survey Open File Study 04-05, p. 8-29.
219. Lazar, O.R., and Schieber, J., 2004, New Albany and Ohio Shales: An Introduction. *In:* Devonian Black Shales of the Eastern U.S.: New Insights into Sedimentology and Stratigraphy from the Subsurface and Outcrops in the Illinois and Appalachian Basins. Field Guide for the 2004 Great Lakes Section SEPM Annual Field Conference, J. Schieber and O.R. Lazar (eds.), Indiana Geological Survey Open File Study 04-05, p. 31-34.
220. Dumitrescu, M., Finkelstein, D.B., Lazar, O.R., Schieber, J., and Brassell, S.C., 2004, Origin and history of bitumen in geodes of the New Albany Shale. *In:* Devonian Black Shales of the Eastern U.S.: New Insights into Sedimentology and Stratigraphy from the Subsurface and Outcrops in the Illinois and Appalachian Basins. Field Guide for the 2004 Great Lakes Section SEPM Annual Field Conference, J. Schieber and O.R. Lazar (eds.), Indiana Geological Survey Open File Study 04-05, p. 61-67.

221. Schieber, J., 2004, Connecting the dots: Sequence stratigraphic correlations in Devonian black shales of the eastern US and relationship to global sea-level variations. *In:* Devonian Black Shales of the Eastern U.S.: New Insights into Sedimentology and Stratigraphy from the Subsurface and Outcrops in the Illinois and Appalachian Basins. Field Guide for the 2004 Great Lakes Section SEPM Annual Field Conference, J. Schieber and O.R. Lazar (eds.), Indiana Geological Survey Open File Study 04-05, p. 80-82.
222. Parke, M., Schieber, J., and Mastalerz, M., 2009, The New Albany Shale in the Illinois Basin. Field trip guide to outcrops south of Louisville, Kentucky. 2009 AAPG Eastern Section Meeting, Evansville, In, September 19th 2009, 40 pp.
223. Schieber, J., Lazar, R., and Bohacs, K., 2010, Sedimentology and Stratigraphy of Shales: Expression and correlation of depositional sequences in the Devonian of Tennessee, Kentucky and Indiana. AAPG 2010 Annual Convention in New Orleans, Field Guide for Post-Convention Field Trip 10, 172 pp.
224. Lazar, R., Bohacs, K., Macquaker, J., and Schieber, J, 2010, Fine-grained rocks in outcrops: Classification and description guidelines. In: Sedimentology and Stratigraphy of Shales: Expression and correlation of depositional sequences in the Devonian of Tennessee, Kentucky and Indiana. AAPG 2010 Annual Convention in New Orleans, Field Guide for Post-Convention Field Trip 10, Schieber, J., Lazar, R., and Bohacs, K. (eds.), p. 3-14.
225. Lazar, R., Schieber, J., and Wilson, R., 2010, Chattanooga, New Albany and Ohio Shales: An Introduction. In: Sedimentology and Stratigraphy of Shales: Expression and correlation of depositional sequences in the Devonian of Tennessee, Kentucky and Indiana. AAPG 2010 Annual Convention in New Orleans, Field Guide for Post-Convention Field Trip 10, Schieber, J., Lazar, R., and Bohacs, K. (eds.), p. 31-40.
226. Lazar, R., Schieber, J, and Over, J., 2010, New Albany Shale: A sequence stratigraphic overview. In: Sedimentology and Stratigraphy of Shales: Expression and correlation of depositional sequences in the Devonian of Tennessee, Kentucky and Indiana. AAPG 2010 Annual Convention in New Orleans, Field Guide for Post-Convention Field Trip 10, Schieber, J., Lazar, R., and Bohacs, K. (eds.), p. 41-55.
227. Schieber, J., 2010, Chattanooga Shale: A sequence stratigraphic overview. In: Sedimentology and Stratigraphy of Shales: Expression and correlation of depositional sequences in the Devonian of Tennessee, Kentucky and Indiana. AAPG 2010 Annual Convention in New Orleans, Field Guide for Post-Convention Field Trip 10, Schieber, J., Lazar, R., and Bohacs, K. (eds.), p. 56-73.
228. Schieber, J., 2010, Outcrop description, Tennessee and Southern Kentucky (Stops 1-6). In: Sedimentology and Stratigraphy of Shales: Expression and correlation of depositional sequences in the Devonian of Tennessee, Kentucky and Indiana. AAPG 2010 Annual Convention in New Orleans, Field Guide for Post-Convention Field Trip 10, Schieber, J., Lazar, R., and Bohacs, K. (eds.), p. 79-115.
229. Schieber, J., and Lazar, R., 2010, Outcrop description, Central Kentucky (Stops 7-9). In: Sedimentology and Stratigraphy of Shales: Expression and correlation of depositional sequences in the Devonian of Tennessee, Kentucky and Indiana. AAPG 2010 Annual Convention in New Orleans, Field Guide for Post-Convention Field Trip 10, Schieber, J., Lazar, R., and Bohacs, K. (eds.), p. 116-142.
230. Schieber, J., and Wilson, R., 2013, Sedimentology and stratigraphy of shales: Expression and correlation of depositional sequences in the Devonian of Ohio and Kentucky. AAPG 2013 Annual Convention in Pittsburgh, Field Guide for Post-Convention Field Trip 9, 159 pp.
231. Smith, T., Schieber, J., Wilson, R., Leone, J., and Nyahay, R., 2013, Organic-Rich Shales of New York. AAPG 2013 Annual Convention in Pittsburgh, Field Guide for Post-Convention Field Trip 111 pp.

ABSTRACTS

1. Schieber, J., 1983, Tempestites from the Mid-Proterozoic Newland Formation, Montana: GSA abstr. w. progr., v. 15, # 6, p. 679.
2. Schieber, J., 1984, Cryptalgal laminites and storm layers in a Proterozoic shale: Proceedings of the Oregon Academy of Science, v. 19.
3. Schieber, J., 1984, Shale facies in basin analysis: An example from the Proterozoic of Montana: GSA abstr. w. progr., v. 16, p. 646.
4. Schieber, J., 1984, A novel use of rare earth element patterns in stratigraphy and basin analysis: presented at the September 1984 AGU-meeting in Corvallis Oregon.
5. Schieber, J., 1986, Basinal evolution of the Mid-Proterozoic Helena embayment, Belt basin, Montana: GSA abstr. w. progr. 18, p. 740-741.
6. Schieber, J., 1987, Mobility of rare earth elements (REE) during carbonate diagenesis of the Mid-Proterozoic Newland Formation, Montana: SEPM 1987 Annual Midyear Meeting in Austin, Texas; Abstracts, v. IV, p. 75.
7. Schieber, J., 1987, Mixed terrigenous-carbonate sedimentation in the Mid-Proterozoic Newland Formation, Montana: Geol. Soc. Am. Abstr. w. Progr., v. 19, p. 832.
8. Schieber, J., and Ellwood, B.B., 1987, The coincidence between macroscopic paleocurrent indicators and magnetic lineation in shales of the Precambrian Belt basin: Application of anisotropy of magnetic susceptibility to paleocurrent determination in shales: Presented at the August 1987 meeting of the IUGG in Vancouver.

9. Schieber, J., 1988, Sedimentary structures, textures, and depositional settings of shales from the Mid-Proterozoic Belt basin: Workshop on Microstructure of Mudrocks, NORDA, NSTL, Ms.
10. Schieber, J., 1989, Pyrite mineralization in microbial mats from the Mid-Proterozoic Newland Formation, Belt Series, Montana, U.S.A.: Geol. Soc. Am. Abstr. w. Progr., v. 21, p. A291.
11. Schieber, J., 1989, Distribution of rare earth elements in stratigraphic units of the Belt Supergroup. EOS, v. 70, October 24, p. 1390
12. Schieber, J., and Ellwood, B.B., 1989, Application of anisotropy of magnetic susceptibility (AMS) to paleocurrent studies in shale sequences. EOS, v. 70, October 24, p. 1066
13. Strauss, H., and Schieber, J., 1989, Schwefelisotopenwerte als Hinweis zur Pyritgenese in der Newland Formation, Belt Supergroup, Montana, U.S.A.: Presented at the DMG meeting in Berlin, West Germany, September 1989.
14. Schieber, J., 1990, Evidence for stabilization of terrigenous mud and sand surfaces by microbial mats in the Mid-Proterozoic Belt Supergroup. Geol. Soc. Am. Abstr. w. Progr., v. 22, p. A93.
15. Schieber, J., 1990, A comparison of provenance clues from interbedded shales and sandstones of the Mid-Proterozoic Newland Formation, Belt Series, Montana, U.S.A. EOS, v. 71, p. 1716.
16. Schieber, J., 1991, Non-clastic fluvial iron supply to the Mid-Proterozoic Belt basin: Evidence from major element composition of shales and carbonates. Geol. Soc. Am. Abstr. w. Progr., v. 23, p. A156.
17. Schieber, J. and Ellwood, B.B., 1991, Application of anisotropy of magnetic susceptibility (AMS) to paleocurrent studies in several shale basins. EOS, v. 72, no. 44, p. 137.
18. Schieber, J., 1992, A smorgasbord of meso- and mega-Scale sedimentary features in shales and their possible environmental significance. Geol. Soc. Am. Abstr. w. Progr., v. 24, p. 72.
19. Schieber, J., 1992, Evidence for episodic high energy events and shallow water deposition in the Chattanooga Shale, Devonian, Central Tennessee, USA. 29th International Geological Congress, Kyoto, Abstr., p. 4-35.
20. Schieber, J., 1992, Determining paleoflow patterns in a shale dominated epicontinental basin by using anisotropy of magnetic susceptibility (AMS). 29th International Geological Congress, Kyoto, Abstr., p. 4-36.
21. Schieber, J., 1992, Observations suggestive of persistent bottom currents and episodic high energy events during deposition of the Chattanooga Shale, Devonian of Tennessee: Implications for probable water depth and sedimentation conditions. Geol. Soc. Amer. Abstr. w. Progr., v. 24, p. A352.
22. Schieber, J., 1992, Relationships between microfabrics, mesofabrics, and sedimentary environments of shales from the Mid-Proterozoic Newland Formation, Montana. EOS, p. 516.
23. Schieber, J., 1993, Sedimentologic, geochemical, and mineralogical features of the Belt Series and their bearing on the lacustrine vs marine debate. Belt Symposium III, abstract volume.
24. Schieber, J., 1993, Facies and origin of shales in Upper Devonian Sonyea Group, New York. GSA Abstr. w. Progr., v. 25/6, p. A-464.
25. Schieber, J., 1993, Paleoflow patterns and macroscopic sedimentary features in the Late Devonian Chattanooga Shale of Tennessee: Differences between the Appalachian Basin and the American Craton. 1993 Annual Convention of Canadian Society of Petroleum Geologists, Program and Abstracts, p. 267.
26. Schieber, J., 1993, Reflection of deep vs shallow water deposition by small-scale sedimentary features and microfabrics of the Chattanooga Shale in Tennessee. 1993 Annual Convention of Canadian Society of Petroleum Geologists, Program and Abstracts, p. 268.
27. Fraticelli, C., and Schieber, J., 1993, Relationship of depositional environment to microfabric features of a shale unit in the Mid-Proterozoic Newland Formation, Montana. Geol. Soc. Amer. Abstr. w. Progr., v. 25/1, p. 10.
28. Lobza, V., and Schieber, J., 1993, Relationships between benthic communities and sedimentary environments in the Pennsylvanian Finis Shale near Jacksboro, Texas. Geol. Soc. Amer. Abstr. w. Progr., v. 25/1, p. 36.
29. Lobza, V., Schieber, J., and Nestell, M., 1993, The influence of sea level changes and possible pycnocline shifts on benthic communities in the Finis Shale (Virgilian) near Jacksboro, north-central Texas. 1993 Annual Convention of Canadian Society of Petroleum Geologists, Program and Abstracts, p. 183.
30. Knode, T., Reaser, D., and Schieber, J., 1993, Geological aspects of the Devonian Misener/Sylamore Sandstone in the central United States. AAPG 1993 Southwest Section Geological Convention, Transactions and Abstracts, p. 93.
31. Schieber, J., 1994, The utility of small scale sedimentary structures in shales. AAPG Annual Meeting in Denver, Abstract Volume, p. 251.
32. Schieber, J., 1994, Authigenic silica deposition in spores: A mechanism to produce "in situ" quartz sand in black shales? GSA Abstr. w. Progr., v. 26/7, p. A-489.
33. Schieber, J., 1995, Depositional cycles in the Chattanooga Shale of Tennessee: Evidence of orbital forcing? Geol. Soc. Amer. Abstr. w. Progr., v. 27/2, p. 85.
34. Schieber, J., 1995. Sedimentary expression and stratigraphic significance of erosion surfaces, condensation horizons, and hiatuses in the Chattanooga Shale of central Tennessee. GSA Abstr. w. Progr., v. 27/6, p. A-400.
35. Lobza, V., and Schieber, J., 1995. An Atrypid/Leiorhynchid brachiopod fauna in the Chattanooga Shale of southwestern Tennessee: Indication of dysaerobic conditions? GSA Abstr. w. Progr., v. 27/2, p. 70.
36. Schieber, J., 1996. Lag deposits in the Chattanooga Shale: The importance of diagenetic and biogenic grains and potential for clues to paleoceanography. Geol. Soc. Amer. Abstr. w. Progr., v. 28/7, p. A-278.
37. Lobza, V., and Schieber, J., 1996. Are sedimentary features associated with worm burrows in the Chattanooga Shale a result of fluid mixing? An experimental approach. Geol. Soc. Amer. Abstr. w. Progr., v. 28/7, p. A-278.
38. Schieber, J., 1997. Microbial mats in terrigenous clastics: The challenge of identification in the rock record. Geol. Soc. Amer. Abstr. w. Progr., v. 29/6, p. A-192.
39. Schieber, J., 1998. Pyrite Ooids: A Conundrum of Texture vs Mineralogy. Geol. Soc. Amer. Abstr. w. Progr., v. 30/7, p. A-332.

40. Lobza, V., and Schieber, J., 1998. Detection of erosion surfaces in shales with high resolution image scans - examples from the Dowelltown Member of the Chattanooga Shale, Upper Devonian of central Tennessee. Geol. Soc. Amer. Abstr. w. Progr., v. 30/7, p. A-193.
41. Schieber, J., 1999. Sequence stratigraphy in the Chattanooga Shale: Unraveling the depositional history of a black shale succession. AAPG Annual Meeting in San Antonio, Abstract Volume, p. A124.
42. Schieber, J., 1999. Possible tubular tempestites in the Chattanooga Shale: indicators of complex erosive episodes? GSA Abstr. w. Progr., v. 31/1, p. A-34.
43. Lobza, V., and Schieber, J., 1999. Colonization hierarchy of a Devonian sea floor by burrowing organisms in the context of sediment properties: – examples from the Dowelltown Member of the Chattanooga Shale, Upper Devonian, central Tennessee. GSA Abstr. w. Progr., v. 31/1, p. A-12.
44. Thaisen, K., and Schieber, J., 1999. The Flynn Creek Impact Structure of Tennessee: Evidence for shock deformation and infill mechanisms. GSA Abstr. w. Progr., v. 31/1, p. 36.
45. Johri, P., and Schieber, J., 1999. A detailed study of gamma ray logs from the Laconia field in southern Indiana: Internal stratigraphy of the New Albany Shale and implications for sequence stratigraphy. GSA Abstr. w. Progr., v. 31/1, p. A-10.
46. Johri, P., and Schieber, J., 1999. A regional study of sequences in the New Albany Shale of the southeastern Illinois Basin (Indiana) with gamma ray logs and well cores. AAPG Regional Meeting in Wichita/KS, Transactions of the 1999 AAPG Midcontinent Section Meeting (Kansas Geological Survey Open-File Report 99-28, D.F. Merriam, ed.), p. 211.
47. Schieber, J., 1999. Pyrite ooids and oncoids from the Winnipeg Formation (Ordovician of Saskatchewan): Textural and geochemical observation in support of a primary origin. GSA Abstr. w. Progr., v. 31/7, p. A282.
48. Barrett, T., and Schieber, J., 1999. Experiments on the Self-Compaction of Fresh Muds: Implications for Interpreting the Rock Record. GSA Abstr. w. Progr., v. 31/7, p. A282.
49. Lobza, V. and Schieber, J., 1999. Ichnofacies: Burrow community, or hierarchy of emplacement? Examples from the Dowelltown Member of the Chattanooga Shale, Upper Devonian, central Tennessee. GSA Abstr. w. Progr., v. 31/7, p. A104.
50. Krinsley, D., Schieber, J., and Riciputi, L., 1999. "In situ" quartz silt in Devonian mudstones from the eastern US: A petrographic and geochemical investigation by scanning cathodoluminescence and ion microprobe mass spectrometry. GSA Abstr. w. Progr., v. 31/7, p. A282.
51. Schieber, J., 2000. Sequence Stratigraphic Correlations in Devonian Black Shales of the eastern US: Relationship to Global Sealevel Variations. AAPG Annual Meeting in New Orleans, Abstract Volume, p. A132.
52. Schieber, J., 2000. New Insights into the Deposition of the Chattanooga Shale in Tennessee and Possible Applications to Lateral Equivalents in North-Central Arkansas. GSA Abstr. w. Progr., v. 32/3, p. 40.
53. Barrett, T., and Schieber, J., 2000. Observations on Sediment Reworking and Bioturbation in the Camp Run Member of the New Albany Shale Group, Indiana. GSA Abstr. W. Progr., v. 32/3, p. 2.
54. Moffett, J., and Schieber, J., 2000. A Study of Cyclic vs Event Sedimentation in a Shallowing Upwards Mudstone Succession: The Upper Placid Shale (Virgilian) of the Fort Worth Basin, Texas. GSA Abstr. W. Progr., v. 32/3, p. 36.
55. Baggett, K., and Schieber, J., 2000. A Detailed Study of Depositional History and Sequence Boundaries in the Middle Member of the Ranger Limestone (Virgilian) of the Fort Worth Basin, Texas. GSA Abstr. W. Progr., v. 32/3, p. 36.
56. Johri, P., and Schieber, J., 2000. A Regional Study of Internal Sequence Stratigraphy of the New Albany Shale of the Illinois Basin with the Help of Gamma Ray Logs. GSA Abstr. W. Progr., v. 32/3, p. 37.
57. Schieber, J., 2000. Deposition of the Chattanooga Shale in central Tennessee: A complex history of Late Devonian transgressions and regressions. GSA Abstr. W. Progr., v. 32/7, p. A224.
58. Schieber, J., and Roddy, D., J., 2000. The Flynn Creek crater in Tennessee: Learning from crater sedimentation about timing and impact conditions. GSA Abstr. W. Progr., v. 32/7, p. A451.
59. Barrett, T., Schieber, J., and Balsam, W., 2000. Differentiating black shale sequences with visible light reflectance. GSA Abstr. W. Progr., v. 32/7, p. A225.
60. Schieber, J., 2000. Organic Petrography of Late Devonian Black Shales: What's in it for Sedimentologists? Proceedings Volume, TSOP meeting in Bloomington, Indiana.
61. Schieber, J., 2001. Sequences in the Late Devonian Chattanooga Shale of Tennessee and the Impact of Depositional History on their Sealing Capacity. AAPG Annual Meeting in Denver, Abstract Volume, p. A179.
62. Schieber, J., 2001. Finding life on Mars: A mudrock geologist's perspective. 32nd Lunar and Planetary Sciences Conference, Houston, March 12-16th 2001, Abstract Volume - CD.
63. Schieber, J., Krinsley, D., and Riciputi, L., 2001. Quartz silt in the sedimentary record - A diagenetic origin. GSA Abstr. W. Progr., v. 33/3, p. A72.
64. Schieber, J., 2001. Pyrite Ooids in Late Devonian Black Shales of the Eastern US: Relict Features of Intermittent Ironstone Formation. GSA Abstr. W. Progr., v. 33/6, p. A102.
65. Schieber, J., 2001. How Anoxic Was the Late Devonian Inland Sea? New Perspectives from an Integrated Study of the Chattanooga Shale. GSA Abstr. W. Progr., v. 33/6, p. A102.
66. Barrett, T., and Schieber, J., 2001. Detailed Correlations in the New Albany Shale of Southeastern Indiana. GSA Abstr. W. Progr., v. 33/6, p. A101.
67. Tennison, E., Schieber, J., and Krinsley, D., 2001. Textural Features of Metamorphic Quartz as Revealed by Scanned Cathodoluminescence (SEM-CL): Potential Use in Provenance Studies. GSA Abstr. W. Progr., v. 33/6, p. A72.
68. Schieber, J., 2002. Sequence Stratigraphy in a Black Shale Succession: Recognition of Rising and Falling Sea Level in the Chattanooga Shale. AAPG Annual Meeting in Houston, Abstract Volume - CD.
69. Schieber, J., Arnott, H.J., and Coviello, M., 2002. Various occurrences of potential microbial fossils in mudstones and investigations into bacterial taphonomy. 33rd Lunar and Planetary Sciences Conference, Houston, March 11-15th 2002, Abstract Volume - CD.

