

Publications

Peer Reviewed

- Karakaya, S., Ogiesoba, O. C., Bhattacharya, S., and Olariu, C., 2023, Generating 3D lithology probability volumes using poststack inversion, probability neural networks, and Bayesian classification: A case study from the mixed carbonate siliciclastic deposits of the Cisco Group of the Eastern Shelf of the Permian Basin, North-Central Texas: *Geophysics*, v. 89, no. 2, p. 1—61. DOI: [10.1190/geo2023-0157.1](https://doi.org/10.1190/geo2023-0157.1)
- Ogiesoba, O. C., Karakaya, S., and Cortez, T., 2023, Simultaneous seismic inversion study for channel sandstone identification, northern part of the Eastern Shelf, King County, North-Central Texas: *Interpretation*, v. 11, no. 3, p. T593—T610. <http://dx.doi.org/10.1190/INT-2022-0096.1>.
- Ogiesoba, O. C., Bhattacharya, S., Karakaya, S., and Cortez, T., 2023, Prestack velocity ratio evaluation of a mixed siliciclastic-carbonate formation: Case study from the Strawn Group on the Eastern Shelf Texas. *Energies*, v. 16, no. 2037, 1-24. <https://doi.org/10.3390/en16042037>
- Ogiesoba, O. C., and Zeng, H., 2022, Identification of sandstone-rich zones in upper bathyal, deep-water environment on South Texas Gulf Coast. *Interpretation*, v. 10, no. 2, p. T265—T278. <http://dx.doi.org/10.1190/INT-2021-0139.1>.
- Ogiesoba, O. C., and Ambrose, W. A., 2021, A systematic approach to identifying hydrocarbon sweet spots using integrated seismic multiattribute, wireline-log, and core analysis: Case study from the Upper Cretaceous Taylor Serbin field Southeast Texas: Bureau of Economic Geology, The University of Texas at Austin, Austin, Texas. Report of Investigations No. 287, p. 1—72.
- Ogiesoba, O. C., and Eluwa, A. K., 2019, Comparison of structural styles observed in Upper Eocene (Jackson Group) and Oligocene (Vicksburg Group) Strata within the Rio Grande and Houston embayments southwest and northeast of the San Marcos Arch, Refugio and Calhoun Counties, South Texas Gulf Coast. *GCAGS Journal*, v. 8, p. 170—190.
- Eluwa, A. K., Mohrig, D., Ogiesoba, O. C., and Ambrose, W., A., 2018, Depositional settings and history of Lower Miocene Fleming Group, Refugio County, Texas, as defined using seismic geomorphology: *Marine and Petroleum Geology*, v. 92, p. 565—581. <https://doi.org/10.1016/j.marpetgeo.2017.11.021>.
- Ogiesoba, O. C., Ambrose, W. A., and Loucks, R. G., 2018, Investigation of seismic attributes, depositional environments, and hydrocarbon sweet spots distribution in the Serbin field, Taylor Formation, Southeast Texas: *Interpretation*, v. 7, no. 1, p. T49—T66. <http://dx.doi.org/10.1190/INT-2018-0041.1>.

