

VITA

**Jon R. Rotzien**

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**Education**

Stanford University, Ph.D., Geology (2013)  
Colorado College, B.A., Geology (2007)

**Experience**

2015– President, Basin Dynamics, LLC, Consulting and Exploration, Houston, Texas

2013–2015 Applied Geologist, BP, Exploration and Appraisal, Houston, Texas

2012 BP, Gulf of Mexico Appraisal, Houston, Texas

2010 Devon Energy, Southern Division Exploration, Houston, Texas

2009 Shell, Bellaire Tech Center (BTC), Houston, Texas

2008 Hess Corporation, GOM Pre-Development, Houston, Texas

**Academic Positions**

2019– Adjunct Professor, University of Houston, Houston, Texas

2018– Adjunct Professor, University of Texas Permian Basin, Odessa, Texas

2017– Instructor, South Dakota School of Mines and Technology Black Hills Natural Sciences Field Station, Rapid City, South Dakota

2017–2018 Visiting Assistant Professor, University of Louisiana, Lafayette, Louisiana

2017 Session Lecturer, University of Toronto, Toronto, Ontario

2011–2013 TA/RA, Stanford University, Stanford, California

2007–2008 Paraprofessional, Economics and Business Department, Colorado College, Colorado Springs, Colorado

## **Professional Interests**

Sedimentology, stratigraphy, sequence and seismic stratigraphy, basin analysis, source-to-sink and provenance analysis, reservoir characterization, subsurface interpretation, geologic risking and volumetric analysis, geologic mapping

## **Selected Publications, Reports and Public Presentations**

[38] **Rotzien, J. R.**, 2019, Reservoir-scale architecture of deep-water slope, base-of-slope, and basin-floor fan depositional environments: the upper Miocene Urenui and Mount Messenger formations, Taranaki Basin, New Zealand: Gulf Coast Association of Geological Societies Transactions, Houston, Texas.

[37] **Rotzien, J. R.**, 2019, Fundamentals of exploration vs. the digital transformation of the oil and gas industry: EAGE Annual 2019, Your Career Symposium, London, June 3.

[36] **Rotzien, J. R.**, 2019, Stratigraphic analysis of sediment gravity flow deposits and implications: Third Annual Geoscience Symposium, Keynote presentation, Odessa, Texas, April 25.

[35] **Rotzien, J. R.**, 2019, Practical Methods for Mapping and Interpreting Deep-Water Reservoirs (GEO 53): HOT Engineering, Stavanger, Norway: Short Course Notes and Exercises, 636 p.

[34] **Rotzien, J. R.**, 2019, Integrated Methods for Deep-water Reservoir Characterization, version 2.0: EAGE Workshop on Deepwater Exploration, Cancun, Mexico: Short Course Notes and Exercises, 263 p.

[33] **Rotzien, J. R.**, 2018, Fundamentals of deep-water stratigraphy and reservoirs: Baylor University, Waco, Texas: Short Course Notes and Exercises, 198 p.

[32] **Rotzien, J. R.**, 2018, Reservoir and seal trends and anomalies in submarine canyon environments: 21<sup>st</sup> century progress and limitations derived from outcrop studies of the Great Valley Group, western California, U.S.A.: AAPG GTW Transactions, Beijing, China.

[31] **Rotzien, J. R.\***, G. H. Browne, and P. R. King, 2018, Geochemical, petrographic, and U–Pb geochronological evidence for multi-sourced poly-cyclic provenance of deep-water strata in a hybrid tectonic setting: the Upper Miocene Upper Mount Messenger Formation, Taranaki Basin: AAPG Bulletin. v. 102, no. 9, p. 1763–1802.

[30] **Rotzien, J. R.**, N. Uzunlar, and C. Pellowski, 2018, Depositional systems of New Zealand: South Dakota School of Mines and Technology, Black Hills Natural Sciences Field Station Guide for GEOL 412, 134 p.

[29] **Rotzien, J. R.**, 2018, Deep-water Depositional Processes: Short Course Notes and exercises, 193 p.

[28] **Rotzien, J. R.**, 2018, Introduction to Deep-water Reservoir Characterization: Short Course Notes, 243 p.

[27] **Rotzien, J. R.**, 2018, Integrated Methods for Deep-water Reservoir Characterization: EAGE Education Days Rio de Janeiro, Mexico City, Houston: Short Course No. 1 Notes, 259 p.

[26] **Rotzien, J. R.**, N. Uzunlar, and C. Pellowski, 2018, Depositional systems of western California: South Dakota School of Mines and Technology, Black Hills Natural Sciences Field Station Guide for GEOL 412, 123 p.