70. Schieber, J., Krinsley, D., and Tennison, E., 2002. Provenance studies of fine-grained sediments with scanned cathodoluminescence of quartz: Potential applications in planetary exploration. 33rd Lunar and Planetary Sciences Conference, Houston, March 11-15th 2002, Abstract Volume - CD.
71. Sur, S., Schieber, J., and Banerjee, S. 2002. Petrographic Observations Suggestive of Microbial Mats and Metazoan Activity in Late Proterozoic Black Shales from India. GSA Abstr. W. Progr., v. 34/6, p. 133.
72. Tennison, E., Schieber, J., and Krinsley, D., 2002. A study of Microscopic and Macroscopic Fractures in Crystalline Rocks from the Llano Uplift, Texas: Implications for Provenance Studies of Quartz. GSA Abstr. W. Progr., v. 34/6, p. 434.
73. Schieber, J., 2002. Pyrite Ooids as a Relic Feature of Intermittent Sea Level Drop and Shallow Water Conditions in Devonian Black Shales. GSA Abstr. W. Progr., v. 34/6. p. 442.
74. Schieber, J., and Arnott, H.J., 2003. Nannobacteria as a Byproduct of Organic Tissue Degradation by Bacteria. 34th Lunar and Planetary Sciences Conference, Houston, March 17-21st 2003, Abstract Volume - CD.
75. Schieber, J., 2003. Shale Facies Stacking in Parasequences of the Cretaceous Blackhawk Formation, Book Cliffs, Utah. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. A153.
76. Sur, S., Schieber, J., and Banerjee, S., 2003. The Bijaygarh and Rampur Shales of the Vindhyan Supergroup, India: Transgressive System Tract Source Rocks of Mid- Proterozoic Age. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. A165.
77. Schieber, J., 2003. An Alternative Way to Produce Black Shale Rhythmites: The Significance of Depositional Processes. GSA Abstr. W. Progr., v. 35/6, p. 391.
78. Schieber, J., 2003. Disturbed beds in Lower Frasnian Black Shales of Tennessee and Kentucky: Their Possible Connection to Impacts. GSA Abstr. W. Progr., v. 35/6, p. 209.
79. Banerjee, S., and Schieber, J., 2003. Paleoproterozoic Condensed Zone Sediments in the Kajarahat Formation, Vindhyan Supergroup, Central India. GSA Abstr. W. Progr., v. 35/6, p. 173.
80. Lazar, O., and Schieber, J., 2003. The influence of sedimentary processes on element distribution in the Devonian New Albany Shale of the Illinois Basin. GSA Abstr. W. Progr., v. 35/6, p. 83.
81. Krinsley, D., and Schieber, J., 2003. Evaluating SEM-CL Textures in Quartz Grains for Provenance Studies of Mudstones and Shales. GSA Abstr. W. Progr., v. 35/6, p. 173.
82. Tennison, E., and Schieber, J., 2003. An investigation of the granites and rhyolites of the Wichita Mountains Igneous Province, southern Oklahoma using SEM-CL: Textural features of quartz crystals reflect crystallization histories. GSA Abstr. W. Progr., v. 35/6, p. 326.
83. Sur, S., Schieber, J., and Banerjee, S., 2003. Shale Microfacies and origin of the Middle Proterozoic Rampur Shale of the Rohtas Formation, Vindhyan Basin, India. GSA Abstr. W. Progr., v. 35/6, p. 173.
84. Schieber, J., 2004. SEM and TEM Study of Silica Diagenesis in Shales from the Cretaceous Blackhawk Formation, Book Cliffs, Utah: Implications for Sealing Capacity. AAPG Annual Meeting in Dallas, Abstract Volume, p. A124.
85. Lazar, R.O., and Schieber, J., 2004. Gaining New Insights into the Stratigraphy of the New Albany Shale of the Illinois Basin through an Integrated Study of Well Cores and Gamma-Ray Logs. AAPG Annual Meeting in Dallas, Abstract Volume, p. A81.
86. Sur, S., Schieber, J., and Banerjee, S., 2004. The Geochemistry of the Bijaygarh Shale of the Vindhyan Supergroup, India: A Mid- Proterozoic Source Rock. AAPG Annual Meeting in Dallas, Abstract Volume, p. A134.
87. Schieber, J., 2004. Groundwater-Fed Iron-Rich Microbial Mats in a Freshwater Creek: Growth Cycles and Fossilization Potential of Microbial Features. . 35th Lunar and Planetary Sciences Conference, Houston, March 15-19st 2004, Abstract Volume - CD.
88. Strapoc, D., and Schieber, J., 2004. Carbon Isotope Characteristics of Spring-Fed Iron-Precipitating Microbial Mats. 35th Lunar and Planetary Sciences Conference, Houston, March 15-19st 2004, Abstract Volume - CD.
89. Schieber, J., and Over, J.D., 2004. Age Constraints on the Formation of the Devonian Flynn Creek Structure, Tennessee. GSA Abstr. W. Progr., v. 36/5, p. 165.
90. Schieber, J., 2004. On the Origin and Significance of Pyrite Beds in Devonian Black Shales from the Eastern US. GSA Abstr. W. Progr., v. 36/5, p. 372.
91. Lazar, O.R., and Schieber, J., 2004, Using Size Distribution of Pyrite Framboids to Evaluate Paleo-Anoxia During Deposition of the Devonian New Albany Shale in the Illinois Basin. GSA Abstr. W. Progr., v. 36/5, p. 372.
92. Schieber, J., 2004, Marcasite in sediments and sedimentary rocks – conundrum and opportunity. EOS, November 23rd 2004, p. F1004.
93. Schieber, J., 2005, The IU Mudflume - Ongoing and Planned Experiments in Mudstone Sedimentology. AAPG Annual Meeting in Calgary, Abstract Volume, p. A124.
94. Schieber, J., 2005, A Differential Scanning Electron Microscope Color-Cathodoluminescence Approach to Provenance Determination of Quartz in Devonian Shales of the Eastern US. AAPG Annual Meeting in Calgary, Abstract Volume, p. A123.
95. Schieber, J., 2005, Early Diagenesis of New Albany Shale (Upper Devonian) Flooding Surfaces – An Intertwined Record of Fe-sulfide, Fe-carbonate, and Silica Deposition in Dysoxic Surface Sediments. AAPG Annual Meeting in Calgary, Abstract Volume, p. A124.
96. Mainwaring, P.R., and Schieber, J., 2005, A New Approach to Color Cathodoluminescence Imaging of Mudstones in the Scanning Electron Microscope (SEM). AAPG Annual Meeting in Calgary, Abstract Volume, p. A85.
97. Lazar, R.O, and Schieber, J., 2005, A Coherent and Genetically Based Stratigraphic Framework for the New Albany Shale Succession: Methods and Results. AAPG Annual Meeting in Calgary, Abstract Volume, p. A79.
98. Lazar, R.O., and Schieber, J., 2005, Paleo-redox Conditions During Deposition of the Devonian New Albany Shale, Illinois Basin: Results of a Multi-proxy Investigation. AAPG Annual Meeting in Calgary, Abstract Volume, p. A80.

99. Dumitrescu, M., Finkelstein, D.B., Lazar, R., Schieber, J., and Brassell, S.C., 2005, Origin and history of bitumen in geodes of the New Albany Shale. AAPG Annual Meeting in Calgary, Abstract Volume, p. A38.
100. Over, J.D., and Schieber, J., 2005, Conodonts and crater fill history of the Flynn Creek Structure, Upper Devonian, Central Tennessee, USA. GSA Abstr. W. Progr., v. 37/3, p. 13.
101. Edgett, K.S., Bell, J.F., Herkenhoff, K.E., Heydari, E., Kah, L.C., Minitti, M.E., Olson, T.S., Rowland, S.K., Schieber, J., Sullivan, R.J., Yingst, R.A., Ravine, M.A., Caplinger, M.A., and Maki, J.N., 2005, The Mars Handlens Imager (MAHLI) for the 2009 Mars Science Laboratory. 36th Lunar and Planetary Sciences Conference, Houston, March 14-18st 2005, Abstract No. 1170, Abstract Volume – CD.
102. Schieber, J., 2005, Granular microbial habitats built from iron sulfides: Alternative microbial lifestyles? 36th Lunar and Planetary Sciences Conference, Houston, March 14-18st 2005, Abstract No. 1972, Abstract Volume – CD.
103. Strapoc, D., Beard, B., and Schieber, J., 2005, How can a fingerprint of primitive bacteria look like? A carbon and iron stable isotopic study of an iron-oxidizing bacterial community. 36th Lunar and Planetary Sciences Conference, Houston, March 14-18st 2005, Abstract No. 2232, Abstract Volume – CD.
104. Buono, A., Brophy, J., Schieber, J., and Basu, A., 2005, Experimental production of pure iron globules from melts of lunar soil-compositions. 36th Lunar and Planetary Sciences Conference, Houston, March 14-18st 2005, Abstract No. 2066, Abstract Volume – CD.
105. Schieber, J., and Wintsch, R.P., 2005, Scanned Colour Cathodoluminescence Establishes A Slate Belt Provenance for Detrital Quartz in Devonian Black Shales of the Appalachian Basin. 15th Annual Goldschmidt Conference, Geoch. Cosmoch. Acta, v. 10, Suppl. 1, p. A592.
106. Golledge, S., Krinsley, D., O'Hara, P., Gasser, R., and Schieber, J., 2005, Time of Flight Secondary Ion Masss Spectrometry (ToF-SIMS) use in sedimentary geochemistry. 15th Annual Goldschmidt Conference, Geoch. Cosmoch. Acta, v. 10, Suppl. 1, p. A379.
107. Schieber, J., 2005, Morphological Variability of Pyrite Framboids from Santa Barbara Basin Sediments – A Question of Nature vs. Nurture? GSA Abstr. W. Progr., v. 37/7, p. 253.
108. Schieber, J., 2005, Agglutinated Foraminifera in Devonian Black Shales of the Eastern US: Implications for Paleoenvironmental Reconstructions. GSA Abstr. W. Progr., v. 37/7, p. 188.
109. Schieber, J., 2005, Green River Formation Evaporites as a Textural Analog to Meridiani Planum Sediments. GSA Abstr. W. Progr., v. 37/7, p. 512.
110. Thaisen, K., and Schieber, J., 2005, Stratigraphic Stacking of Sedimentary Successions on Mars – A Reflection of Base Level Fluctuations?. GSA Abstr. W. Progr., v. 37/7, p. 546.
111. Deb, S.P., Chaudhuri, A.K., Schieber, J., and Basu, A., 2005, Neoproterozoic garnetiferous tuff beds in the Chattisgarh Basin of central India: First Report. GSA Abstr. W. Progr., v. 37/7, p. 219.
112. Papazis, P., Milliken, K.L., Choh, S.-J., Schieber, J., and Macquaker, J. 2005, The widespread occurrence of agglutinated foraminifera in black shales. GSA Abstr. W. Progr., v. 37/7, p. 188.
113. Thaisen, K, and Schieber, J., 2006, Mapping Stratigraphic Discontinuities in West Candor Layered Deposits and the Potential for Sequence Stratigraphic Analysis. 37th Lunar and Planetary Sciences Conference, Houston, March 13-17st 2006, Abstract No. 2393, Abstract Volume – CD.
114. Glamoclija, M., and Schieber, J., 2006, Biotic Contributions to the Formation of Submarine Iron-Rich Hydrothermal Crusts Near the Panarea Island, Tyrrhenian Sea, Italy. 37th Lunar and Planetary Sciences Conference, Houston, March 13-17st 2006, Abstract No. 1135, Abstract Volume – CD.
115. Schieber, J., Glamoclija, M., Schimmelmann, A., and Thaisen, K., 2006, Snot, Sticks, and Lots of Water: Iron Microbes as Minimalist Architects. 37th Lunar and Planetary Sciences Conference, Houston, March 13-17st 2006, Abstract No. 2004, Abstract Volume – CD.
116. Schieber, J., and Schimmelmann, A., 2006, High resolution pyrite framboid size distribution in Santa Barbara Basin sediments: Implications for the study of black shales. *Eos Trans. AGU, 87*(36), Ocean Sci. Meet. Suppl., Abstract OS46A-11.
117. Lazar, O.R., and Schieber, J., 2006, Stratigraphic Insights into Late Devonian Black Shales of the Illinois and Appalachian Basins: Outcrop to Subsurface Examples. AAPG Annual Meeting in Houston, Abstract Volume, p. A38.
118. Schieber, J., Southard, B., and Thaisen, K., 2006, Accretion of Mudstone Beds from Migrating Floc-Ripples. GSA Abstr. W. Progr., v. 38/7, p. 519.
119. Krinsley, D., Schieber, J., and Golledge, S., 2006, Studying the distribution of Molybdenum in a Black Shale with ToF-SIMS. GSA Abstr. W. Progr., v. 38/7, p. 56.
120. Thaisen, K., and Schieber, J., 2006, Geomorphological expression of layered rocks in the western USA. Reasonable Earth-Mars analogs? GSA Abstr. W. Progr., v. 38/7, p. 309.
121. Glamoclija, M., Schieber, J., and Szynkiewicz, A., 2006, Bacterial Signatures in Iron-Rich Hydrothermal Crusts, Tyrrhenian Sea, Italy. 6th European Workshop on Astrobiology, Lyon, France, 16-18th October 2006.
122. Schieber, J., 2007, Organic Production by Iron Microbial Mats – Implications for Volcaniclastic Successions and Hydrocarbons on Mars. AAPG Annual Meeting in Long Beach, CA, Abstract Volume, p. 124.
123. Schieber, J., 2007, On the Potential to Apply Sequence Stratigraphic Concepts to Martian Strata. AAPG Annual Meeting in Long Beach, CA, Abstract Volume, p. 124.
124. Schieber, J., Southard, J., and Thaisen, K., 2007, The Sedimentology of Milk - Studying Deposition and Transport Modes of Moving Clay Suspensions. AAPG Annual Meeting in Long Beach, CA, Abstract Volume, p. 124.
125. Lazar, R., and Schieber, J., 2007, Paleo-redox Conditions during Deposition of the Devonian New Albany Shale (Illinois Basin) and Correlative Black Shales in the Eastern US: Multiple Perspectives from Geochemistry, Paleoecology, and Petrography. AAPG Annual Meeting in Long Beach, CA, Abstract Volume, p. 81.