- Ogiesoba, O. C., Ambrose, W. A., and Loucks, R. G., 2018, Application of instantaneous - frequency attribute and gamma-ray wireline log in the delineation of lithology in Serbin field, Southeast Texas: A case study: *Interpretation*, v. 6, no. 4, p. T1023—T1043. <http://dx.doi.org/10.1190/INT-2018-0067.1>.
- Ogiesoba, O. C., and Klokov, A., 2017, Examples of seismic diffraction imaging from the Austin Chalk and Eagle Ford Shale, Maveric Basin South Texas. *Journal of Petroleum Science and Engineering*, v. 157, p. 248—263. <http://dx.doi.org/10.1016/j.petrol.2017.07.040>
- Ogiesoba, O. C., 2017, Application of thin-bed indicator and sweetness attribute in the evaluation of sediment composition and depositional geometry in coast-perpendicular subbasins, South Texas Gulf Coast: *Interpretation*, v. 5, no. 1, p. T87—T105. <http://dx.doi.org/10.1190/INT-2015-0213.1>.
- Ogiesoba, O. C., Klokov, A., Hernandez, R., 2015, Diffraction imaging of polygonal faults within a submarine volcanic terrain, Maverick Basin, South Texas: *Interpretation*, v. 3, no. 1, p. SF81—SF99. <http://dx.doi.org/10.1190/INT-2014-0105.1>.
- Ogiesoba, O. C., and Hernandez, R., 2015, Diapiric Shale and coast-perpendicular fault-related subbasins, South Texas Gulf Coast. *Interpretation*, v. 3, no. 2, p. T43—T56. <http://dx.doi.org/10.1190/INT-2014-0016.1>.
- Klokov, A., Irkabaev, D., Ogiesoba, O. C., and Munasyrov, N., 2015, Correlation between seismic diffractions extracted from vertical seismic profiling data and borehole logging in a carbonate environment: *Interpretation*, v. 3, no. 2, p. T121—T129. <http://dx.doi.org/10.1190/INT-2014-0156.1>.
- Zeng, H., Marfurt, K., Fomel, S., Chopra, S., Partyka, G., Wallet, B., Smith, M., Matos, M., Zhou, H., Cai, Y., and Ogiesoba, O., 2015, Introduction to special section: Thin beds: *Interpretation*, v. 3, no. 3, p. SS1—SS11. <http://dx.doi.org/10.1190/INT2015-0614-SPSEINTRO.1>.
- Klokov, A., Irkabaev, D., Ogiesoba, O., Skachek, K., and Munasyrov, N., 2014, Diffraction analysis for the Sortym Formation using vertical seismic profiling data: *Journal of Seismic Exploration*, v. 23, p. 463—480.
- Ogiesoba, O. C., and Hammes, U., 2014, Seismic attribute identification of brittle and TOC-rich zones within the Eagle Ford Shale, Dimmit County, South Texas. *Journal of Petroleum Exploration and Production Technology*, v. 4, p. 133—151. DOI 10.1007/s13202-014-0106-1.
- Ogiesoba, O. C., Klokov, A., and Hernandez, R., 2014, Diffraction imaging of polygonal faults within a submarine volcanic terrain, Maverick Basin, South Texas: *Interpretation*,

v. 3, no. 1, p. SF81—SF99. <http://dx.doi.org/10.1190/INT-2014-0105.1>.

Ogiesoba, O. C., and Eastwood, R., 2013, Seismic multiattribute analysis for shale gas/oil within the Austin Chalk and Eagle Ford Shale in a submarine volcanic terrain, Naverick Basin, South Texas: Interpretation, v. 1, no. 2, p. SB 61—SB83. <http://dx.doi.org/10.1190/INT-2013-0019.1>.

Ogiesoba, O. C., and Hammes, U., 2011, Seismic interpretation of mass-transport deposits within the upper Oligocene Frio Formation, South Texas Gulf Coast. AAPG Bulletin, v. 96, no. 5, p. 845—868. DOI:10.1306/09191110205

Ogiesoba, O. C., Wright, W., Wang, F., Popini, M. V., Franco, M. P., Lourenco, A. T., and da Silva, G. B. D., 2011, Seismic conditioning and attenuation of high-angle coherent noise in a mixed carbonate and siliciclastic setting, Campos Basin, offshore Brazil: A case study. Geophysics, v. 76, no. 5, p. B199-B212. <http://dx.doi.org/10.1190/GEO2010-0103.1>

Ogiesoba, O. C., 2010, Porosity prediction from seismic attributes of the Ordovician Trenton-Black River groups, Rochester field, Southern Ontario: American Association of Petroleum Geologists Bulletin, v. 94, no. 11, p. 1673—1693.

Ogiesoba, O. C., and Hart, B. S., 2009, Fault imaging in hydrothermal dolomite reservoirs: a case study: Geophysics, v. 74, no. 3, p. B71—B82.

Abstracts

Ogiesoba, O. C., Seismic reservoir characterization of the Strawn Group, Northern part of the Eastern Shelf, King County, North-Central Texas: Present at the 3rd SEG-AAPG International Meeting for Applied Geosciences and Energy (IMAGE), August 31, 2023, in Houston, Texas. <http://doi.org/10.1190/image2023-3913248>.