[25] **Rotzien, J. R.**, 2018, Fundamentals of Deep-water Reservoirs: Pacific Section AAPG Convention, Bakersfield, California: Short Course No. 2 Notes, 71 p.

[24] **Rotzien, J. R.**, 2018, Addressing 21<sup>st</sup> century challenges in siliciclastic petroleum reservoirs: Examples from the Gulf Coast and beyond: Lafayette Chapter of Society of Independent Professional Earth Scientists (SIPES) and Fort Worth Geological Society (FWGS), Lafayette, Louisiana on March 14 and Fort Worth, Texas on April 9.

[23] **Rotzien, J. R.**, 2018, Integrated Methods for Deep-water Reservoir Characterization: EAGE Annual in Copenhagen, Denmark: Short Course No. 2 Notes, 238 p.

[22] **Rotzien, J. R.**, 2017, Stratigraphic terminations of the Eocene-Oligocene Annot Sandstone, southeast France: Gulf Coast Association of Geological Societies Transactions, v. 67, p. 529–532.

[21] **Rotzien, J. R.**, 2017, Integrated Methods for Exploration in Clastic Depositional Systems: GCAGS Convention in San Antonio, Texas: Short Course No. 2 Notes, 65 p.

[20] **Rotzien, J. R.**, 2017, Global Deep-water Siliciclastic Reservoirs: Offshore Technology Conference, Houston, Texas: Short Course No. 5 Notes, 166 p.

[19] **Rotzien, J. R.**, 2017, Global Deep-water Siliciclastic Reservoirs: AAPG Annual Convention and Exhibition, Houston, Texas: Short Course No. 4 Notes, 166 p.

[18] **Rotzien, J. R.**, 2017, Application of global deep-water outcrop belts to exploration and field extension in the Gulf of Mexico. AAPG Deepwater and Shelf Reservoirs Workshop: Jan. 24–25, Houston, Texas. Also prepared for Houston Geological Society (2016) and Dallas Geological Society (2016).

- [17] Xu, C., J. Hamman, A. Brickell, and **J. R. Rotzien**, eds., 2017, Introduction to special section: Integrating multiscale and multidiscipline data: Interpretation, v. 5.2, p. 1–2.
- [16] **Rotzien, J. R.**, 2016, Deep-water Stratigraphy and Petroleum Reservoirs: Denver Geophysical Society: Short Course Notes, 71 p.
- [15] **Rotzien, J. R.**, 2016, Application of global deep-water outcrop belts to exploration and field extension in Ventura Basin, California: San Joaquin Geological Society, Bakersfield, California, May 10.
- [14] Donovan, A. D., T. S. Staerker, R. D. Gardner, A. Pramudito, M. Wehner, M. J. Corbett, J. J. Lundquist, A. M. Romero, L. Henry, **J. R. Rotzien**, and K. S. Boling, 2015, A sequence stratigraphic framework for establishing the chronostratigraphic relationships between the Woodbine and Eagle Ford groups along the outcrop belt and shallow subsurface in Texas: Journal of the Gulf Coast Association of Geological Societies, v. 4, p. 67–87.
- [13] Marchand, A. M. E., G. Apps, W. Li, and **J. R. Rotzien**, 2015, Depositional processes and impact on reservoir quality in deepwater Paleogene reservoirs, US Gulf of Mexico: AAPG Bulletin, v. 99, no. 9, p. 1635–1648.
- [12] **Rotzien, J. R.**, D. R. Lowe, P. R. King, and G. H. Browne, 2014, Processes of sedimentation and stratigraphic evolution of the Upper Miocene Upper Mount Messenger Formation, Taranaki Basin, New Zealand: Journal of Marine and Petroleum Geology, v. 52, p. 22–41.
- [11] **Rotzien, J. R.**, D. R. Lowe, and J. R. Schwalbach, 2014, Processes of sedimentation and stratigraphic architecture of deep-water braided lobe complexes: The Pliocene Repetto and Pico formations, Ventura Basin, U.S.A.: Journal of Sedimentary Research, v. 84, p. 910–934.
- [10] **Rotzien, J. R.**, 2013, Processes of sedimentation, stratigraphic architecture and provenance of deep-water depositional systems: Examples from the Upper Miocene Upper Mount Messenger Formation, Taranaki Basin, New Zealand and the Pliocene Repetto and Pico formations, Ventura Basin, California: Stanford University PhD thesis, Stanford, California, 218 p.
- [9] Ruleman, C. A., R. A. Thompson, R. S. Shroba, M. L. Anderson, B. Dreneth, **J. Rotzien**, and J. Lyon, 2013, Late Miocene-Pleistocene evolution of a Rio Grande rift sub-basin, Sunshine Valley-Costilla Plain, San Luis Basin, New Mexico and Colorado, in M. R. Hudson, and V. J. S. Grauch, eds., New Perspectives on Rio Grande Rift Basins: From Tectonics to Groundwater: Geological Society of America Special Papers 494, p. 47–73.