126. Stoesz, E., Wintsch, R.P., and Schieber, J., 2007, Textural evidence for reaction hardening by feldspar precipitation in mylonites. GSA Abstr. W. Progr., v. xx/y, p. tba.
127. Schieber, J., Glamoclija, M., and Thaisen, K., 2007, Experiments on Fossilization of Iron Microbes – A Preliminary Report. 38th Lunar and Planetary Sciences Conference, Houston, March 12-16st 2007, Abstract No. 1626, Abstract Volume – CD.
128. Schieber, J., 2007, Reinterpretation of the Martian Eberswalde Delta in the Light of New HIRISE images. 38th Lunar and Planetary Sciences Conference, Houston, March 12-16st 2007, Abstract No. 1982, Abstract Volume – CD.
129. Glamoclija, M., Schieber, J., and Reimold, W.U., 2007, Microbial Signatures from Impact-Induced Hydrothermal Settings of the Ries Crater, Germany; A Preliminary Study. 38th Lunar and Planetary Sciences Conference, Houston, March 12-16st 2007, Abstract No. 1989, Abstract Volume – CD.
130. Glamoclija, M., Schieber, J., Szynkiewicz, A., and Beard, B., 2007, Sulfur and Iron Geochemistry, and their Relations to Microbial Communities from the Submarine Hydrothermal Site North of Panarea Island, Tyrrhenian Sea, Italy. 38th Lunar and Planetary Sciences Conference, Houston, March 12-16st 2007, Abstract No. 2270, Abstract Volume – CD.
131. Schieber, J., and Schimmelmann, A., 2007, High Resolution Study of Pyrite Framboid Distribution in Santa Barbara Basin Sediments and Implications for Water-Column Oxygenation. PACLIM 2007 Workshop.
132. Schieber, J., 2007, Now You See It – Now you Don't: Comparing Textural Details Visible with the Hand lens imagers of the MER rovers and Mars Science Lab. GSA Abstr. W. Progr., v. 39/6, p. 368.
133. Yawar, Z., and Schieber, J., 2007, Hand-lens Scale Sedimentary and Textural Features in Mudstones and Their Environmental Implications. GSA Abstr. W. Progr., v. 39/6, p. 367.
134. Howald, T., and Schieber, J., 2007, Hand-lens Scale textural features produced by aoelian erosion of mudstones. GSA Abstr. W. Progr., v. 39/6, p. 367.
135. Glamoclija, M., and Schieber, J., 2007, Fossil Microbial Signatures from Impact Induced Hydrothermal Settings of the Chesapeake Bay Impact Structure; A Preliminary SEM Study. GSA Abstr. W. Progr., v. 39/6, p. 316.
136. Podratz, L., Schieber, J., and Bish, D., 2007, Morphological features due to epsomite hydration/dehydration reactions in simulated evaporites at the hand lens scale - Implications for Martian sediments. GSA Abstr. W. Progr., v. 39/6, p. 367.
137. Ventura, G.T., Kenig, F., Reddy, C.M., Schieber, J., Nelson, R.K., Dinel, E., and Frysinger, G.S., 2007, Molecular evidence of Late Archean archea and the presence of a subsurface hydrothermal biosphere. GSA Abstr. W. Progr., v. 39/6, p. 448.
138. Minitti, M.E., Edgett, K., and MSL, Mastcam/MAHLI/MARDI Team, 2007, The Mars Science Laboratory Mars Handlens Imager (MSL MAHLI). GSA Abstr. W. Progr., v. 39/6, p. 367.
139. Schieber, J., and Southard, J., 2007, Flume Experiments in Mudstone Sedimentology: Floccule Formation in the Deposition and Erosion of Muds. GSA Abstr. W. Progr., v. 39/6, p. 631.
140. Stoesz, E., Wintsch, R.P., and Schieber, J., 2007, Polycyclic deformation and cementation in the exhumed Norumbega Fault Zone, Maine – New Hampshire. GSA Abstr. W. Progr., v. 39/6, p. 51.
141. Schieber, J., 2008, Deposition and Sequence Stratigraphic Framework of Late Devonian Black Shales in the Eastern US. AAPG Annual Meeting in San Antonio, Tx, Abstract Volume, p. xx.
142. Lazar, R., and Schieber, J., 2008, Controls on Organic Carbon Sequestration in the New Albany Shale: An Examination of the Relative Role of Organic Carbon Production, Preservation and Dilution. AAPG Annual Meeting in San Antonio, Tx, Abstract Volume, p. xx.
143. Schieber, J., 2008, Early Diagenetic Silica in Shales – An Important Factor in Early Pore Occlusion and Fracturing Behavior? AAPG Annual Meeting in San Antonio, Tx, Abstract Volume, p. xx.
144. Schieber, J., 2008, Features of Geologic Interest within the Proposed Eberswalde Crater Mars Science Lab (MSL) Landing Ellipse. 39th Lunar and Planetary Sciences Conference, Houston, March 10-14 st 2008, Abstract No. 2117, Abstract Volume – CD.
145. Schieber, J., Zawar, Y., and Glamoclija, M., 2008, Experiments on Silicification of Iron Microbes – A Preliminary Report. 39th Lunar and Planetary Sciences Conference, Houston, March 10-14 st 2008, Abstract No. 2132, Abstract Volume – CD.
146. Thaisen, K.G., Schieber, J., Dumke, A., Hauber, E., and Neukum, G., 2008, Geomorphic Evidence for Significant Glacial and Fluvial Activity in Candor Chasma, Mars. 39th Lunar and Planetary Sciences Conference, Houston, March 10-14 st 2008, Abstract No. 2358, Abstract Volume – CD.
147. Howald, T., and Schieber, J., 2008, Textural Features Produced by Aeolian Erosion of Mudstones. 39th Lunar and Planetary Sciences Conference, Houston, March 10-14 st 2008, Abstract No. 2052, Abstract Volume – CD.
148. Podratz, L.A., Bish, D.L., and Schieber, J, 2008, Magnesium Sulfate Phase Equilibria in Simulated Martian Conditions. 39th Lunar and Planetary Sciences Conference, Houston, March 10-14 st 2008, Abstract No. 1887, Abstract Volume – CD.
149. Schieber, J., 2008, Marcasite in black shales – a mineral based indicator of "burndown" in ancient sapropels? 18th Annual Goldschmidt Conference, Geoch. Cosmoch. Acta, v. 72/12, Suppl. 1, p. A830.
150. Stoesz, E., Wintsch, R.P., and Schieber, J., 2008, Polycyclic Deformation, Reactions and Disequlibrium in Mylonites from an Evolving Fault Zone. GSA Abstr. W. Progr., v. 40/6, p. 444.
151. Schieber, J., 2008, Experimental Study of Mud-Ripple Propagation – Direct Observations of Ripple Geometry and Transport Processes. GSA Abstr. W. Progr., v. 40/6, p. 435.
152. Schieber, J., 2008, Non-Tectonic Aspects of Shale Fracture Formation, Permeability, and Porosity of Late Devonian Black Shales in the Eastern US. GSA Abstr. W. Progr., v. 40/6, p. 233.
153. Yawar, Z., and Schieber, J., 2008, Facies and Depositional Setting of Eau Claire Formation (Cambrian) Mudstones in Northwestern Indiana. GSA Abstr. W. Progr., v. 40/6, p. 435.
154. O'Donnel, K., and Schieber, J., 2009, Scanned Cathodoluminescence Petrography of Quartz in the Cambridge Argillite. GSA Abstr. W. Progr., v. 41/3, p. yy.
155. Yawar, Z., and Schieber, J., 2009, Sedimentary Features and Depositional Setting of the Cambrian Eau Claire Formation in Central Indiana. AAPG Annual Meeting in Denver, Co, Abstract Volume, p. 233.

156. O'Donnel, K., and Schieber, J., 2009, Sedimentary Features and Depositional Setting of the Ordovician Maquoketa Group in Indiana. AAPG Annual Meeting in Denver, Co, Abstract Volume, p. 156.
157. Schieber, J., 2009, Late Devonian Source Rocks in the eastern US – Not So Deep, Not So Quiet, Rarely Anoxic. AAPG Annual Meeting in Denver, Co, Abstract Volume, p. 186.
158. Edgett, K.S. et al. (incl. Schieber, J.), 2009, The Mars Hand Lens Imager (MAHLI) aboard the Mars rover Curiosity. Workshop on the Microstructure of the Martian Surface, Copenhagen, August 27-29.
159. Yawar, Z., and Schieber, J., 2009, Experimental Deposition of Aragonite Mud from Moving Suspensions. GSA Abstr. W. Progr., v. 41/7, p. zzz.
160. Southard, J.B., Schieber, J., and Yawar, Z., 2009, Mud bed accretion from moving Silt–Kaolinite suspensions – Observations from a flume study. GSA Abstr. W. Progr., 41/7, p. zzz.
161. Schieber, J., 2009, Observation of current ripples composed of mud in modern terrestrial flood deposits. GSA Abstr. W. Progr., v. 41/7, p. zzz.
162. Krinsley, D., Stokes, M.R., and Schieber, J., 2009, Application of Scanned Color Cathodoluminescence of quartz to provenance investigations of shales and mudstones. GSA Abstr. W. Progr., v. 41/7, p. zzz.
163. O'Donnel, K.H., and Schieber, J., 2009, Sedimentary features and fossil accumulation in mudstones of the Kope Formation, lower Maquoketa Group (Upper Ordovician), Indiana. GSA Abstr. W. Progr., v. 41/7, p. zzz.
164. Schieber, J., 2010, The Petrographic and Sedimentological Context of Pore Types in the New Albany Shale – SEM Observations on Ion-Milled Samples. AAPG Annual Meeting in New Orleans, La, Abstract Volume, p. xx.
165. Schieber, J., and Southard, J.B., 2010, Experimental Mudstone Sedimentology – Making the Connection Between Flume Studies and the Rock Record. AAPG Annual Meeting in New Orleans, La, Abstract Volume, p. xx.
166. Schieber, J., 2010, Common Themes in the Formation and Preservation of Intrinsic Porosity in Shales and Mudstones - Illustrated With Examples Across the Phanerozoic. Paper Number 132370-MS, SPE Unconventional Gas Conference, 23-25 February 2010, Pittsburgh, Pennsylvania, USA
167. Wilson, R., and Schieber, J., 2010, Petrographic Pore Characterization in the Upper Devonian Geneseo Shale of New York in the Context of Depositional Setting – SEM Observations from Ion-Milled Samples. AAPG Annual Meeting in New Orleans, La, Abstract Volume, p. xx.
168. Yawar, Z., and Schieber, J., 2010, Depositional Setting and Pore Distribution in Mudstones of the Upper Cambrian Eau Claire Formation – SEM Observations on Ion-Milled Samples. AAPG Annual Meeting in New Orleans, La, Abstract Volume, p. xx.
169. Malin, M., and co-authors, 2010, The Mars Science Laboratory (MSL) mast-mounted cameras (Mastcams) flight instruments. 41st Lunar and Planetary Sciences Conference, Houston, March 1-5 2010, Abstract No. xxxx, Abstract Volume – CD.
170. Schieber, J., 2010, Progressive Silicification of Iron Microbes – Preliminary observations from a two year experiment. 41st Lunar and Planetary Sciences Conference, Houston, March 1-5 2010, Abstract No. 1106, Abstract Volume – CD.
171. O'Donnel, K.H., and Schieber, J., 2010, Eolian adhesion crusts produced during experimental abrasion of sedimentary rock – An alternative process for Martian rock varnish formation? 41st Lunar and Planetary Sciences Conference, Houston, March 1-5 2010, Abstract No. 1453, Abstract Volume – CD.
172. Root, P., Wintsch, R.P., Schieber, J., and Growdon, M., 2010, Development of multiple fabrics in the Moretown Member, Vermont. GSA Abstr. W. Progr., v. 42/x, p. zzz.
173. Young, B., Wintsch, R.P., and Schieber, J., 2010, Evidence for the formation of pseudotachylite in Lewisian gneisses, Moine Thrust hanging wall, Scotland. GSA Abstr. W. Progr., v. 42/x, p. zzz.
174. Schieber, J., and Wilson, R., 2010, Observations on distal sequences in Famennian black shales of central Kentucky and their implications for reconstructing depositional settings. GSA Abstr. W. Progr., v. 42/5, p. zzz.
175. Wilson, R., and Schieber, J., 2010, The Middle to Upper Devonian Geneseo Shale to Penn Yan Shale Succession of New York: Interplay between Eustatic Sea Level Rise and Tectonically Driven Sediment Supply. GSA Abstr. W. Progr., v. 42/5, p. zzz.
176. Hout, C., Levy, P., and Schieber, J., 2010, Flume studies of grain size distribution in moving clay suspensions: relationship to floccule composition, flow velocity, bottom shear stress, and accretionary bedforms. GSA Abstr. W. Progr., v. 42/5, p. zzz.
177. Basu et al., 2010, New U-Pb SHRIMP ages and the stratigraphy of the Chhattisgarh Basin, Bastar Craton, Central India: Significance for global studies of Mesoproterozoic sedimentary assemblages. GSA Abstr. W. Progr., v. 42/5, p. zzz.
178. Yawar, Z., and Schieber, J., 2010, Pore distribution in the Upper Cambrian Eau Claire Formation of Indiana – Thin section and SEM Observations. GSA Abstr. W. Progr., v. 42/5, p. zzz.
179. Schieber, J., Flume Studies of Shale Sedimentology – Implications for the Rock Record, Shale Microfabrics, and Pore Development. Invited presentation for AAPG Hedberg Research Conference, "Critical Assessment of Shale Resource Plays", December 5-10, 2010 – Austin, Texas.
180. Wilson, R., and Schieber, J., 2011, The Significance of Erosional features found in the Middle Devonian Geneseo Shale. GSA Abstr. W. Progr., v. 43/1, p. zzz.
181. Stokes, M.R., Wintsch, R., Yeh, M.W., and Schieber, J., 2011, Fabric Evolution via Solution-Precipitation Creep in the Slaty Lishan Fault Zone, Taiwan. GSA Abstr. W. Progr., v. 43/1, p. zzz.
182. Schieber, J. 2011, Implications of flume studies for shallow marine mud deposition and the stratigraphic record. AAPG Annual Meeting in Houston, Tx, Abstract Volume, p. xx.
183. Wilson, R., and Schieber, J., 2011, Shale and Mudstone Facies In The Middle to Upper Devonian Geneseo Shale to Penn Yan Shale Succession of New York: Implications For Accommodation During A Eustatic Sea Level Rise. AAPG Annual Meeting in Houston, Tx, Abstract Volume, p. xx.

184. Schieber, J. 2011, Shifting paradigms in shale sedimentology – The implications of recent flume studies for interpreting shale fabrics and depositional environments. Canadian Society of Petroleum Geologists Annual Convention, Calgary, May 10, 2011.
185. Schieber, J. 2011, Shale Microfabrics and Pore Development: An Overview with Emphasis on the Importance of Depositional Processes. Canadian Society of Petroleum Geologists Annual Convention, Calgary, May 10, 2011.
186. Picardal, F.W., Z. Zaybak, A. Chakraborty, J. Schieber, and U. Szewzyk. Microaerophilic, Fe(II)-Dependent Growth During Fe(II) Oxidation by a Dechlorospirillum Species. Presented at the American Society for Microbiology 111th General Meeting, New Orleans, LA, May 21 – 24th 2011.
187. Wilson, R., and Schieber, J., 2011, Using bioturbation to evaluate paleoredox conditions and identify cyclicity in the Middle Devonian Geneseo Formation of New York. GSA Abstr. W. Progr., v. 44/1, p. zzz.
188. Bohacs, K., Ottman, J., Lazar, R., Dumitrescu, M., Klimentides, R., Schieber, J., Montelli, R., and Liu, C., 2011, Deciphering genetic controls on the occurrence, distribution, and character of fine-grained rocks (mudstone/shale)—An integrated sequence stratigraphic analysisof the Cenomanian-Turonian of North America. GSA Abstr. W. Progr., v. 44/1, p. zzz.
189. Riese, D., and Schieber, J., 2011, Trace fossil morphologies in the New Albany Shale of southern Indiana help to derive sediment history. GSA Abstr. W. Progr., v. 44/1, p. zzz.
190. Schieber, J., 2011, Grading phenomena in mudstones – Ancient shales and modern shelf muds in the context of recent flume studies. GSA Abstr. W. Progr., v. 44/1, p. zzz.
191. Zabreckie, J., and Schieber, J., 2011, An occurrence of the Middle Devonian Portwood Member of the New Albany Shale in the Illinois Basin. GSA Abstr. W. Progr., v. 44/1, p. zzz.
192. Schieber, J., Schimmelmann, A., Bennett, R., Douglas, J., and Curry, K., 2011, Flume Experiments on the Co-Deposition of Organic Matter and Clays in Muddy Flows. AGU Annual Meeting in San Francisco.
193. Schieber, J., 2011, Grain Size Distribution in Mudstones: A Question of Nature vs. Nurture. AGU Annual Meeting in San Francisco.
194. Rossman, B., Wilson, R., and Schieber, J., 2012, Eolian erosion experiments on soft sedimentary rocks – measurement of erosion rates, textural observations, and implications for Mars Rover geology. 43rd Lunar and Planetary Sciences Conference, Houston, March 19-23 2012, Abstract No. 2837, Abstract Volume – CD.
195. Schieber, J., Lazar, R., Bohacs, K., Klimentidis, B., Ottmann, J., Dumitrescu, M., 2012, A Scanning Electron Microscope Study of Porosity in the Eagle Ford Shale of Texas. AAPG Annual Meeting in Long Beach, Ca, Abstract Volume, p. xx.
196. Schieber, J., 2012, Flume Experiments with Carbonate Muds and Their Relevance for the Micrite Problem and the Deposition of Ancient Carbonates. AAPG Annual Meeting in Long Beach, Ca, Abstract Volume, p. xx.
197. Wilson, R., Schieber, J., 2012, Pore Characterization and Facies Analysis in the Geneseo Formation of New York: Can Small-Scale Mudstone Variations relate to Pore Morphology and Distribution?AAPG Annual Meeting in Long Beach, Ca, Abstract Volume, p. xx.
198. Riese, D., Schieber, J., 2012, The role of macrobioturbation and cryptobioturbation in the New Albany Shale to derive depositional histories. AAPG Annual Meeting in Long Beach, Ca, Abstract Volume, p. xx.
199. Zabrecky, J., Schieber, J., 2012, Identification of the Middle Devonian Portwood member of the New Albany Shale in the Illinois Basin. AAPG Annual Meeting in Long Beach, Ca, Abstract Volume, p. xx.
200. Miszei, D., Schieber, J., 2012, Sedimentary facies in the Upper Ordovician Maquoketa Group of Indiana: A preliminary analysis. GSA Abstr. W. Progr., v. 45/1, p. zzz.
201. Spencer, S., Schieber, J., 2012, An investigation of parasequences in the Camp Run Member of the Upper Devonian New Albany Shale. GSA Abstr. W. Progr., v. 45/1, p. zzz.
202. Riese, D., Schieber, J., 2012, Neoichnological experiments with Meio- and Macrofauna in Fine-grained media: Preliminary results. GSA Abstr. W. Progr., v. 45/1, p. zzz.
203. Zabrecky, J., Schieber, J., 2012, the use of color Cathodoluminescence and Texture of detrital quartz grains to determine provenance in shales: An example for the Middle Devonian of Kentucky and Tennessee. GSA Abstr. W. Progr., v. 45/1, p. zzz.
204. Wilson, R., Schieber, J., 2012, Using stable carbon isotopes of organic matter, elemental ratios, and trace metal geochemistry to infer organic matter sources, accumulation rates, and redox conditions during the deposition of the Middle Devonian Geneseo Formation of New York. GSA Abstr. W. Progr., v. 45/1, p. zzz.
205. Riese, D., Schieber, J., 2012, Fast and economic sampling and resin embedding technique for fine grained sediments: An example using neoichnology experiments with meio and macrofauna. GSA Abstr. W. Progr., v. 45/1, p. zzz.
206. Malin,M.C., and the MSL Science team, 2012, Mars Science Laboratory Mastcam observations of gale Crater. GSA Abstr. W. Progr., v. 45/1, p. zzz.
207. Basu, A., Bickford, M.E., Mukherjee, A., and Schieber. J., 2012, New geochronology, rhyolitic volcanism, basin closure and tectonism at ca. 1000 Ma in India. Abstract Volume, ISAG-Annual General Meeting, v. x, p.1
208. Bennett, R., Schieber, J., Schimmelmann, A., Hulbert, M., Curry, K., Douglas, J., Head, A., and Curry, A., 2012, Sequestration of Organic Matter in Marine Mud: Flume Experiments,Biogeochemistry, Mass Physical Properties, and 3D Modeling. 32nd Annual GCSSEPM Research Conference, Houston, December 2-5 2012, Abstract Volume.
209. Schieber, J., Schimmelmann, A., Bennett, R., Curry, K., Douglas, J., 2012, Modes of Organic Matter Burial in Mudstones – Observations from Flume Experiments. AGU Annual Meeting in San Francisco.
210. Schieber, J., 2012, On the Possible Role of Bedload Transport of Mud for the Infilling of Epicontinental Basins. AGU Annual Meeting in San Francisco.
211. Edgett, K.S., et al., 2013, Curiosity's Mars Hand Lens Imager (MAHLI): Initial observations and activities. 44th Lunar and Planetary Sciences Conference, Houston, March 18-22 2013, Abstract No. 1199, Abstract Volume – CD.