Karakaya, S., Ogiesoba, O. C., and Olariu, C., Lateral lithology heterogeneity due to autogenic processes in mixed carbonate and siliciclastic deposits of Cisco Group, the Eastern Shelf of the Permian Basin, King County, north-central Texas: SEG-AAPG 2nd International Meeting for Applied Geosciences and Energy, August 2022, p. 427—429. DOI: [10.1190/image2022-3751846.1](http://dx.doi.org/10.1190/image2022-3751846.1)

Ogiesoba, O. C., Zeng, H., 2021, Identification of sandstone-rich zones in upper bathyal deep-water slope environment, South Texas Gulf Coast: First SEG-AAPG International Meeting for Applied Geosciences and Energy (IMAGE-2021), Expanded Abstracts, September 1, 2021, p. 1056—1060. <https://doi.org/10.1190/segam2021-3576166.1>.

Ogiesoba, O. C., and Eluwa, A. K., 2018, Structural styles of Eocene and Oligocene Vicksburg formations within the Rio Grande and Houston embayments near the San Marcos Arch, Refugio and Calhoun Counties, South Texas Gulf Coast: Expanded

Abstracts presented at GCAGS Annual Meeting in Shreveport, Louisiana *in* Gulf Coast Association of Geological Societies Transactions, v. 68, p. 357—370.

- Ogiesoba, O. C., Ambrose, W. A., and Loucks, R. G., 2018, Application of instantaneous dominant-frequency attribute and gamma-ray wireline logs in the delineation of lithology in Serbin field Southeast Texas: A case study: Expanded Abstracts *in* Society of Exploration Geophysics 88th Annual Meeting, Anaheim, California, p. 1743—1747. 10.1190/segam2018-2983521.1
- Ogiesoba, O. C., and Ambrose, W. A., 2017, Seismic attributes investigation of depositional environments and hydrocarbon sweet-spot distribution in Serbin field, Taylor group, Central Texas. (exp. Abs), *in* Society of Exploration Geophysics 87th Annual Meeting, Houston, p. 2274—2278.
- Ogiesoba, O. C., and Klovov, A., 2016, Seismic diffraction imaging of lithology in fault zones and hydrocarbon sweet spots within the Maverick Basin, South Texas. Expanded Abstracts in Unconventional Resources Technology Conference (URTeC: 2452176) in San Antonio, Texas, August 1—3, 2016. P. 1266-1273. DOI: [10.15530/urtec-2016-2452176](https://doi.org/10.15530/urtec-2016-2452176).
- Ogiesoba, O. C., 2016, Application of quality factor (Q) in the characterization of the Austin Chalk and Eagle Ford Shale, South Texas: American Association of Petroleum Geologists Search and Discovery Article #41781 (2016). Presented at Geoscience Technology Workshop, Unconventionals Update, Austin, Texas, November 3, 2015
- Ogiesoba, O. C., and Klovov., A., 2015, Diffraction imaging of lithology and fluid saturation in fault zones within the Austin Chalk and Eagle Ford Shale, Maverick Basin, South Texas: (exp. Abs), *in* Society of Exploration Geophysics Annual Meeting, New Orleans. DOI <http://dx.doi.org/10.1190/segam2015-5850096.1>
- Ogiesoba, O. C., 2014, Seismic multiattribute analysis for shale gas/oil within the Austin Chalk and Eagle Ford in a submarine volcanic terrain, Maverick Basin, South Texas: American Association of Petroleum Geologists Search and Discovery Article #10601 (2014), Presented at GTW-AAPG/STGS Eagle Ford plus Adjacent Plays and Extensions Workshop, San Antonio, Texas, February 24—26, 2014. http://pubs.usgs.gov/dds/dds-069dds-069-h/REPORTS/69_H_CH_2pdf
- Johnson, B. E., Ogiesoba, O. C., and Hammes, Ursula, 2009, Techniques for imaging 4th- and 5th-order shelf sequences in 3-D seismic data: Miocene, South Texas Gulf Coast (abs.): American Association of Petroleum Geologists Annual Convention, v. 18, p. 109.
- Ogiesoba, O. C., and Hammes, Ursula, 2009, Seismic interpretation of mass-moved sediments within the upper Oligocene Frio Formation, South Texas Gulf Coast (abs.): American Association of Petroleum Geologists Annual Convention, v. 18, p. 157.