[8] Graham, S. A., B. N. Burgreen, T. Schwartz, and **J. R. Rotzien**, 2012, Deep-water deposits of the Ventura region. Stanford Project on Deep-water Depositional Systems supplemental guidebook for fall industry affiliates meeting, Oct. 1–3, Oxnard, CA.

[7] **Rotzien, J. R.**, G. Sharman, L. U. Masalimova, B. N. Burgreen, D. R. Lowe, and S. A. Graham, 2012, Deep-water deposits of the Late Miocene Taranaki and East Coast Basins, New Zealand. Stanford Project on Deep-water Depositional Systems Field Trip & Guidebook, Feb. 14–22, New Plymouth & Gisborne, New Zealand, 165 p.

[6] Maier, K. L., L. U. Masalimova, **J. R. Rotzien**, S. A. Graham, and D. R. Lowe, 2010, Deep-water deposits of the Upper Miocene Mount Messenger, Urenui and Kiore Formations, Taranaki Basin, North Island, New Zealand: New Zealand Field Trip Guidebook, Stanford Project on Deep-water Depositional Systems industry affiliates trip, Feb. 23–Mar. 1, New Plymouth, New Zealand.

[5] Schwalbach, J. R., D. D. Miller, and **J. R. Rotzien**, 2009, Pliocene turbidites of the Ventura Basin: Core workshop and field trip, complete with guidebook, held in conjunction with the AAPG/SEPM Meeting Short Course, May 3–6, Ventura, CA.

[4] Bank, C., and **J. Rotzien**, 2007, Reflections by a Student and a Faculty Member on Student-faculty Collaborative Geophysical Field Research. American Geophysical Union Fall Meeting, San Francisco, CA, Supp., Abst. ED33B–1223.

[3] **Rotzien, J.**, B. Mayhew, S. Yospin, A. Beiki, C. Tewksbury, D. Hardman, C. Bank, J. Noblett, S. Semken, and G. Kroeger, 2007, Ship Rock Diatreme: is it a Classical Volcano? New Evidence on Magma Ascent and Emplacement Within the Navajo Volcanic Field. American Geophysical Union Fall Meeting, San Francisco, CA. Supp., Abst. NS31B–0388.

[2] **Rotzien, J.**, M. Anderson, E. Parker, H. Lynn, and C. Ruleman, 2007, New constraints on rift-associated faulting in Sunshine Valley, northern New Mexico. Geological Society of America Annual Meeting, Denver, CO. Supp., Abst. 130715.

[1] **Rotzien, J. R.**, C. Bank, and J. Noblett, 2007, Magnetic Exploration and Modeling of The Thumb, Navajo Volcanic Field. Geological Society of America, Rocky Mountain Spring Section Meeting, St. George, UT. Supp., Abst. 121766.

*\*Denotes cover article*

## **Service, Philanthropy and Collaboration**

2019            Co-chair of deep-water stratigraphy and reservoirs sessions, British Sedimentological Research Group Annual Meeting, London

- 2019 Co-chair of deep-water exploration sessions, GeoGulf (formerly GCAGS), Houston, Texas
- 2018–2019 Committee member, EAGE Deepwater Exploration Conference, Cancun, Mexico
- 2018 Member, Academic Committee, AAPG Geosciences Technology Workshop, Beijing
- 2018– Co-founder, Houston Explorers Club
- 2018– Associate Editor, Bulletin of Canadian Petroleum Geology
- 2017 Co-chair of deep-water depositional systems and petroleum reservoirs Symposium, GCAGS, San Antonio, Texas
- Ad Hoc Reviewer *AAPG Bulletin, Bulletin of Canadian Petroleum Geology, Basin Research, Interpretation, New Zealand Journal of Geology and Geophysics, Sedimentology, SEPM Special Publications*

### **Professional Memberships**

- Society of Independent Professional Earth Scientists (2017–present)
- European Association of Geoscientists and Engineers (2016–present)
- Gulf Coast Society SEPM, Society for Sedimentary Geology (2016–present)
- Houston Geological Society (2013–present)
- American Association of Petroleum Geologists (2009–present)

### **Awards**

#### Basin Dynamics

2018 Distinguished Service Award, Gulf Coast Society SEPM

#### Stanford University

2011–2013 Siemon (“Si”) W. Muller Memorial Fellowship

2008–2011 Chevron Grant

2008–2011 AAPG Foundation Grants-in-Aid, John E. Kilkenny Memorial Grant

2008–2011 A.I. Levorsen Research Grant

2008–2011 National Science Foundation Graduate Research Fellowship