212. Edgett, K.S., et al., 2013, Mars Hand Lens Imager (MAHLI) Efforts and Observations at the "Rocknest" eolian sand shadow in Curiosity's Gale Crater field site. 44th Lunar and Planetary Sciences Conference, Houston, March 18-22 2013, Abstract No. 1201, Abstract Volume – CD.
213. Schieber, J., Malin, M.C., Olson, T.S., Calef, F., and Comeaux, K., 2013. The final 2½ minutes of terror – what we learned about the MSL landing from the images taken by the MARDI descent imager. 44th Lunar and Planetary Sciences Conference, Houston, March 18-22 2013, Abstract No. 1260, Abstract Volume – CD.
214. Edgar et al., 2013, Sedimentary facies and bedform analysis observed from the Rocknest outcrop (Sols 59-100), Gale Crater, Mars. 44th Lunar and Planetary Sciences Conference, Houston, March 18-22 2013, Abstract No. 1628, Abstract Volume – CD.
215. Sautter, V. et al., 2013, Is Bathurst Inlet rock and evidence of explosive volcanism in the Rocknest area of Gale Crater? 44th Lunar and Planetary Sciences Conference, Houston, March 18-22 2013, Abstract No. 1985, Abstract Volume – CD.
216. Minitti, M.E. et al., 2013, Mars Hand Lens Imager (MAHLI) observations of rocks at Curiosity's field site, Sols 0-100. 44th Lunar and Planetary Sciences Conference, Houston, March 18-22 2013, Abstract No. 2186, Abstract Volume – CD.
217. Hallet, B. et al., 2013, Fracture networks, Gale Crater, Mars. 44th Lunar and Planetary Sciences Conference, Houston, March 18-22 2013, Abstract No. 3108, Abstract Volume – CD.
218. Riese, D., and Schieber, J., 2013, Application of CT-Scan Data to the Study of Bioturbation Features in Cores of the New Albany Shale in Indiana: AAPG Annual Meeting in Pittsburgh, PA, Abstract Volume, p. xx.
219. Spencer, S., and Schieber, J., 2013, A Geochemical and Mineralogical Investigation of Parasequences in the Camp Run Member of the Upper Devonian New Albany Shale: AAPG Annual Meeting in Pittsburgh, PA, Abstract Volume, p. xx.
220. Mizsei, D., and Schieber, J., 2013, Sedimentary Facies in the Upper Ordovician Maquoketa Group of Indiana: A Preliminary Analysis: AAPG Annual Meeting in Pittsburgh, PA, Abstract Volume, p. xx.
221. Lazar, R., Bohacs, K., Macquaker, J., Schieber, J., and Demko, T., 2013, Classification and Description Guidelines for the Spectrum of Fine-Grained Sedimentary Rocks: Simplicity and Order Out of Chaos: AAPG Annual Meeting in Pittsburgh, PA, Abstract Volume, p. xx.
222. Schieber, J., Bennett, R., Curry, K., and Schimmelmann, A., 2013, Bedload Transport of Mud — A Mechanism for the Infilling of Epicontinental Basins and Lateral Displacement of Source Rocks: AAPG Annual Meeting in Pittsburgh, PA, Abstract Volume, p. xx.
223. Wilson, R., and Schieber, J., 2013, Depositional Environment and Sedimentary Facies of the Proximal Middle Devonian (Givetian) Geneseo Formation of New York, USA: AAPG Annual Meeting in Pittsburgh, PA, Abstract Volume, p. xx.
224. Schieber, J., Newhart, R., Green, S., Suarez-Rivera, R., Gathogo, P., Petriello, J., and Huster, W., 2013, Tight Shale Heterogeneity and Pore Structure at the Nanometer to Centimeter Scale: AAPG Annual Meeting in Pittsburgh, PA, Abstract Volume, p. xx.
225. Schieber, J., Green, S., Suarez-Rivera, R., and Mastalerz, M., 2013, Textural and Compositional Heterogeneity of Tight Shales at the Micro-Scale: 47th US Rock Mechanics/Geomechanics Symposium, San Francisco, CA, 23-26 June 2013, Abstract Volume, p. xx-yy.
226. Schieber, J., 2013, (keynote) An Overview of Experimental Mudstone Sedimentology - Results of Experiments and Applications to the Rock Record: International Association of Sedimentologists Meeting in Manchester, Sept. 2-4, 2013, Abstract Volume, p. xx.
227. Bristow, T.F., Eigenbrode, J.L., Edgett, K.S., Kah, L.C., Schieber, J., and the MSL Science Team, 2013, An overview of Curiosity's search for ancient habitable environments. GSA Abstr. W. Progr., v. 46/1, p. zzz.
228. Schieber, J., Gupta, S., Grotzinger, J., Suarez-Rivera, R., and the MSL Science Team, 2013, Hydraulic fracturing of Martian mudstones. GSA Abstr. W. Progr., v. 46/1, p. zzz.
229. Xu, J., and Schieber, J., 2013, Sedimentary features and depositional settings of organic-rich shale facies in the Middle to Upper Ordovician of Northeast Indiana and Northwest Ohio. GSA Abstr. W. Progr., v. 46/1, p. zzz.
230. Gupta, S., Edgar, L.A., Rubin, D.M., Lewis, K., Kocurek, G., Anderson, R.B., Bell, J.F., Dromart, G., Edgett, K.S., Grotzinger, J.P., Hardgrove, C.J., Kah, L.C., Leveille, R.J., Malin, M., Mangold, N., Milliken, R., Minitti, M.E., Mulleer, J.P., Rice, M., Rowland, S.K., Schieber, J., Stack, K., Sumner, D.Y., and the MSL Science Team, 2013, Sedimentary architecture of the Shaler outcrop, Gale Crater, Mars: paleoenvironmental and sediment transport implications. GSA Abstr. W. Progr., v. 46/1, p. zzz.
231. Bell, J.F., Malin, M., Maki, J., Dietrich, W.E., Edgett, K.S., Edwards, L., Garvin, J.B., Hallet, B., Herkenhoff, K.E., Heydari, E., Johnson, J., Kah, L.C., Lemmon, M.T., Minitti, M., Olson, T.S., Parker, T.J., Rice, M.S., Rowland, S.K., Schieber, J., Sletten, R.S., Sullivan, R.J., Sumner, D.Y., Thomas, P.C., Yingst, R.A., and the MSL Science Team, 2013, Mars Science Laboratory Curiosity rover initial Mastcam geomorphologic and multispectral characterization of the Gale crater field site: GSA Abstr. W. Progr., v. 46/1, p. zzz.
232. Schieber, J., Green, S., and Suarez-Rivera, R., 2013, The Challenge of Scale - SEM Imaging of the Textural and Compositional Heterogeneity of Tight Shales from the Nanometer to Centimeter Scale *(Invited):* AGU Annual Meeting in San Francisco.
233. Rowland, S.K., Williams, R.M., Bridges, N.T., Bridges, J., Stack, K., Lewis, K.W., Schieber, J., and the MSL Science Team, 2013, Accentuation of Subtle Rock-density Differences by Aeolian Erosion: AGU Annual Meeting in San Francisco.
234. Edgar, L., Gupta, S., Rubin, D.M., Lewis, K.W., Kocurek, G., Anderson, R.B., Bell, J.F., Dromart, G., Edgett, K.S., Grotzinger, J.P., Hardgrove, C.J., Kah, L.C., Leveille, R.J., Malin, M., Mangold, N., Milliken, R., Minitti, M.E., Rice, M.S., Rowland, S.K, Schieber, J., Stack, K., Sumner, D.Y., and the MSL Science Team, 2013, Sedimentary Petrography and Facies Analysis at the Shaler Outcrop, Gale Crater, Mars: AGU Annual Meeting in San Francisco.
235. Gupta, S., LA Edgar, DM Rubin, JP Grotzinger, JF Bell III, FJ Calef, G Dromart, LC Kah, KW Lewis, N Mangold, J Schieber, KM Stack, DY Sumner, J-P Muller, 2013, Cross-stratified sedimentary rocks observed by the Mars Science

Laboratory Sol 0-180 - evidence for fluvial sedimentary transport. European Planetary Science Congress 2013, held 8-13 September in London, UK. EPSC Abstracts Vol. 8, EPSC2013-781-1, 2013

236. Edgar, L. et al., 2014, A fluvial sandbody on Mars: Reconstruction of the Shaler outcrop, Gale. 45th Lunar and Planetary Sciences Conference, Houston, March 17-21 2014, Abstract No. 1648. Abstract Volume – CD.
237. Williams, R., et al., 2014, Sedimentology of Darwin waypoint from Curiosity observations. 45th Lunar and Planetary Sciences Conference, Houston, March 17-21 2013, Abstract No. 2401. Abstract Volume – CD.
238. Schieber, J., et al., 2014, Closing in on a Martian mudstone. 45th Lunar and Planetary Sciences Conference, Houston, March 17-21 2014, Abstract No. 2488. Abstract Volume – CD.
239. Minisini, D., Mizsei, D., Schieber, J., and Yawar, Z., 2014, Lab Experiments Recreating Typical Laminations of Black Shales, Unconventional Thoughts About the Unconventional Eagle Ford Play. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
240. Wilson, R., and Schieber, J., 2014, Sedimentologic and Stratigraphic Evolution of the Middle Devonian Geneseo Formation of New York, USA: Implications for Mud Transport in a Shallow Epeiric Sea. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
241. Gier, S., Schieber, J., and Schicker, A., Deepening the Frontier-Porosity Preservation in Deeply Buried (28,000 Feet) Mudstones of the Vienna Basin, Austria. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
242. Donoghue, K., and Schieber, J., 2014, Fluid Inclusion Study of Prominent Mineralized Fractures in the New Albany Shale, Kentucky, USA – Dissecting a Mississippian Seal Breach. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
243. Xu, J., and Schieber, J., 2014, Sedimentary Features and Depositional Setting of Organic-Rich Shale Facies in the Middle to Upper Ordovician of Northeast Indiana and Northwest Ohio. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
244. Kah, L., et al., 2014, Diagenetic Features in Yellowknife Bay, Gale Crater, Mars: Implications for Substrate Rheology and Potential Gas Release. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
245. Schieber, J., 2014, A Seal Breach on Mars – How We Closed in on a Mudstone and Teased Information from Images and Comparison with Experimental and Earth Analogs. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
246. Miclaus, C., and Schieber, J., 2014, A Hierarchy of Current-Produced Bedforms in a Source Rock from the Eastern Carpathians Points to Predominant Bedload Deposition of an Organic-Rich Mudstone. AAPG Annual Meeting in Houston, TX, Abstract Volume, p. xx.
247. Edgar, L.A., et al., 2014, Cross-bedded facies and inferred paleocurrents observed by the Curiosity Rover along the traverse to Mt. Sharp, Gale Crater, Mars. The 8th International Conference on Mars, July 14-18, Pasadena, California.
248. Gier, S., Schieber, J., and Schicker, A., 2014, Porosity preservation in deeply buried (8552 m) mudstones of the Vienna Basin (Austria). Mid-European Clay Conference 2014 in Desden, Abstract Volume. P. 37.
249. Schieber, J., 2014, Contrasting Parameters of Deposition and Erosion of High vs. Low-Latitude Muddy Shelf Seas – An Experimental Perspective. Hedberg Conference: Latitudinal Controls on Stratigraphic Models and Sedimentary Concepts. Banff, Alberta, September 28 – October 1, 2014.
250. Schieber, J., 2014, Mud redistribution in epicontinental basins – Exploring likely processes. GSA Abstr. W. Progr., v. 47/1, p. zzz.
251. Yawar, Z., and Schieber, J., 2014, Bedload transport of coarse, medium and fine mud – Flume studies with graded quartz powders. GSA Abstr. W. Progr., v. 47/1, p. zzz.
252. Li, Y., and Schieber, J., 2014, On the Origin of Phosphate Nodules in the Chattanooga Shale (Upper Devonian) of Tennessee – A combined sedimentologic and petrographic study. GSA Abstr. W. Progr., v. 47/1, p. zzz.
253. Edgar, L.A., et al., 2014, Reconstructing Ancient Fluvial Environments at the Balmville and Dingo Gap Outcrops, Gale Crater, Mars. AGU Annual Meeting in San Francisco.
254. Gupta, S. et al., 2015, From Kimberley to Pahrump_Hills: toward a working sedimentary model for Curiosity's exploration of strata from Aeolis Palus to lower Mount Sharp in Gale crater. EGU General Assembly Meeting, Vienna, Austria, April 12-17, abstract volume.
255. Schieber et al., 2015, The Pahrump succession in Gale Crater – A potential evaporite bearing lacustrine mudstone with resemblance to earth analogs. 46th Lunar and Planetary Sciences Conference, Houston, March 16-20 2015, Abstract No. 2153. Abstract Volume – CD.
256. Minitti et al., 2015, Mapping the Pahrump Hills outcrop using MARDI sidewalk mosaics. 46th Lunar and Planetary Sciences Conference, Houston, March 16-20 2015, Abstract No. 2399. Abstract Volume – CD.
257. Sumner et al., 2015, Fluvial to Lacustrine Facies Transitions in Gale Crater, Mars. AGU Joint Assembly Meeting, Abstract Volume.
258. Kah, L., et al., 2015. Diagenetic crystal clusters and dendrites, Lower Mount Sharp, Gale Crater. 46th Lunar and Planetary Sciences Conference, Houston, March 16-20 2015, Abstract No. 1901. Abstract Volume – CD.
259. Stack, K.M., et al., 2015. Sedimentology and stratigraphy of the Pahrump Hills outcrop, Lower Mount Sharp, Gale Crater, Mars. 46th Lunar and Planetary Sciences Conference, Houston, March 16-20 2015, Abstract No. 1994. Abstract Volume – CD.
260. McBride, M.J., et al., 2015. Mars Hand Lens Imager (MAHLI) observations at the Pahrump Hills field site, Gale Crater. 46th Lunar and Planetary Sciences Conference, Houston, March 16-20 2015, Abstract No. 2855. Abstract Volume – CD.
261. Kronyak, R.E., et al., 2015. Distribution of mineralized veins from Yellowknife Bay to Mount Sharp, Gale Crater, Mars. 46th Lunar and Planetary Sciences Conference, Houston, March 16-20 2015, Abstract No. 1903. Abstract Volume – CD.
262. Schieber, J., et al., 2015. The Pahrump Succession in Gale Crater – A potentially evaporite bearing lacustrine mudstone with resemblance to Earth analogs. 46th Lunar and Planetary Sciences Conference, Houston, March 16-20 2015, Abstract No. 2153. Abstract Volume – CD.