Ogiesoba, O. C., and Hart, B. S., 2009, Amplitude envelope and fault zone reflection phenomenon: Society of Exploration Geophysicists (SEG) 2009 Annual Conference and Exhibition Expanded Abstracts, p. 562—566. <https://doi.org/10.1190/1.3255819>

Hart, B. S., Sagan, J. A., Ogiesoba, O. C., 2009, Lessons learned from 3D seismic attribute studies of hydrothermal dolomite reservoirs: Canadian Society of Exploration Geophysicists (CSEG) Recorder, May 2009, p. 18—24

Ogiesoba, O. C., and Hart, B. S., 2008, Fault imaging in hydrothermal dolomite reservoirs: A case study (abs.), *in* Society of Exploration Geophysicists, Development and Production Forum, Austin.

Hammes, Ursula, and Ogiesoba, Osareni, 2008, Seismic imaging of sediment ridges in growth-faulted subbasins of the Oligocene of the South Texas Gulf Coast—are they shale, salt, or seismic artifacts? (abs.): AAPG 2008 Annual Convention and Exhibition Abstracts Volume, v. 17, p. 74.

Ogiesoba, O. C., and Hart, B. S., 2005, Fault controlled porosity within a Trenton-Black River hydrothermal dolomite reservoir, Essex County, Southern Ontario (abs.), *In* AAPG Convention, Calgary, Alberta, Canada.

Ogiesoba, O. C., and Stewart, R. R., 2004, Prestack Vp/Vs scanning and automatic PS-to-PP time mapping using multicomponent seismic data (exp. abs.), *in* Canadian Society of Exploration Geophysicists, 2004 Annual Convention, Calgary, Expanded Abstracts.

Ogiesoba, O. C., and Stewart, R. R., 2003, Vp/Vs from multicomponent seismic data and automatic PS to PP time mapping (exp. abs.), *in* Society of Exploration Geophysicists, Dallas, Expanded Abstracts, p. 789–792.

Presentations (Lectures)

Seismic reservoir characterization of the Strawn Group, Northern part of the Eastern Shelf, King County, North-Central Texas: presented to SEG-AAPG, presented at 3rd International Meeting for Applied Geosciences and Energy (IMAGE-2023), Houston, Texas, August 28-31, 2023.

Magma intrusion pathways and seismic attributes characterization of the volcanic tuff in Elaine, Thrall, and Marcelina Creek Fields, in South Central Texas: presented to The State of Texas Advanced Resource Recovery Projects (STARR), presented at Volcanic Core Workshop, Austin, May 12, 2023.

A Systematic Approach to Identifying Hydrocarbon Sweet Spots Using Integrated Seismic Multiattribute, Wireline-Log, and Core Analyses: Case Study from the Upper Cretaceous Taylor Serbin Field, Southeast Texas: presented to Austin Geological Society, presented at Austin, Bureau of Economic Geology, The University of Texas at Austin, April 4, 2022.

Identification of sandstone-rich zones in upper bathyal deep-water slope environment, South Texas Gulf Coast: presented to Joint AAPG and SEG IMAGE 2021 Meeting, presented at SEG

International Exposition and 91st Annual Meeting 26 September–1 October 2021, Denver, Colorado, September 26-October 1, 2021.

Simultaneous seismic inversion study of the northern part of the Eastern Shelf, King County, Central Texas: presented to Fort Worth Geological Society, presented at 2021 SWS AAPG Annual Convention, Houston, Tex., June 26-30, 2021.

Diapiric Shale, Coast-Orthogonal and Coast-Parallel Faults, observed in the Vicinity of the San Marcos Arch, Refugio and Calhoun Counties, South Texas Gulf Coast: presented to Corpus Christi Geological Society (CCGS), presented at CCGS October Zoom Meeting, <https://us02web.zoom.us/j/88522517767>, Meeting ID: 885 2251 7767, October 21, 2020.

Comparison of Structural Styles Observed in Upper Eocene (Jackson Group) and Oligocene (Vicksburg Group) Strata within the Rio Grande and Houston Embayments Southwest and Northeast of the San Marcos Arch, Refugio and Calhoun Counties, South Texas Gulf Coast: presented to Gulf Coast Association of Geological Societies and Gulf Coast Section SEPM, presented at 69th Annual Convention, Houston, Tex., October 23-25, 2019.

Application of Instantaneous Frequency Attributes and Gamma-Ray Wireline Logs in the Delineation of Lithology in Serbin Field, Southeast Texas: A Case Study: presented to Society of Exploration Geophysicists, presented at 88th SEG International Exposition and Annual Meeting, Anaheim, California, USA, October 15, 2018.

Structural Styles of Eocene-Jackson and Oligocene-Vicksburg Formations within the Rio Grande and Houston Embayments near the San Marcos Arch, in Refugio and Calhoun Counties, South Texas Gulf Coast: presented to Gulf Coast Association of Geological Societies and Gulf Coast Section SEPM, presented at 68th Annual Convention, Shreveport, La., October 1, 2018.

Seismic attributes investigation of depositional environments and hydrocarbon sweet-spot distribution in Serbin field, Taylor group, Central Texas: presented to Society of Exploration Geophysicists, presented at 87th SEG International Exposition and Annual Meeting, Houston, Tex., September 25-28, 2017.

Seismic multiattribute analysis for shale gas/oil within the Austin Chalk and Eagle Ford Shale in a submarine volcanic terrain, Maverick Basin, South Texas: presented at Sanchez Oil and Gas Corporation, Houston, Texas, December 1, 2016.

Seismic diffraction imaging of lithology in fault zones and hydrocarbon sweet spots within the Austin Chalk and Eagle Ford Shale, Maverick Basin, South Texas: presented at Unconventional Resources Technology (URTec) Conference, San Antonio, Texas, August 1-3, 2016.

Application of thin-bed indicator and sweetness attribute in the evaluation of sediment composition and depositional geometry in coast-perpendicular subbasins, South Texas Gulf Coast: presented at AAPG Annual Conference & Exhibition, Calgary, Alberta, Canada, April 19-22, 2016.

Application of the instantaneous quality factor (Q) in the characterization of the Austin Chalk and Eagle Ford Shale, South Texas: presented to AAPG, presented at Inaugural AAPG Unconventional Update, Austin, Tex., November 3-5, 2015.

Diffraction imaging of lithology and fluid saturation in fault zones within the Austin Chalk and Eagle Ford Shale, Maverick Basin, South Texas: presented to Society of Exploration Geophysicists, presented at International Exposition and 85th Annual Meeting, New Orleans, Louisiana, October 18-23, 2015.

Diffraction imaging of fault zones within the Austin Chalk and Eagle Ford Shale, Maverick Basin, South Texas: presented to AAPG GeoScience Technology Workshop (GTW), presented at Fourth Annual Eagle Ford Shale, San Antonio, Texas, March 9-11, 2015.

Seismic multiattribute analysis for shale gas/oil within the Austin Chalk and Eagle Ford Shale in a submarine volcanic terrain, Maverick Basin, South Texas: presented at AAPG/STGS Eagle Ford plus Adjacent Plays & Extensions Geoscience and Technology Workshop, San Antonio, Texas, February 24-26, 2014.

3D Seismic visualization of minibasins controlled by shale tectonics in the Frio Formation, South Texas Gulf Coast: presented at Gulf Coast Association of Geological Societies (GCAGS) Annual Convention Meeting, New Orleans, Louisiana, October 5-8, 2013.

Velocity errors in migration: presented at The University of Texas Geophysical Research Seminar, Jackson School of Geosciences, The University of Texas at Austin, Austin, Texas, August 2, 2013.

Applications of the instantaneous quality factor (Q) attribute in hydrocarbon exploration: presented at The University of Texas Geophysical Research Seminar, Jackson School of Geosciences, The University of Texas at Austin, Austin, Texas, July 9, 2013.

Seismic inversion for shale gas/oil within the Austin Chalk and Eagle Ford Shale in a submarine volcanic terrain, Maverick Basin, South Texas: presented at American Association of Petroleum Geologists 2013 Annual Convention and Exhibition, Pittsburgh, Pennsylvania, May 19-22, 2013.

Seismic inversion for shale gas/oil within the Austin Chalk and Eagle Ford Shale in a submarine volcanic terrain, Maverick Basin, South Texas: presented to San Antonio Geophysical Society (SAGS), San Antonio Petroleum Club, San Antonio, Texas, April 23, 2013.