263. Gupta, S., et al., 2015. From Kimberley to Pahrump_Hills: toward a working sedimentary model for Curiosity's exploration of strata from Aeolis Palus to lower Mount Sharp in Gale crater. European Planetary Science Congress 2015, Nantes, France, Sept. 27-Oct. 2, 2015, abstract volume.
264. Mangold. N., et al., 2015. ChemCam analyses of the Pahrump Hills sediments in the context of other sediments analyzed by the Curiosity Rover. European Planetary Science Congress 2015, Nantes, France, Sept. 27-Oct. 2, 2015, abstract volume.
265. Li, I., and Schieber, J. 2015. Controls on the Formation of a Phosphatic Interval in the Chattanooga Shale (Upper Devonian) of Tennessee – A Combined Sedimentologic and Geochemical Study. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
266. Donoghue, K., and Schieber, 2015. Investigation of Prominent Mineralized Fractures in Middle to Upper Devonian Organic-Rich Mudstones of the Eastern U.S.: Implications for Multi-Sourced Fluid Migration During a Mississippian Seal Breach. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
267. Wilson, R., and Schieber, J., 2015. Detailed Sequence Stratigraphic Framework of the Middle Devonian Geneseo Formation of New York, USA: Implications for Unconventional Reservoir Quality and Distribution. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
268. Schieber, J., 2015. New Horizons in Shale Sedimentology — How Experimental Advances Allow a New Look at the Rock Record. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
269. Yawar, Z., and Schieber, J., 2015. Flume Studies With Graded Quartz Powders and a Mixture of Quartz and Kaolinite — Implications for Silt Laminated Shales in the Rock Record. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
270. Minisini, D., Eldrett, J., Bergman, S., Schieber, J., Ma, C., and Lutz, B., 2015. Laminated Black Shales: Process Sedimentology at Lamina Scale: Examples From the Eagle Ford Formation, TX, USA. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
271. Wilson, R., and Schieber, J., 2015. The Role of Muddy Hyperpycnites in Shelfal Mudstones and Their Effect on Reservoir Quality: Examples From the Geneseo Formation of New York, USA. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
272. Li, Z., Schieber, J., and Bhattacharya, J., 2015. Linking Sedimentary Facies in Fine-Grained Deposits to Depositional Processes: Upper Cretaceous Ferron Notom Delta, Utah. AAPG Annual Meeting in Denver, CO, Abstract Volume, p. xx.
273. Edgett, K., et al., 2015, Curiosity's Mars Handlens Imager (MAHLI) Initial Investigations of Lower Aeolis Mons Strata, Gale Crater, Mars. GSA Abstr. W. Progr., v. 47/7, p. zzz.
274. Yingst, R.A., et al., 2015, Sedimentary early Mars revealed at the microscale at Pahrump Hills, Gale Crater. GSA Abstr. W. Progr., v. 47/7, p. zzz.
275. Kah, L.C., et al., 2015, Diagenetic crystal growth in the Murray Formation, Gale Crater, Mars. GSA Abstr. W. Progr., v. 47/7, p. zzz.
276. Leung, M.H.C. et al., 2015, Thin-bedded facies analysis of fine-grained parasequences: Cenomanian Tununk Shale Member, Henry Mountain Region, Utah. GSA Abstr. W. Progr., v. 47/7, p. zzz.
277. Schieber, J., Bish, D., Coleman, M., Reed, M., Edgett, K., and Malin, M., 2015, Revisiting the Sheepbed Mudstone of Gale Crater, Mars – A comprehensive reappraisal of its depositional, diagenetic, and burial history. AGU Annual Meeting in San Francisco.
278. Yawar, Z., and Schieber, J., 2015, Bedload Transport of Flocculated Mud and Resulting Microfabric of Deposits – Insights from Flume Studies. AGU Annual Meeting in San Francisco.
279. Kah, L., Kronyak, R., van Beek, J., Mangold, N., Thompson, L., Wiens, R., Grotzinger, J., and Schieber, J., 2015, Late diagenetic cements in the Murray Formation, Gale Crater, Mars: Implications for postdepositional fluid flow. AGU Annual Meeting in San Francisco.
280. Rubin, D., et al., 2015, Sedimentary facies as indicators of changing lake levels in Gale Crater, Mars. AGU Annual Meeting in San Francisco.
281. Schieber, J., and Pedersen, P., 2016, Not all Shales are Created Equal –Obscure Fine Grained Intraclasts and Lithics and Possible Consequences for Reservoir Quality in Dunvegan Mudstones. AAPG Annual Meeting in Calgary, Alberta, Canada, Abstract Volume, p. xx.
282. Schieber, J., 2016, On the Durability of Shale Lithics – Experimental Constraints, Modern Examples, and Implications for Interpreting the Rock Record. AAPG Annual Meeting in Calgary, Alberta, Canada, Abstract Volume, p. xx.
283. Li, Z., and Schieber, J., 2016, Facies Characteristics and Sequence Stratigraphy of the Upper Cretaceous Tununk Shale Member, Henry Mountains Region, Utah. AAPG Annual Meeting in Calgary, Alberta, Canada, Abstract Volume, p. xx.
284. Rossman, B., and Schieber, J., 2016, A Sedimentologic-Petrographic Study of Parasequences in the Late Cretaceous Tununk Shale of the Henry Mountain Region of SW Utah – Implications for Shale Deposition in the Western Interior Seaway. AAPG Annual Meeting in Calgary, Alberta, Canada, Abstract Volume, p. xx.
285. Yawar, Z., and Schieber, J., 2016, Pore types and their Distribution within different facies types in the Devonian Ohio Shale of Martin County, Kentucky – SEM Observations on Ion-milled Samples. AAPG Annual Meeting in Calgary, Alberta, Canada, Abstract Volume, p. xx.
286. Edgett. K., et al., 2016, Recent observations by Curiosity's Mars Hand Lens Imager (MAHLI) of rock strata and eolian sediment on the lower North Slope of Aeolis Mons, Gale Crater, Mars. 47th Lunar and Planetary Sciences Conference, Houston, March 21-25 2016, Abstract No. xxxx. Abstract Volume – CD.
287. Newsom, H.E., et al., 2016, The materials at an unconformity between the Murray and Stimson Formations at Marias Pass, Gale Crater Mars. 47th Lunar and Planetary Sciences Conference, Houston, March 21-25 2016, Abstract No. yyyy. Abstract Volume – CD.

288. Gupta, S., and the MSL Science Team, 2016, Curiosity explores the base of Aeolis Mons, Gale Crater, Mars: Recent Geological and Geochemical Mission Results. EGU General Assembly Meeting, Vienna, Austria, April 17-22, abstract volume.
289. Edgar, L., et al., 2016, Sedimentary Facies Observed by the Curiosity Rover at Gale Crater, Mars. 35th International Geological Congress (Aug. 27 - Sept. 4); Cape Town, South Africa.
290. Schimmelmann, A., et al., 2016, Global compilation of marine varve records. 35th International Geological Congress (Aug. 27 - Sept. 4); Cape Town, South Africa.
291. Edgar, L., et al., 2016, Environmental Transitions Recorded by Fluvial Fan Stratigraphy at Dingo Gap and Moonlight Valley, Gale Crater, Mars. AGU Annual Meeting in San Francisco.
292. Edgett, K. et al., 2016, Depth of burial for lithification and diagenesis of muds and sands on early Mars. SEPM/AAPG Research Conference "Mudstone Diagenesis", October 16-19, 2016 — Santa Fe, New Mexico, USA.
293. Schieber, J. et al., 2016, From Petrographic Wonderland to Hard Numbers, or How We Might Combine High End Petrography with Numerical Modeling to Understand Mudstone Diagenesis at the Rock Volume Level – Lessons Learned at a Distant Place. SEPM/AAPG Research Conference "Mudstone Diagenesis", October 16-19, 2016 — Santa Fe, New Mexico, USA.
294. Fedo, C., et al., 2017, Facies analysis and basin architecture of the upper part of the Murray Formation, Gale Crater, Mars. 48th Lunar and Planetary Sciences Conference, Houston, March 20-24 2017, Abstract No. 1689. Abstract Volume – CD.
295. Stein, N., et al., 2017, Candidate desiccation cracks in the upper Murray Formation, Gale Crater, Mars. 48th Lunar and Planetary Sciences Conference, Houston, March 20-24 2017, Abstract No. 2387. Abstract Volume – CD.
296. Minitti, M., et al., 2017, Using MARDI twilight images to assess variation in the Murray Formation with elevation, Gale Crater, Mars. 48th Lunar and Planetary Sciences Conference, Houston, March 20-24 2017, Abstract No. 2622. Abstract Volume – CD.
297. White, A., and Schieber, J., 2017, Sedimentology and facies analysis of the Jurassic Smmerville Formation, Utah – A potential analog for Martian mudstones. 48th Lunar and Planetary Sciences Conference, Houston, March 20-24 2017, Abstract No. 1834. Abstract Volume – CD.
298. Schieber, J., et al., 2017, A sandy lens in the upper Murray Formation at Gale Crater, Mars: A likely lowstand deposit of a dynamic ancient lake. 48th Lunar and Planetary Sciences Conference, Houston, March 20-24 2017, Abstract No. 2311. Abstract Volume – CD.
299. Schieber J., 2017, A Conceptual Perspective on Processes That Deposit Mud and Their Impact on Shale Fabrics and Future Pore Systems. AAPG Annual Meeting in Houston, TX, Abstract CD.
300. Schieber J., 2017, The Influence of Clay Type and Grain Size on the Bedload Deposition of Muds - An Experimental Perspective. AAPG Annual Meeting in Houston, TX, Abstract CD.
301. Li, Z., and Schieber, J., 2017, Sedimentological and Petrographic Characteristics of a Mudstone-Dominated Succession Within a Sequence Stratigraphic Context: The Upper Cretaceous (Lower-Middle Turonian) Tununk Shale, South-Central Utah. AAPG Annual Meeting in Houston, TX, Abstract CD.
302. Li, Y., Schieber, J., and Fan, T., 2017, Pore Characterization and Shale Facies Analysis of the Ordovician-Silurian Succession of Northern Guizhou, South China: The Relationship Between Pore Distribution and Shale Facies. AAPG Annual Meeting in Houston, TX, Abstract CD.
303. Liu, B., and Schieber, J., 2017, Authigenic Minerals Formation and Detrital Minerals Accumulation Associated with Tasmanites Cysts, and Initial Depositional Porosity in the New Albany Shale, Illinois Basin. AAPG Annual Meeting in Houston, TX, Abstract CD.
304. Li, Z., and Schieber, J., 2017, Sequence Stratigraphic Analysis of the Turonian Tununk Shale Member, Henry Mountains Region, Utah: Implications for a Depositional Model of Shelfal Mudstones in Epicontinental Seas. AAPG Annual Meeting in Houston, TX, Abstract CD.
305. Yawar, Z., and Schieber, 2017, Lithofacies Distribution of the Middle to Upper Devonian Ohio Shale in the Southern Appalachian Basin, Kentucky. AAPG Annual Meeting in Houston, Abstract Volume, p. xx.
306. Fedo C., et al., 2017, Paleoenvironments and Stratigraphic Architecture of an Ancient Lake Basin, Gale Crater, Mars. Fedo C., et al. (2017) Paleoenvironments and Stratigraphic Architecture of an Ancient Lake Basin, Gale Crater, Mars. 2017 GSA Annual Meeting in Seattle, GSA Abstracts with Programs, v. 49, No. 6.
307. Li, Z. and Schieber, J., 2017, Sequence Stratigraphic Analysis of Late Cretaceous (Turonian) Tununk Shale Member of the Mancos Shale Formation, South-Central Utah: Parasequence Styles in Shelfal Mudstone Strata. 2017 GSA Annual Meeting in Seattle, GSA Abstracts with Programs, v. 49, No. 6.
308. Liu, B., Schieber, J., and Mastalerz, M., 2017, Combined SEM and Reflected Light Petrography of Organic Matter in the New Albany Shale (Devonian-Mississippian) in the Illinois Basin: A Perspective on Organic Porosity Development with Thermal Maturation. 2017 GSA Annual Meeting in Seattle, GSA Abstracts with Programs, v. 49, No. 6.
309. Liu, B., Mastalerz, M., and Schieber, J., 2017, Petrographic Study of Organic Matter in the New Albany Shale (Devonian-Mississippian) with Thermal Maturation: Implications for Oil-Prone Kerogen Transformation and Primary Migration. 2017 GSA Annual Meeting in Seattle, GSA Abstracts with Programs, v. 49, No. 6.
310. Rossman, B., Li, Z., and Schieber, J., 2017, Sedimentological Characterization of the Tununk Shale: Petrogroahic Interpretation of Depositional Systems Cretaceous Mudstone Parasequences. 2017 GSA Annual Meeting in Seattle, GSA Abstracts with Programs, v. 49, No. 6.
311. Schieber, J., M.E. Minitti, R. Sullivan, M. Malin, T. Parker, F. Calef, K. Edgett, 2018, ENGRAVED ON THE ROCKS – MARDI OBSERVATIONS SHOW THE RELATIONSHIP OF EOLIAN ABRASION OF MURRAY FORMATION MUDSTONES TO MODERN WIND PATTERNS IN GALE CRATER, MARS. 49th Lunar and Planetary Sciences Conference, Houston, March 19-23 2018, Abstract No. 1102. Abstract Volume – CD.

312. Schieber, J., 2018, HOW SMALL IS IT? PUSHING MAHLI TO THE LIMIT IN THE SEARCH FOR MUDSTONES AT GALE CRATER, MARS. 49th Lunar and Planetary Sciences Conference, Houston, March 19-23 2018, Abstract No. 1100. Abstract Volume – CD.
313. Yawar, Z., J. Schieber, M. Minitti, J. Van Beek, F. Calef, K. Edgett, M. Malin, 2018, WITH THE NOSE TO THE GROUND – EXPLORING THE PAHRUMP HILLS OUTRCROP WITH MARDI FOR NEW PERSPECTIVES ON THE MUDSTONES OF THE MURRAY FORMATION AT GALE CRATER, MARS. .49th Lunar and Planetary Sciences Conference, Houston, March 19-23 2018, Abstract No. 1101. Abstract Volume – CD.
314. Rivera-Hernandez, F. et al., 2018, CHARACTERIZING SHIFTING ANCIENT DEPOSITIONAL ENVIRONMENTS IN THE MURRAY FORMATION, GALE CRATER, MARS FROM CHEMCAM LIBS DATA. 49th Lunar and Planetary Sciences Conference, Houston, March 19-23 2018, Abstract No. 1102. Abstract Volume – CD.
315. Newsom, H., et al., 2018, A BURIED AEOLIAN LAG DEPOSIT AT AN UNCONFORMITY BETWEEN THE MURRAY AND STIMSON FORMATIONS AT MARIAS PASS, GALE CRATER, MARS. 49th Lunar and Planetary Sciences Conference, Houston, March 19-23 2018, Abstract No. 2263. Abstract Volume – CD.
316. Minitti, M., et al., 2018, PRIMARY AND SECONDARY FEATURES WITHIN THE PAHRUMP HILLS OUTCROP AS SEEN IN THE MARDI SIDEWALK MOSAIC. 49th Lunar and Planetary Sciences Conference, Houston, March 19-23 2018, Abstract No. 1560. Abstract Volume – CD.
317. Schieber; J., S. Menpes; M. Archer; R. Johns, 2018, Deducing Processes of Shale Deposition, Erosion, and Transport From Textural Attributes and Insights From Experimental Studies: Observations From the Middle Velkerri Member of the Beetaloo Basin, Northern Australia. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
318. Schieber; J., K. Bohacs; Z. Yawar; M. Minitti; R. Williams; MSL Science Team, 2018, A Sequence Stratigraphic Perspective on the Murray Formation, a Martian Mudstone Succession in Gale Crater, Mars. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
319. Li; Z., J. Schieber, 2018, Detailed Petrographic Studies of the Late Cretaceous Tununk Shale Member of the Mancos Shale Formation: Prevalence and Types of Mud-Dominated Composite Particles in Mudstones. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
320. Liu; B., J. Schieber; M. Mastalerz, 2018, SEM Petrography of Organic Matter in the Devonian-Mississippian New Albany Shale and Its Implication for Organic Pore Development With Thermal Maturation. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
321. Liu; B., M. Mastalerz; J. Schieber, 2018, Petrographic and Micro-FTIR Study of Organic Matter in the Devonian - Mississippian New Albany Shale During Thermal Maturation: Implications for Oil-Prone Kerogen Transformation. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
322. Wilson, R., J. Schieber, 2018, Depositional Models and Sequence Stratigraphic Framework for the "Upper Devonian" Geneseo Formation in the Northern Appalachian Basin, NY: Implications for Hydrocarbon Play Element Quality and Distribution. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
323. Schieber, J., O.R. Lazar; K. Bohacs, 2018, An Integrated Study of Facies, Depositional Context, and Porosity Development in the Eagle Ford Shale of Southwest Texas. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
324. Yawar, Z., J. Schieber, 2018, Sediment Transport and Dispersal in the Appalachian Basin, Observations From the Rock Record and Flume Experiments. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
325. Li; Z., J. Schieber, 2018, Sequence Stratigraphic Analysis of Late Cretaceous Tununk Shale Member of the Mancos Shale Formation, South-Central Utah: Parasequence Styles in Shelfal Mudstone Strata. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
326. Schieber, J., B. Liu; C. Stewart; A. Schimmelmann, 2018, An Experimental Perspective on Co-Deposition of Marine Organic Matter With Clays and Silt. AAPG Annual Meeting in Salt Lake City, Abstract Volume, p. xx.
327. Schieber, J., 2018, How flume studies are changing our perceptions of mud depositional processes and our appraisal of shales in the rock record. International Sedimentologic Congress, Quebec City, Canada, Abstract Volume.
328. Li, Z., and Schieber, J., 2018, Application of sequence stratigraphy to an ancient shelf mudstone succession: Upper Cretaceous Tununk Shale Member, Mancos Shale Formation, Utah, USA. International Sedimentologic Congress, Quebec City, Canada, Abstract Volume.
329. Rossman, B., Schieber, J., 2018, DETAILED CHARACTERIZATIONS OF THE CRETACEOUS TUNUNK SHALE, NORTH HENRY BASIN, UTAH, USA: A HIGH-RESOLUTION STUDY OF MUDSTONE PARASEQUENCES INTEGRATING SEDIMENTOLOGY AND PETROGRAPHY WITH HIGH-FREQUENCY PXRF 2018 GSA Annual Meeting in Indianapolis, GSA Abstracts with Programs, v. 50, No. 6.
330. Liu, B., Schieber, J., Mastalerz, M., Lazar, R., Teng, J., 2018, ORGANIC MATTER CONTENT AND TYPE VARIATION IN THE SEQUENCE STRATIGRAPHIC CONTEXT OF THE UPPER DEVONIAN NEW ALBANY SHALE, ILLINOIS BASIN 2018 GSA Annual Meeting in Indianapolis, GSA Abstracts with Programs, v. 50, No. 6.
331. Liu, B., Schieber, J., Mastalerz, M., Lazar, R., Teng, J., 2018, ROCK MECHANICAL PROPERTIES VARIATION IN THE SEQUENCE STRATIGRAPHIC CONTEXT OF THE UPPER DEVONIAN NEW ALBANY SHALE, ILLINOIS BASIN 2018 GSA Annual Meeting in Indianapolis, GSA Abstracts with Programs, v. 50, No. 6.
332. Li, Z., Schieber, J, Bish, D., 2018, THE ORIGIN OF CLAY MINERALS IN THE UPPER CRETACEOUS TUNUNK SHALE MEMBER OF THE MANCOS SHALE FORMATION, HENRY MOUNTAINS REGION, SOUTH-CENTRAL UTAH 2018 GSA Annual Meeting in Indianapolis, GSA Abstracts with Programs, v. 50, No. 6.
333. Runze, M., et al., 2018, Sediment Transport and Morphological Change in a River Meander without Vegetation. 2018 AGU Meeting in Washington DC. Conference Proceeedings.
334. Yawar Z., Schieber J., Sullivan R., Minitti M., Edgett K., 2019, On the Eolian Transport Durability of Sand-Size Mudstone Clasts — The Potential for Martian Sand Dunes that are Composed of Fine Grained Aggregates and Implications for

Interpreting Mudstone Strata at Gale Crater, Mars. 50th Lunar and Planetary Sciences Conference, Houston, March 18-22 2019, Abstract No. 1999. Abstract Volume – CD.

335. Yawar Z., Schieber J., Bish D., Minitti M., 2019, Using Mahli Images for Detection of Gypsum in the Murray Formation at Gale Crater, Mars. 50th Lunar and Planetary Sciences Conference, Houston, March 18-22 2019, Abstract No. 2007. Abstract Volume – CD.
336. Rapin W., Ehlmann B. L., Dromart G., Schieber J., Thomas N. et al., 2019, High Salinity Recorded by Bedrock Sulfate Enrichments at Gale Crater. 50th Lunar and Planetary Sciences Conference, Houston, March 18-22 2019, Abstract No. 2147. Abstract Volume – CD.
337. Li, Z., J. Schieber, D. Bish, 2019, Depositional Controls on the Origin of Clay Minerals in the Mancos Shale (Turonian Age), Henry Mountains Region, South-Central Utah: AAPG Annual Meeting in San Antonio, Abstract Volume, p. xx.
338. Wilson, R.D., M. D. Sullivan, R. V. Macauley, R. Kukulski, A. Springer, J. Schieber, 2019, Parasequence Expression in Epicontinental Organic-Rich Mudstones: Examples From the Middle-Late Devonian of North America: AAPG Annual Meeting in San Antonio, Abstract Volume, p. xx.
339. Yawar, Z., J. Schieber, 2019, Experimental Co-Deposition of Sand and Flocculated Mud From Moving Muddy Suspensions — Implications for Shale Sedimentology: AAPG Annual Meeting in San Antonio, Abstract Volume, p. xx.
340. Li, Z., J. Schieber, 2019, Cryptic Sequence Boundaries in an Ancient Offshore Mudstone-Dominated Succession: The Upper Cretaceous Mancos Shale Formation, South-Central Utah: AAPG Annual Meeting in San Antonio, Abstract Volume, p. xx.
341. Smith, L.B., F. G. Tomassini, J. Schieber, 2019, Semi-Quantitative SEM Analysis of Vaca Muerta Formation, Neuquén Basin, Argentina: AAPG Annual Meeting in San Antonio, Abstract Volume, p. xx.
342. Schieber, J. 2019, Changing Perceptions of Mud Depositional Processes as a Consequence of Flume Studies. 34th IAS Meeting of Sedimentology, Rome, September 10-13 2019. Abstract volume.
343. Gupta, S., et al., 2019, Stratigraphy, Sedimentology, and Diagenesis of a Martian Lacustrine Deposit, Murray Formation, Gale Crater, Mars. 34th IAS Meeting of Sedimentology, Rome, September 10-13 2019. Abstract volume.
344. Pellegrini, C., et al., 2019, Disentangling the roles of river and shelfal depositional processes in terrigenous-organic-carbon sequestration on continental shelves: an example from the Adriatic Sea. 34th IAS Meeting of Sedimentology, Rome, September 10-13 2019. Abstract volume.
345. Li, Y., et al., 2019, Pore characterization and shale facies analysis of the Ordovician- Silurian transition of northern Guizhou, South China: The controls of shale facies on pore distribution. 34th IAS Meeting of Sedimentology, Rome, September 10-13 2019. Abstract volume.
346. Yawar, Z., and Schieber, J., 2020. Eighteen months continuous eolian transport of sand-size mudstone clasts – Experimental results and implications for interpreting mudstone strata at Gale Crater, Mars. 51st Lunar and Planetary Sciences Conference, Houston, March 16-20, 2020. Abstract No. 1200. Abstract Volume – CD.
347. Rivera-Hernandez, F., et al., 2020. Grain Size and Facies Variations in Glen Torridon (Gale Crater, Mars): Perspective from MAHLI, Mastcam, and ChemCam LIBS Data. 51st Lunar and Planetary Sciences Conference, Houston, March 16-20, 2020. Abstract No. 2814. Abstract Volume – CD.
348. Caravaca, G., et al., 2021. Evidence of depositional settings variation at the Juar/Knockfarril Hill Members transition in the Glen Torridon region (Gale Crater, Mars). 52nd Lunar and Planetary Sciences Conference, Houston, March 15-19, 2021. Abstract No. 1455. Abstract Volume – CD.
349. Schieber, J., 2021. Grow yourself a source rock: Insights from flume studies on benthic microbial mats as primary producers in carbonaceous shales of the Proterozoic. AAPG Annual Meeting in Denver, Abstract CD.
350. Schieber, J., Yawar, Z., Fedele, J., 2021. Experimental determination of erosional thresholds of water-rich muds in a racetrack flume – implications for shale sedimentology. AAPG Annual Meeting in Denver, Abstract CD.
351. Schieber, J., 2021. Anoxia Not Obligatory - The Myths and Realities of Black Shale Depositional Settings. GSA Annual Meeting in Portland, GSA Abstracts with Programs, v. 53, No. 6.
352. Schieber, J., M Minitti, W Rapin, K Bohacs, G Caravaca, et al., 2022, LAMINATED MUDSTONES IN THE CLAY-SULFATE TRANSITION INTERVAL AT MT. SHARP-SIMILARITIES TO EVAPORITIC MUDSTONES FROM PAHRUMP HILLS AND POSSIBLE IMPLICATIONS. 53rd Lunar and Planetary Science Conference, abstract# 1304.
353. Rapin, W., et al., 2022, THE CURIOSITY ROVER IS EXPLORING A KEY SULFATE-BEARING ORBITAL FACIES. 53rd Lunar and Planetary Science Conference, abstract# 2473.
354. Schieber, J. ; Bohacs, K. ; Coleman, M. ; Bish, D. ; Reed, M. ; Thompson, L. ; Rapin, W. ; Yawar, Z., 2022, Integrated Assessment of Depositional Setting of the Pahrump Hills Succession in Gale Crater, Mars — Multiple Depositional Sequences in an Evaporitic Lake. 53rd Lunar and Planetary Science Conference, abstract# 1303.
355. Schieber, J., 2022. Its not hopeless: How we can extract environmental parameters from ancient shales through a combination of textural deduction and Flume Study Analogs - Illustrated with a case study from the Meso-Proterozoic Velkerri Formation. Keynote address at PESA CABSIV Conference in Darwin, August 2022.
356. Camp, W.K., Schieber, J., Mastalerz, M., Nesheim, T., 2022. Organic Petrography of the Ordovician Red River Kukersite Tight Oil and Gas Play, Williston Basin, North Dakota, U.S.A. AAPG Rocky Mountain Section Meeting, Denver Colorado, July 24-27, 2022, Search and Discovery Article #11358
357. Schieber, J., et al. 2022. Mars is a Mirror 1 – Understanding the Pahrump Hills Mudstones from a Perspective of Earth Analogs through an integrative physical-chemical analytical-experimental-modeling study. GSA Annual Meeting in Denver, GSA Abstracts with Programs, v. 54, No. 6.
358. Bohacs, K., Schieber, J., et al. 2022. Mars is a Mirror 2 – The Pahrump Hills Member of the Murray Formation, Gale Crater, Mars – An evaporative lake facies association formed in an underfilled through-flow lake basin type. GSA Annual Meeting in Denver, GSA Abstracts with Programs, v. 54, No. 6.

359. Gupta, S., et al., 2022. Episodic Aqueous Conditions Punctuated dominantly Aeolian Deposition within the Layered Sulphate-bearing Unit, Gale crater (Mars). 2022 AGU Meeting in San Francisco. Conference Proceedings.
360. Li, Z., and Schieber, J., 2022. The significance of composite particles in the transport and deposition of fine-grained sediments: Insights from multiple offshore mudstone units in the Late Cretaceous Western Interior Seaway. 2022 AGU Meeting in San Francisco. Conference Proceedings.
361. Strom, K., Ashley, T., and Schieber, J., 2022. Mud Particle Velocity in the Viscous Sublayer. 2022 AGU Meeting in San Francisco. Conference Proceedings.
362. Rampe, E.B. et al., 2023. MINERALOGICAL EVIDENCE FOR ENVIRONMENTAL CHANGE IN THE CLAY-SULFATE TRANSITION AT GALE CRATER, MARS. 54th Lunar and Planetary Science Conference, abstract# 1554.
363. Weitz, C.M., et al., 2023. THE MARKER BAND IN GALE CRATER: A SYNTHESIS OF ORBITAL AND GROUND OBSERVATIONS. C. M. Weitz. 54th Lunar and Planetary Science Conference, abstract# 1560.
364. Rapin, W. et al., 2023. NOT ALWAYS WET: AN ARIDIFICATION SEQUENCE IN THE ORBITAL CLAY-SULFATE TRANSITION OF AEOLIS MONS. 54th Lunar and Planetary Science Conference, abstract# 2085.
365. Gupta, S. et al., 2023. 'HIGH' BUT NOT SO DRY ON AEOLIS MONS: TRANSIENT LAKE SYSTEMS IN HESPERIANDESERTS IN GALE CRATER. 54th Lunar and Planetary Science Conference, abstract# 2707.
366. Gupta, S., 2023. 'High'but Not So Dry on Aeolis Mons: Transient Lake Systems in Hesperian Deserts in Gale Crater. LPI Contributions, v. 2806, p. 2707.
367. Dietrich, W.E., et al., 2023. IMPLICATIONS OF THE LOCAL TOPOGRAPHY OF THE MARKER BAND CONTACT, GALE CRATER. 54th Lunar and Planetary Science Conference, abstract# 1421.
368. Thompson, L.M., et al., 2023. INVESTIGATION OF THE GALE CRATER MARKER BAND (AND BEYOND) WITH THE MARS SCIENCE LABORATORY, ALPHA PARTICLE X-RAY SPECTROMETER. 54th Lunar and Planetary Science Conference, abstract# 2311.
369. Gasda, P.J., et al., 2023. CHEMCAM OBSERVATIONS OF THE MARKER BAND, GALE CRATER, MARS. 54th Lunar and Planetary Science Conference, abstract# 2389.
370. Lewis, K., et al., 2023. RHYTHMIC STRATIGRAPHY AT THE ORBITAL MARKER BED AT MOUNT SHARP, GALE CRATER, MARS. 54th Lunar and Planetary Science Conference, abstract# 2887.
371. Schieber, J. et al., 2023. TWO SIDES OF THE SAME COIN? BENEFITS OF COMPARATIVE STUDY OF MUDSTONES FROM EARLY MARS AND EARTH. 36th International Meeting of Sedimentology, abstract volume.
372. Schieber, J. et al., 2023. A New Portal to Sediment Provenance: Prima Facie Identification of Source Rocks via High-End Mudstone Petrography - Illustrated with Examples from the Quaternary of the Central Adriatic. AAPG Annual Meeting in Houston, 8/28-9/1/2023.
373. Gupta, S., et al., 2023. Rippled to Bits: Tales of Transient Lakes in a Martian Desert. 2023 AGU Meeting in San Francisco. Conference Proceedings.
374. Kite, E.S., et al., 2023. Metal Enrichment of Wave-Rippled Sediments on Ancient Mars. 2023 AGU Meeting in San Francisco. Conference Proceedings.
375. Runze, M., et al., 2023. The sediment transport mechanics driving lateral accretion in muddy meanders. 2023 AGU Meeting in San Francisco. Conference Proceedings.
376. Rapin, W., et al., 2023. Aridification sequence and formation of sulfates in Aeolis Mons, Gale crater. Fluvial Aeolian InteRactions on PLAnetarY surfaces workshop, hosted by ESA, in Noordwijk, Netherlands.

INVITED PRESENTATIONS/LECTURES

(136 total; without published abstract)

1. Microbial Mats and Precambrian Metallogeny. Lecture at the University of Tübingen, West Germany, November 14th 1989.
2. Fossil Microbial Mats in Terrigenous Clastics and Associated Sulphide Mineralization. Lecture at the University of Oldenburg, West Germany, November 17th 1989.
3. Stratabound Sulfide Mineralization in the Proterozoic Belt Basin. Lecture at Arizona State University, Tempe, April 9th 1991.
4. Microbial Mats as Surface Stabilizers in Terrigenous Sediments of the Belt Supergroup. Lecture at Ruhr-Universität Bochum, July 2nd 1991.
5. An Overview of the Depositional History of the Belt Basin, Mid-Proterozoic of Montana. Lecture at Freie Universität Berlin, Berlin, Germany, July 4th 1991.
6. An Overview of the Depositional History of the Belt Basin, Mid-Proterozoic of Montana. Lecture at Universität Tübingen, Tübingen, Germany, July 9th 1991.
7. Geochemical Data from the Belt Supergroup in the Context of Basin Evolution. Lecture at Max-Planck Institut für Geochemie, Mainz, Germany, July 18th 1991.
8. Geochemical Data from the Belt Supergroup in the Context of Basin Evolution. Lecture at Department of Earth Sciences, National Cheng Kung University, Tainan, Taiwan, R.O.C., January 10th 1992.
9. Sedimentologic, geochemical, and mineralogical features of the Belt Series and their bearing on the lacustrine vs marine debate. Presentation, Belt Symposium III, Whitefish, Montana, August 1993.
10. Early silica diagenesis in shales. Presentation, Clastic Diagenesis Research Group, AAPG Meeting in Houston, March 5 1995.

11. Sedimentologic, geochemical, and mineralogical features of the Belt Series and their bearing on the lacustrine vs marine debate. Lecture, Texas Tech University, Lubbock, April 24, 1995.
12. New sedimentologic observations on the Upper Devonian Chattanooga Shale of Tennessee and Kentucky, and their bearing on the deposition and origin of black shales. Lecture, University of Iowa, Iowa City, September 9th, 1997.
13. Upper Devonian black shales of the eastern US: Results of sedimentologic and sequence stratigraphic investigations. Lecture, University of Mainz/Germany, November 13th, 1997.
14. Upper Devonian black shales of the eastern US: Results of sedimentologic and sequence stratigraphic investigations. Lecture, University of Regina, Regina, Saskatchewan, Canada, December 3rd, 1997.
15. Sequence Stratigraphy and Depositional setting of the Late Devonian Chattanooga Shale: A shallow water black shale. Presentation, Exxon Production Research, Houston/TX, March 20, 1998.
16. Sedimentologic, geochemical, and mineralogical features of the Belt Series and their bearing on the lacustrine vs marine debate. Lecture, The University of Texas at Dallas, Richardson/TX, April 16, 1998.
17. Upper Devonian black shales of the eastern US: Results of sedimentologic and sequence stratigraphic investigations. Lecture, The University of Texas at Dallas, April 17, 1998.
18. A new look at an old shale: Implications of recent observations on the origin of the Chattanooga Shale in Tennessee. Lecture, Vanderbilt University, Nashville/TN, September 15, 1998.
19. A new look at an old shale: Implications of recent observations on the origin of the Chattanooga Shale in Tennessee. Lecture, Tennessee Tech University, Cookeville/TN, September 16, 1998.
20. Sequence stratigraphy in black shales: Results of recent stratigraphic studies in the Chattanooga Shale of Tennessee. Lecture, University of Kentucky, Lexington/KY, September 17, 1998.
21. Results of recent sequence stratigraphic studies in the Chattanooga Shale of Tennessee: Implications for regional correlations. Lecture, Indiana University, Bloomington/IN, September 22, 1998.
22. Results of recent sequence stratigraphic studies in the Chattanooga Shale of Tennessee: Implications for regional correlations. Lecture, University of Cincinnati, Cincinnati/OH, September 23, 1998.
23. Sedimentological Studies of Late Devonian Shales in the Eastern US: The Sequence Stratigraphic Consequences of New Sedimentologic and Petrographic Observations. Lecture, University of California, Riverside/CA, February 22, 1999.
24. Criteria to Identify Microbial Mat Deposits in the Terrigenous Clastic Rock Record: Learning from the Proterozoic to understand the Phanerozoic. Lecture, University of California, Riverside/CA, February 23, 1999.
25. Studying Shales for Fun and Profit. Lecture, Iowa State University, Ames/Iowa, February 7, 2000.
26. Studying Shales for Fun and Profit. Lecture, University of Cincinnati, Cincinnati/Ohio, September 22, 2000.
27. Of Mudstones, Microbes, and Mars. Lecture, Indiana University, Bloomington/Indiana, April 26, 2001.
28. Studying Shales for Fun and Profit (2nd edition). Lecture, Indiana University, Bloomington/Indiana, April 27, 2001.
29. Studying Shales for Fun and Profit (2nd edition). Lecture, University of Texas at Austin, Austin/Texas, October 15, 2001.
30. Studying Shales for Fun and Profit (2nd edition). Lecture, IUPUI, Indianapolis, October 3, 2003.
31. Studying Shales for Fun and Profit (2nd edition). Lecture, Purdue University, Lafayette/Indiana, December 4, 2003.
32. Tales of Pyrite Ooids: Small Grains – Big Implications. Lecture, University of Cincinnati, Cincinnati/Ohio, February 6, 2004.
33. The Potential Importance of Diagenetically Redistributed Biogenic Silica for the Gas Potential of the New Albany Shale. Workshop, 2004 Indiana Oil & Gas Association Annual Meeting. Evansville, Indiana, October 13, 2004.
34. Tales of Pyrite Ooids: Small Grains – Big Implications. Lecture, University of Texas, Austin/Texas, November 29, 2004.
35. Shale Studies at Indiana University. Lecture, ChevronTexaco, Houston, Texas, September 1, 2005.
36. Mudstones and Microbes – An Intimate Association. Lecture, University of Wisconsin, Madison, Wisconsin, November 10, 2005.
37. Studying Shales for Fun and Profit (3rd edition). Lecture, University of Wisconsin, Madison, Wisconsin, November 11, 2005.
38. Shale Provenance from Quartz Grains. Lecture, ExxonMobil Research Lab, Houston, Texas, November 29, 2005.
39. How Anoxic Was It? Lecture, ExxonMobil Research Lab, Houston, Texas, November 30, 2005.
40. The Key Roles of Mudstones for Unlocking Geological History and Understanding the Hydrocarbon System. Lecture, Louisiana State University, Baton Rouge, Louisiana, March 14, 2006.