Orientations of shale diapirs and minibasins within the Frio Formation, Gulf of Mexico: presented at The University of Texas Geophysical Research Seminar, Jackson School of Geosciences, The University of Texas at Austin, Austin, Texas, February 1, 2013.

Seismic inversion for shale gas/oil in the Austin Chalk and Eagle Ford Shale in a submarine volcanic terrain, Maverick Basin, South Texas: presented to Researchers at the Bureau of Economic Geology, The University of Texas at Austin, presented at Bureau of Economic

Geology Friday Seminars, The University of Texas at Austin, Austin, Texas, USA, December 11, 2012.

Seismic-attribute characterization of the Eagle Ford Shale, Dimmit County, South Texas: presented at American Association of Petroleum Geologists Annual Convention and Exhibition, Long Beach, California, 2012.

Seismic velocities and geopressure prediction: presented at The University of Texas Geophysical Research Seminar, Jackson School of Geosciences, The University of Texas at Austin, Austin, Texas, July 22, 2011.

An investigation of the petrophysical and acoustic properties of mass-transport sediments within the Oligocene Frio Formation, South Texas Gulf Coast: presented at American Association of Petroleum Geologists Annual Convention and Exhibition, Making the Next Giant Leap in Geosciences, Houston, Texas, April 10-13, 2011.

Value of 3D Seismic in the Eagle Ford, Dimmit County, South Texas: presented to Mudrock Systems Research Laboratory, presented at March 2011 meeting, Bureau of Economic Geology, The University of Texas at Austin, Austin, Texas, March 9-10, 2011.

Measurement and identification of 3-D coherent noise generated from irregular surface carbonates: presented to Bureau of Economic Geology and The Institute for Geophysics, Jackson School of Geosciences, The University of Texas at Austin, presented at Geophysics Research Seminar, Austin, Texas, February 11, 2011.

Seismic attribute characterization of the Eagle Ford Shale, Dimmit County, South Texas: presented to Mudrock Systems Research Laboratory, presented at June 2010 meeting, Bureau of Economic Geology, The University of Texas at Austin, Austin, Texas, June 14, 2010.

Understanding lithologic significance of amplitude envelope and acoustic impedance within Oligocene and Miocene strata, South Texas Gulf Coast: presented to AAPG, presented at AAPG Annual Convention and Exhibition, New Orleans, Louisiana, April 11-14, 2010.

Understanding lithologic significance of amplitude envelope within Oligocene and Miocene Strata, South Texas Gulf Coast: presented to Geophysical Group, Jackson School Institute for Geophysics, The University of Texas at Austin, Austin, Texas, October 2, 2009.

Amplitude envelope and fault zone reflection phenomenon: presented to Geophysical Group, Jackson School Institute for Geophysics, The University of Texas at Austin, Austin, Texas, July 17, 2009.

Seismic interpretation of mass-moved sediments within the upper Oligocene Frio Formation, South Texas Gulf Coast: poster presented at American Association of Petroleum Geologists Annual Convention, Houston, Texas, July 7, 2009.

Prestack velocity ratio scanning from PS-wave data: presented to Geophysical Group, Jackson School Institute for Geophysics, The University of Texas at Austin, Austin, Texas, March 6, 2009.

Seismic imaging of large channels in the Miocene interval, South Texas Gulf Coast: presented to Geophysical Group, Jackson School Institute for Geophysics, The University of Texas at Austin, Austin, Texas, October 24, 2008.

Fault imaging in hydrothermal dolomite reservoirs: A case study: presented at Development and Production Forum, Society of Exploration Geophysicists, Austin, Texas, 2008.

Fault controlled porosity within a Trenton-Black River hydrothermal dolomite reservoir, Essex County, Southern Ontario: presented at 72nd Annual International Meeting, American Association of Petroleum Geologists, Calgary, Alberta, 2005.

Prestack V_p/V_s scanning and automatic PS-to-PP time mapping using multicomponent seismic data: presented at Annual Meeting, Canadian Society of Exploration Geophysicists, Calgary, Alberta, Calgary, Alberta, 2004.

V_p/V_s from multicomponent seismic data and automatic PS to PP time mapping: presented at 73rd Annual International Meeting, Society of Exploration Geophysicists, Dallas, Texas, 2003.