41. The Eberswalde Deltaic Complex as a High Science-Return Target for the 2009 Mars Science Laboratory. Presentation, 1st Mars Science Lab Landing Site Conference, Pasadena, California, June 1, 2006.
42. Mars Unser Sedimentärer Nachbarplanet. Lecture at the University of Tübingen, Germany, July 27th, 2006.
43. Mars Unser Nachbarplanet, So Seltsam Vertraut und Doch So Anders. Lecture at the Rieskratermuseum, Nördlingen, Germany, August 3rd, 2006.
44. How Anoxic Was It? Lecture on black shales at the University of Köln, Germany, August 9th, 2006.
45. MSL Site: The Eberswalde Deltaic Complex. Presentation, 2nd Mars Science Lab Landing Site Conference, Pasadena, California, October 24, 2007.
46. Narrative of an Unrepentant Shale Geologist. Lecture at Texas A&M University, College Station, Texas, January 24th, 2008.
47. Mudstone Sedimentology: From Field Studies to Flume Studies. Lecture, ExxonMobil Research Lab, Houston, Texas, February 7, 2008.
48. Authigenic Silica in Mudstones: Impact on Porosity. Lecture, ExxonMobil Research Lab, Houston, Texas, February 8, 2008.
49. The Eberswalde Crater MSL Landing Site with Emphasis on Depositional Setting. Presentation, 3rd Mars Science Lab Landing Site Conference, Monrovia, California, September 16, 2008.
50. The Petrographic Study of Shales and Applications to Gas Shale Exploration. Presentation, Encana Inc., Denver, December 9, 2008.
51. Flume Studies of Mudstone Deposition and Erosion. Lecture, ExxonMobil Exploration and Production Co., Houston, Texas, February 4, 2009.
52. Petrography, Sedimentology, and Sequence Stratigraphy of Shales and Mudstones. Lecture, ExxonMobil Exploration and Production Co., Houston, Texas, February 12, 2009.
53. Flume Studies of Mudstone Deposition and Erosion. Lecture, ExxonMobil Upstream Research Co., Houston, Texas, March 26, 2009.
54. Flume Studies of Mudstone Deposition and Erosion. Lecture, University of Massachusetts/Amherst and Amherst College, Amherst, Massachusetts, April 10, 2009.
55. Reiseziel Mars – Die Suche Nach Einem Landplatz. Lecture at the Rieskratermuseum, Nördlingen, Germany, July 16th, 2009.
56. Narrative of an Unrepentant Shale Geologist. Lecture sponsored by Houston Geological Society and University of Houston, Houston, Texas, November 16th, 2009.
57. Production of Silt-Laminated Shales from Moving Suspensions: Flume Experiments and Analogs in Natural Settings. Lecture, ExxonMobil Exploration and Production Co., Houston, Texas, December 11, 2009.
58. Why Mudstones have a Key Role in Unlocking Geological History and Understanding the Hydrocarbon System. Lecture, Anadarko Petroleum Corp., Houston, Texas, August 17th, 2010.
59. The IU Shale Research Lab. Lecture, Anadarko Petroleum Corp., Houston, Texas, August 18th, 2010.
60. Why Mudstones have a Key Role in Unlocking Geological History and Understanding the Hydrocarbon System. Lecture, University of Houston, Houston, Texas, November 2nd, 2010.
61. Shale Research at Indiana University – An Overview. Lecture, Shell Oil Inc., Houston, Texas, November 3rd, 2010.
62. Scaling Up Shale Properties – A Billion Dollar Question Without Simple Answers. Lecture, Marathon Oil Inc., Houston, Texas, December 3rd, 2010.
63. Flume Studies of Shale Sedimentology - Implications for the Rock Record, Shale Microfabrics & Pore Development. Hedberg Conference: Critical Assessment of Shale Resource Plays; Austin, Texas, December 7th 2010
64. Reverse Engineering Mother Nature- The Significance of Experimental Mudstone Sedimentology. Houston Geological Society Applied Geoscience Conference - Applied Reservoir Characterization of US Gulf Region Mudrocks as Shale Gas/Oil Reservoirs. The Woodlands, Texas, February 7th, 2011.
65. Flume Studies of Shale Sedimentology - Implications for the Rock Record, Shale Microfabrics & Pore Development. Lecture, University of Vienna, Austria, August 10, 2011.
66. Flume Studies of Shale Sedimentology - Implications for the Rock Record, Shale Microfabrics & Pore Development. Schlumberger/TerraTek, Salt Lace City, Utah, September 19th, 2011.
67. The Benefits of Shale Petrography. Schlumberger/TerraTek, Salt Lace City, Utah, September 19th, 2011.
68. Flume Experiments with Clay-Silt-Carbonate Mud Mixtures: Depositional Processes, Observed Sedimentary Features, and their Potential Counterparts in the Rock Record. Houston Geological Society Applied Geoscience Mudrocks Conference. Houston, Texas, February 20th, 2012.
69. A Travelogue of Shale Research From the Precambrian to the Modern. Shell Oil Inc., Research Lab, Houston, Texas, February 22nd, 2012.

70. Flume Experiments with Clay-Silt-Carbonate Mud Mixtures: Depositional Processes, Observed Sedimentary Features, and their Potential Counterparts in the Rock Record. Lecture, Anadarko Petroleum Corp., The Woodlands, Texas, February 23rd, 2012.
71. Flume Research in Shale Sedimentology at Indiana University. Lecture, University of Southern Mississippi, Hattiesburg, MS, March 12th, 2012.
72. Shale Research as a Frontier and Opportunity. Lecture, University of Florida, Gainesville, Fl, March 15th, 2012.
73. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. Keynote lecture, Geoshale 2012 Conference, Warsaw/Poland, May 15 2012.
74. An Overview of Experimental Mudstone Sedimentology – Results of Experiments, Co-Flocculation of Marine Organic Matter with Clays, and Applications to the Rock Record. Keynote lecture, Poland Shale Gas Summit 2012, Warsaw/Poland, May 18 2012.
75. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. Statoil Research Conference, Trondheim, Norway, October 15-17, 2012.
76. The Mars Science Lab landing and recent geologic investigations in Gale Crater on Mars. Lecture, University of Minnesota, Minneapolis, MN, February 28th, 2013.
77. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. University of Minnesota, Minneapolis, MN, March 1st, 2013.
78. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. Presentation at core workshop with Field Trip 1, Organic-Rich Shales of New York AAPG Annual Meeting Pittsburgh, May 16-18 2013.
79. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. Schlumberger Innovation Center, July 9 2013, Salt Lake City, Utah.
80. The Mars Science Lab Landing & Recent Geologic Investigations in Gale Crater on Mars. Lecture at the Rieskratermuseum, Nördlingen, Germany, July 8th, 2013.
81. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. (keynote) Gussow Geoscience Conference, October 15-17 2013, Banff, Alberta.
82. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. Rocky Mountain SEPM Section monthly meeting, November 26 2013, Denver, Colorado.
83. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. Whiting Petroleum Corp. and Noble Oil Corp., Denver, Colorado, November 26 2013.
84. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. Colorado School of Mines, Golden, Colorado, May 1 2014.
85. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. Tulsa Geological Society, Tulsa, Oklahoma, May 27 2014.
86. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Fort Worth Geological Society, Fort Worth, Texas, October 22 2014.
87. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Four Corners Geological Society, Farmington, New Mexico, October 24 2014.
88. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Grand Junction Geological Society, Grand Junction, Colorado, October 27 2014.
89. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Montana Geological Society, Billings, Montana, October 29 2014.
90. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, University of Utah, Salt Lake City, Utah, October 30 2014.
91. Mud Re-Distribution in Epicontinental Basins - Likely Processes and Examples. University of Utah, Salt Lake City, Utah, October 30 2014.
92. Contrasting Parameters of Deposition and Erosion of High vs. Low-Latitude Muddy Shelf Seas – An Experimental Perspective. Schlumberger-Terratek, Salt Lake City, Utah, October 31 2014.
93. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. AAPG Distinguished Lecture, Memorial University of Newfoundland, St. Johns, Newfoundland, February 9 2015.

94. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Queens University, Kingston, Ontario, February 10 2015.
95. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Illinois Geological Society, Mt. Vernon, Illinois, February 11 2015.
96. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. AAPG Distinguished Lecture, University of Tennessee, Knoxville, Tennessee, February 12 2015.
97. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Southern Illinois University, Carbondale, Illinois, February 13 2015.
98. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, Cornell University, Ithaca, New York, April 27 2015.
99. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, West Virginia University, Morgantown, West Virginia, April 29 2015.
100. An Overview of Experimental Mudstone Sedimentology – Results of Experiments and Applications to the Rock Record. AAPG Distinguished Lecture, Auburn University, Auburn, Alabama, April 30 2015.
101. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. AAPG Distinguished Lecture, University of Wisconsin, Madison, Wisconsin, May 1 2015.
102. The Connection Between Depositional Processes, Depositional History, Diagenesis, and Porosity in Shales - A Conceptual Perspective. Shales at all Scales Conference, in Santa Fe, New Mexico. Invited Lecture, conference organized by Sandia Labs, June 8-11 2015.
103. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. Schlumberger Eureka Geology Community Webinar #1, January 20 2016.
104. The Journey of Curiosity through the Stratigraphy of Gale Crater, Mars - Roving 3.8 billion years back into the past at a snail's pace. Astronomisch-Physikalisches Kabinett & Planetarium, Kassel, Germany, April 27 2016.
105. A Conceptual Perspective on Processes that Deposit Mud and their Impact on Shale Fabrics and Future Pore Systems. Wintershall AG, Kassel, Germany, April 29 2016.
106. Depositional Process - Fabric - Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. University of Vienna, Austria, May 12 2016.
107. The Journey of Curiosity through the Stratigraphy of Gale Crater, Mars - Roving 3.8 billion years back into the past at a snail's pace. University of Vienna, Austria, May 19 2016.
108. The Journey of Curiosity through the Stratigraphy of Gale Crater, Mars - Roving 3.8 billion years back into the past at a snail's pace. University of Iasi, Romania, May 20 2016.
109. The Journey of Curiosity through the Stratigraphy of Gale Crater, Mars - Roving 3.8 billion years back into the past at a snail's pace. Rieskrater Museum, Noerdlingen, Germany, June 2 2016.
110. Directions in Shale Research. Marathon Oil, Houston, Tx, March 20 2017.
111. Directions in Shale Research. ExxonMobil Upstream Research Lab, Spring, Tx, March 22 2017.
112. Directions in Shale Research. Shell Oil Research Lab, Houston, Tx, March 22 2017.
113. Directions in Shale Research. Chrevon Inc., Houston, Tx, March 23 2017.
114. The Journey of Curiosity through the Stratigraphy of Gale Crater, Mars - Roving 3.8 billion years back into the past at a snail's pace. NTU, Taipei, Taiwan, October 27 2017.
115. Exploration of Martian Geology and Surface Environments with the Curiosity Rover at Gale Crater, Mars. Academia Sinica, Taipei, Taiwan, October 30 2017.
116. Depositional Process - Fabric - Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. China Petroleum Corporation Research Lab, Miaoli, Taiwan, October 31 2017.
117. Flume Studies in Mudstone Sedimentology. ExxonMobil Upstream Research Lab, Spring, Tx, March 20 2018.
118. Directions in Shale Research. Anadarko Petroleum Corp., Houston, Texas, March 20, 2018.
119. Flume Studies of Mudstone Deposition and Erosion. Marathon Oil, Houston, Tx, March 19 2018.
120. Indications for sulfate evaporites in the Murray Formation. MSL Team meeting in Pasadena, 9/25 2018.
121. Directions in Shale Research. IOGA Annual meeting in New Harmony, Indiana, 10/11 2018.
122. With One Arm Tied Behind Your Back. Doing Geology by Proxy in a Faraway Place (Mars). Gallagher Lecture, University of Calgary, 11/6 2018.
123. Flume Studies of Mudstone Deposition and Erosion. Petrobras Research Lab, Rio De Janeiro, Brazil, 11/21 2018.

124. Directions in Shale Research. Petrochina Research Lab, Beijing, China, June 27, 2019.
125. Directions in Shale Research. University of Pretoria, South Africa, August 6, 2019.
126. Depositional Process – Fabric – Pore: Conceptualizing the connection between depositional regime, pore types, and porosity in mudstones. ENI Research Lab, Milan, Italy, September 6 2019.
127. Directions in Shale Research. Petrobras Research Lab, Rio De Janeiro, Brazil, 1/7 2020.
128. Directions in Shale Research. Department of Energy Resources and Petroleum Energy, King Abdullah University of Science and Technology, Saudi Arabia, 4/28/2021.
129. On the Accumulation of Mud –Changing the Paradigm was the Easy Part. Keynote address, 21st Argentinian Geological Congress, Puerto Madryn, Argentina, March 2022.
130. With One Arm Tied Behind Your Back. Doing Geology by Proxy in a Faraway Place (Mars). NASA outreach, University of Adelaide, 8/19/2022.
131. With One Arm Tied Behind Your Back. Doing Geology by Proxy in a Faraway Place (Mars). NASA outreach, CABSIV Conference, Darwin, 8/26/2022.
132. New Horizons in Shale Sedimentology. University of Padua, Italy, 5/16 2023.
133. New Horizons in Shale Sedimentology. University of Bologna, Italy, 5/22 2023.
134. New Horizons in Shale Sedimentology. ISMAR, Bologna, Italy, 5/25 2023.
135. New Horizons in Shale Sedimentology. University of Göttingen, Germany, 5/30 2023.
136. Not all is Lost: How we study mudstones on Mars without thin sections and make a virtue of necessity. Niedersächsische Akademie der Wissenschaften, Göttingen, Germany, 6/1/2023.
137. Not all is Lost: How we study mudstones on Mars without thin sections and make a virtue of necessity. Plenary Lecture, 36th International Meeting of Sedimentology, Dubrovnik, Croatia, 6/15/2023.

ACTIVITIES IN PROFESSIONAL ORGANIZATIONS

Chairman of Sedimentology Session at 1987 GSA meeting in Phoenix, Arizona.

Reviewed papers for: Geology, Journal of Sedimentary Petrology, Journal of Sedimentary Research, Sedimentology, Sedimentary Geology, Marine Geology, GSA Bulletin, Chemical Geology, Lithos, Geochimica et Cosmochimica Acta, Nature, Palaios, Naturwissenschaften, Science, Ocean Drilling Program (ODP), Marine & Petroleum Geology, Icarus, Applied and Environmental Microbiology, Journal of Geophysical Research, Journal of the Geological Society (London), Geobiology, Meteoritics & Planetary Science, and the Journal of the Texas Society for Electron Microscopy.

Reviewed proposals for NSF, Petroleum Research Fund, NASA, NERC (Britain), National Geographic Society, Volkswagenstiftung (Germany). DFG (German Science Foundation), Department of Energy (DOE).

Participation in organization of 1993 Belt Symposium.

Organizer and Chairman of Symposium on Shale Research at the Annual GSA Meeting in New Orleans, November 9th 1995.

Chief editor of a Symposium Volume: **Shales and Mudstones, vol 1***: Basin Studies, Sedimentology and Paleontology (384pp)*, **vol 2***: Petrography, Petrophysics, Geochemistry, and Economic Geology (296pp)*. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart. Symposium Volume, 25 research papers, 9 review articles.

Chairman of Paleontology, Stratigraphy, and Sedimentology Session at 1999 South-Central Section GSA meeting in Lubbock, Texas.

Judging oral presentations at the annual AAPG meeting in Denver, June 2000.

Vice President of Great Lakes Section of SEPM, Fall 2003 to present.

Organizer and leader of 2004 GLS SEPM Field Conference.

Convener of a two day SEPM Research Symposium on mudstone geology for the 2005 AAPG/SEPM meeting in Calgary.

Editorial Board of GEOLOGY, 2005-2008.

Invited Speaker at "Shale Workshop" for employees of ChevronTexaco Inc., Houston, Texas, 9/1/2005-9/2/2005.

Invited Speaker at "Fine-Grained Rock Symposium", Exxon Production Research, Houston, Texas, 11/29/2005-11/30/2005.

Chief editor of a Geological Atlas: **Atlas of Microbial Mat Features Preserved within the Siliciclastic Rock Record**, Volume 2 of Atlases in Geoscience, 450 pp. Elsevier, Amsterdam, 450pp.

Chair and Organizer of a Session on Martian Sedimentary Geology, "Geoscience in Orbit: Sedimentology on Mars and Titan", at the Annual AAPG Convention in Long Beach/CA, April 1-4, 2007.

Chair and Organizer of a Session on Martian Sedimentary Geology, "Up Close and Personal: Geology on Mars and Earth at the Handlens Scale", at the Annual GSA Meeting in Denver, October 28-31, 2007.

Co-leader of NAPC field trip to the Paleozoic of Kentucky and Indiana, June 24th, 2009.

Co-leader of NAPC field trip to the Devonian of Kentucky, June 27th, 2009.

Leader of AAPG field trip to the Devonian black shales of Kentucky and Indiana, September 19th, 2009.

Chairman of Session - Sediments, Clastic: New Insights to Old Problems, at 2009 Annual GSA meeting in Portland, Oregon.

Panel Member – NSF Sedimentary Geology and Paleobiology Panel, 2009.

Co-leader of AAPG Short Course on Mudstones and Shales, "Sequence-Stratigraphic Analysis of Shales: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal", at 2010 Annual AAPG meeting in New Orleans, April 10th 2010.

Leader of field trip to the Devonian black shales of Tennessee, Kentucky and Indiana, "Sedimentology and Stratigraphy of Shales: Expression and Correlation of Depositional Sequences in the Devonian of Tennessee, Kentucky and Indiana", for the 2010 Annual AAPG meeting in New Orleans, April 21-25 2010.

Invited speaker, AAPG Hedberg Research Conference, “Critical Assessment of Shale Resource Plays”, December 5-10, 2010 – Austin, Texas.

Co-leader of AAPG Short Course on Mudstones and Shales, "Sequence-Stratigraphic Analysis of Shales: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal", at 2011 Annual AAPG meeting in Houston, April 9th 2011.

Scientific Committee, Geoshale 2012 Conference, Recent Advances in Geology of Fine-Grained Sediments; May 14-16, 2012 – Warsaw, Poland.

Invited speaker, Geoshale 2012 Conference, May 15, 2012 – Warsaw, Poland.

Invited speaker, Poland Shale Gas Summit 2012, May 18, 2012 – Warsaw, Poland.

Chairman of Session – Mars Science Laboratory II: Soils and Rocks. Special Session, 44th Lunar and Planetary Science Conference, Houston, March 18th 2012.

Co-Leader of field trip to the Ordovician and Devonian black shales of New York, Tennessee, Kentucky and Indiana, "Organic-Rich Shales of New York", for the 2013 Annual AAPG meeting in Pittsburgh, May 15-18 2013.

Leader of field trip to the Devonian black shales of Ohio and Kentucky, "Sedimentology and Stratigraphy, Stratal Packaging, and Sedimentology of Devonian Shales in Ohio and Kentucky”, for the 2013 Annual AAPG meeting in Pittsburgh, May 23-24 2013.

Co-Chair and Organizer of a Session on Martian Geology, " Curiosity at Gale—Past and Present Environments of Mars”, at the Annual GSA Meeting in Denver, October 27, 2013.

Chair, Organizer, and Keynote Speaker of a Session on Shale Sedimentology at the 2103 Gussow Conference in Banff, Albera, “Importance of Rock Properties in Unconventional Reservoirs”. October 15-17, 2013.

Instructor, CSPG Short Course , “Description and Interpretation of Shale Facies”, Calgary, Alberta, October 18, 2013.

Invited speaker, AAPG Hedberg Research Conference, “Latitudinal Controls on Stratigraphic Models and Sedimentary Concepts. Banff, Alberta, September 28 – October 1, 2014.

Chair and Organizer of a Session on Mudstone Geology, "Mud Deposition”, at the Annual GSA Meeting in Vancouver, October 20, 2014.

Executive Editor, Geological Magazine, since 2014.

Lecture tour in Canada and the US as AAPG Distinguished Lecturer, Fall 2014 - Spring 2015.

Instructor, AAPG Short Course , “Description and Interpretation of Shale Facies”, Tulsa, Oklahoma, March 25-26, 2015.

Co-leader of AAPG Short Course on Mudstones and Shales, "Sequence-Stratigraphic Analysis of Shales: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal", at 2015 Annual AAPG meeting in Denver, May 30th 2015.

Session Chair and Organizer, Depositional and Diagenetic Processes in Shales and Mudstones, at the Annual AAPG Meeting in Denver, June 1 2015.
Invited Speaker, Sandia Lab conference on shales, "Shales at all Scales", Santa Fe, New Mexico, June 8-11 2015.
Organize session on mud deposition for the 2015 AGU Fall Meeting in San Francisco.
Visiting professor, University of Vienna, Spring 2016
Organize and chair sessions for the 2016 AAPG meeting in Calgary.
Instructor, AAPG Short Course on Mudstones and Shales, "Sequence-Stratigraphic Analysis of Shales: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal", at 2016 Annual AAPG meeting in Calgary, June 18th 2016.
Instructor, AAPG Short Course on Mudstones and Shales, "Sequence-Stratigraphic Analysis of Shales: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal", at 2017 Annual AAPG meeting in Houston, April 1st 2017.
Invited Speaker, 5th Workshop of Oil Exploration & Production New Technologies, China University of Petroleum, Qingdao, China, June 11-15, 2017.
Organize and chair sessions for the 2018 International Sedimentologic Congress in Quebec City, Canada.
Instructor, AAPG Short Course on Mudstones and Shales, "Sequence-Stratigraphic Analysis of Shales: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal", at 2018 Annual AAPG meeting in Salt Lake City, May 19st 2018.
Panel Member – NASA Astrobiology Panel, 2018.
Organize and Chair session on mud deposition for the 2019 International Sedimentologic Congress in Rome, Italy.

GRANT SUPPORT

Miscellaneous Small Grants ($5000 or less), 1987-1993 Subtotal: $47,720

1989 A Paleocurrent Study in Shale units of the Belt basin using Anisotropy of Magnetic Susceptibility data, Petroleum Research Fund (ACS), $18,000.
Testing the Feasibility of Anisotropy of Magnetic Susceptibility (AMS) as a Measure of Paleocurrent Flow in Shales, Advanced Research Program (ARP, Texas), $42,863.
1991 A comparative study of shale sedimentology: Relationship between sedimentary environments and shale fabric, National Science Foundation, $70,000.
Shale microfabrics and their relationship to mesofabrics and sedimentary environments: A case study of the Newland Formation, Montana, Petroleum Research Fund (ACS), $35,000.
1994 Exploring the origin of large scale erosion surfaces in the Chattanooga Shale: Testament of mud-bank migration? PRF/ACS, $50,000.
1996 Potential Sequence Boundaries in the Chattanooga Shale: A Study of their Nature, Implications for Basin Evolution, and the Origin of Black Shales. PRF/ACS, $50,000.
1997 A Study of the Origin and Significance of Pyrite Ooids: NSF, $99,000.
1998 Sequence Stratigraphy of the Late Devonian Black Shale Complex of the Eastern US: A Study of the Nature of Sequence Boundaries, Basin Dynamics, and the Origin of Black Shales. PRF/ACS, $60,000.
2000 Can Scanned Cathodoluminescence (SEM-CL) of Quartz Silt be Applied to Provenance Studies of Mudstones? A Feasibility Study. NSF, $105,000.
2001 A Study of Petrophyscial Properties of Shales in a Sequence Stratigraphic Context, with special Emphasis on Sealing Capacity. Texaco Inc., $50,000
2002 Evaluating Models for Late Devonian Black Shale Formation in the Eastern US: Integrating Sequence Stratigraphy, Sedimentology, Petrography, and Geochemical Proxies. ACS/PRF, $120,000
2003 Experimental Mudstone Sedimentology – An Attempt at Reverse Engineering of Natural Processes. NSF, $215,483
2003 Acquisition of a New Environmental SEM (ESEM) Optimized for Advanced Microcharacterization of Samples (EDS, EBSD, CL), NSF, $200,000; (plus $250,000 IU

match[not counted for total]; $25,000 from Grassmann Foundation; and additional funds to a total of $500,000).

2004 MAHLI – Mars HandLens Imager for the Mars Science Laboratory, NASA, $304,338 (IU/J.S. portion) (Co-I, with K. Edgett (PI) of Malin Space Science Systems).

2005 Collaborative Research: Adaptive response of microbial communities and Fe biomineralization pathways to anaerobic redox cycling of Fe and N in sediments, NSF, $246,552 (Co-PI with Flynn Picardal, SPEA).

Investigating Morphological and Isotopic Biosignatures of Terrestrial Iron Bacteria – A Potential Mars Analog, NASA, $206,905.

2006 Characterization of Hydrothermal Deposits and Microbial Biomarkers from a Submarine Plateau North of Panarea Island, Tyrrhenian Sea, Italy, IU Faculty Research Support Program, $17,109.

Grant in Support of Shale Research, Exxon, $20,000.

Experimental Mudstone Sedimentology: Evolving Methodology, Measuring Thresholds and Rates, Investigating Processes. NSF, $270,993

2007 Grant in Support of Shale Research, Exxon, $10,000.

2008 Experimental Study of Processes Producing Polygonal Patterns in Evaporite Bearing Martian Sediments and Sedimentary Rocks. NASA, $287,221.

2009 Grant in Support of Shale Research, Exxon, $73,980.

Collaborative Research ETBC: Combined Experimental and Theoretical Study of the Physical Mechanisms Underlying Deposition, Degradation and Preservation of Marine Organic Carbon. NSF, $2,000,000.

2010 Grant in Support of Shale Research, Exxon, $50,000.

IU Shale Research Consortium, Anadarko Oil Inc., $50,000.

2011 IU Shale Research Consortium, Shell Oil Inc., $50,000.

IU Shale Research Consortium, Marathon Oil Inc., $50,000.

IU Shale Research Consortium, Chevron Inc., $50,000.

Shale Gas: Geochemical and Physical Constraints on Genesis, Storage, and Producibility. DOE, $583,400.

2012 IU Shale Research Consortium, Anadarko Oil Inc., $50,000.

IU Shale Research Consortium, Shell Oil Inc., $50,000.

IU Shale Research Consortium, Marathon Oil Inc., $50,000.

IU Shale Research Consortium, Chevron Inc., $50,000.

Malin Space Science Systems, Mars Science Lab Subcontract, $361,553.

Grant in Support of Shale Research, Exxon, $24,400.

2013 IU Shale Research Consortium, Anadarko Oil Inc., $50,000.

IU Shale Research Consortium, Shell Oil Inc., $50,000.

IU Shale Research Consortium, Marathon Oil Inc., $50,000.

IU Shale Research Consortium, Chevron Inc., $50,000.

IU Shale Research Consortium, ConocoPhillips Inc., $50,000.

2014 IU Shale Research Consortium, Wintershall AG, $50,000.

IU Shale Research Consortium, Anadarko Oil Inc., $50,000.

IU Shale Research Consortium, Shell Oil Inc., $50,000.

IU Shale Research Consortium, Marathon Oil Inc., $50,000.

IU Shale Research Consortium, Chevron Inc., $50,000.

IU Shale Research Consortium, ConocoPhillips Inc., $50,000.

IU Shale Research Consortium, Statoil Inc., $50,000.

IU Shale Research Consortium, Whiting Petroleum Corp., $50,000.

Shale Gas: Geochemical and Physical Constraints on Genesis, Storage, and Producibility. DOE, $300,000.

2015 IU Shale Research Consortium, Wintershall AG, $50,000.

IU Shale Research Consortium, Anadarko Oil Inc., $50,000.

IU Shale Research Consortium, Shell Oil Inc., $50,000.

IU Shale Research Consortium, Marathon Oil Inc., $50,000.

IU Shale Research Consortium, ConocoPhillips Inc., $50,000.
IU Shale Research Consortium, Statoil Inc., $50,000.
IU Shale Research Consortium, Whiting Petroleum Corp., $50,000.
Malin Space Science Systems, Mars Science Lab Subcontract, $244,139.

2016 IU Shale Research Consortium, Anadarko Oil Inc., $50,000.
IU Shale Research Consortium, Marathon Oil Inc., $50,000.
IU Shale Research Consortium, Shell Oil Inc., $50,000.
Malin Space Science Systems, Mars Science Lab Subcontract, $281,352.
Shale Gas: Geochemical and Physical Constraints on Genesis, Storage, and Producibility. DOE, $ 217,700.
IU Shale Research Consortium, Whiting Petroleum Corp., $50,000.

2017 IU Shale Research Consortium, Marathon Oil Inc., $50,000.
ExxonMobil Upstream Research Lab, $30,000.
China National Petroleum Corporation, $60,000

2018 IU Shale Research Consortium, Marathon Oil Inc., $50,000.
ExxonMobil Upstream Research Lab, $30,000.
China National Petroleum Corporation, $60,000
IU Shale Research Consortium, Chevron Inc., $50,000
Malin Space Science Systems, Mars Science Lab Subcontract, $156,730

2019 ExxonMobil Upstream Research Lab, $30,000.
China National Petroleum Corporation, $80,000
IU Shale Research Consortium, Chevron Inc., $50,000
Malin Space Science Systems, Mars Science Lab Subcontract, $120,000

2020 ExxonMobil Upstream Research Lab, $58,857.
China National Petroleum Corporation, $60,000
IU Shale Research Consortium, Chevron Inc., $50,000
Malin Space Science Systems, Mars Science Lab Subcontract, $120,000

2021 ExxonMobil Upstream Research Lab, $58,857.
IU Shale Research Consortium, Chevron Inc., $50,000
Malin Space Science Systems, Mars Science Lab Subcontract, $112,000

2022 ExxonMobil Upstream Research Lab, $58,857.
Malin Space Science Systems, Mars Science Lab Subcontract, $90,000
IU Shale Research Consortium, Chevron Inc., $50,000

2023 IU Shale Research Consortium, Chevron Inc., $50,000
Malin Space Science Systems, Mars Science Lab Subcontract, $85,500

Total: $ 9,898,509

Classes Taught

Principles of Physical Geology (Geol. 1435)	Earth Systems (Geol 1425)
Earth Landforms (Geol. 1440)	Landscape Evolution (Geol. 3309)
Stratigraphy and Sedimentary Petrology (Geol. 3442)	Hydrogeology (Geol. 4320)
Sedimentology (Geol. 4443)	Sandstone Petrology (Geol. 5312)
Depositional Systems of Terrigenous Clastics (Geol. 5344)	Earth: Our Habitable Planet (G105)
Black Shale Seminar (G690)	Terrigenous Clastic Deposition (G690)
SEM Techniques (G690)	Physical Sedimentology (G591)
Shale Petrography (G690)	Black Shale Sedimentology (G690)
Journey to Mars (G121)	Regional Geology Field Trip (G420)

Graduate Students: 19 MS, 7 Ph.D.

Committee Service

(D)=department, (C)=college, (U)=university

UT Arlington: Scholarship Committee (D), Hydro/environmental geology committee, (D), Library Committee (D), Chairman Search Committee (D), Faculty Search Committees (D), Graduate Studies Committee (D), Committee on Science Learning Center (C), Committee on Grade Appeals (C), Science Newsletter Committee (C), Web Site Committee (C), REP Grant Committee (C), Grade Appeals Committee (C), Graduate Assembly (U), Scholarship, Loan, and Award Committee (U), Faculty Development Leave Nominating Committee (U), Tenure and Promotion Committee (C).

Indiana University: Graduate Studies Committee (D), Sedimentology Search Committees (D), Owen Award Committees (D), Machineshop Committee (D), Colloquium (D). IT Committee (D).

External Short Courses

AAPG/SEPM - Short Course on Mudstones and Shales, "Sequence-Stratigraphic Analysis of Shales: Key to Paleoclimate Archives, Subsurface Fluid Flow and Hydrocarbon Source, Reservoir and Seal". Taught at most annual AAPG meetings since 2010.

Canadian Society of Petroleum Geologists - Short Course. Description and Interpretation of Shale Facies.

Qingdao University of Petroleum - Short Course. An introduction to Shale Research. 2017

Yangtze University – Short Course. An introduction to Shale Research. 2019

Wuhan University of Geosciences - Short Course. A Brief Survey of Shale Geology. 2021

Petroleum Exploration Society of Australia – Short Course (taught in Adelaide and Darwin). Description and Interpretation of Shale Facies.

Wuhan University of Geosciences - Short Course. Shale Sedimentology. 2022, 2023

External Academic and Civic Service

Board of Directors of the Arlington Montessori Academy (1994-2000)

Development of an Elementary Grade Science Curriculum for the Arlington Montessori Academy

Conducting an Elementary Level Summer Science Program for the Arlington Montessori Academy (1995, 1996, 1997, 1998)

Technical liaison to Fort Worth Museum of Science and Technology

Judge at Fort Worth Regional Science Fair.

Ellettsville Elementary Math and Science Fun Night, Presentations on Mars Research at IU, April 21st, 2006.

Demonstrations of Flume Experiment at 2006 Science Olympiad, May 18th 2006, IU Bloomington.

Presentation at the Ries Crater Museum, Nördlingen, Germany. Mars Unser Nachbarplanet, So Seltsam Vertraut und Doch So Anders. August 3rd, 2006, as Educational Outreach for NASA grant.

Presentation at the Ries Crater Museum, Nördlingen, Germany. Reiseziel Mars – Die Suche Nach Einem Landeplatz. July 16th, 2009, as Educational Outreach for NASA grant.

Presentation at the Ries Crater Museum, Nördlingen, Germany. The Mars Science Lab Landing & Recent Geologic Investigations in Gale Crater on Mars. August 8th, 2013, as Educational Outreach for NASA grant.

Presentation at the Ries Crater Museum, Nördlingen, Germany. The Journey of Curiosity through the Stratigraphy of Gale Crater, Mars - Roving 3.8 billion years back into the past at a snail's pace. June 2nd, 2016, as Educational Outreach for NASA grant.