

VITA

J. Richard Kyle

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Licensed Professional Geoscientist, Texas

October 2025

EDUCATION:

Ph.D., Geology, 1977, University of Western Ontario, London, Canada
M.S., Geology, 1973, University of Tennessee, Knoxville, Tennessee
B.S., Earth Sciences, 1970, Tennessee Technological University, Cookeville, Tennessee

SIGNIFICANT PROFESSIONAL EXPERIENCE:

2022 to date Faculty Associate, Bureau of Economic Geology, University of Texas at Austin
2003 to date Registered Professional Geoscientist, Texas
2000 to date Associate, Long Institute of Latin American Studies, University of Texas at Austin
1980 to date Consulting Geologist, various clients
2012 to 2022 Professor, Bureau of Economic Geology, University of Texas at Austin
2005 to 2010 Research Professor, Bureau of Economic Geology, University of Texas at Austin
1990 to 2022 Professor; Department of Geological Sciences, University of Texas at Austin
1984 to 1990 Associate Professor; Department of Geological Sciences, University of Texas
Spring, 1983 Research Associate, Bureau of Economic Geology; University of Texas at Austin
1978 to 1984 Assistant Professor; Dept of Geological Sciences, University of Texas at Austin
1976 to 1978 Exploration Geologist; Exxon Minerals Company, U.S.A; Rhinelander, WI

PROFESSIONAL HONORS AND AWARDS:

International Association on the Genesis of Ore Deposits, Honorary Life Member (2023)
Society for Mining, Metallurgy, & Exploration, Mineral Industry Education Award (2023)
Society for Mining, Metallurgy, & Exploration, Hal W. Hardinge (Industrial Minerals) Award (2023)
Society for Mining, Metallurgy, & Exploration, Legion of Honor (2020)
Geological Society of America Energy Division Best Poster Award (2015)
International Association on the Genesis of Ore Deposits, Keynote, Kunming, China (2014)
Society of Economic Geologists Thayer Lindsley Lecturer (2002)
Gulf Coast Association of Geological Societies Excellence of Presentation Award (2001)
Mineral Deposits Studies Group, Geological Society of London, Keynote (1988)
Society of Economic Paleontologists & Mineralogists Excellence of Presentation Award (1986)
Society of Economic Paleontologists & Mineralogists Gulf Coast Section Best Paper Award (1984)
Society of Mining Engineers, Robert Peele Memorial (Best Paper) Award (1981)

UNIVERSITY AWARDS:

Third C. E. Yager Professor in Geological Sciences (1998 to 2022)
Shell Oil Company Teaching Fellow in Geological Sciences (1995 to 1998)
Getty Oil Company Centennial Teaching Fellow in Geological Sciences (1989 to 1995)
Geology Foundation Advisory Council Centennial Teaching Fellow (1985 to 1989)
Houston Oil and Minerals Faculty Excellence Award (1992)
Natural Sciences Council Teaching Excellence Award (1981)
Houston Oil and Minerals Faculty Excellence Award (1980)

RESEARCH INTERESTS:

Ore deposits geology, mineral resources and society, geology and supply chains of critical materials, minerals exploration and evaluation, industrial mineral resources, origin of ore-forming fluids in sedimentary basins, fluid inclusions, stable isotopes, salt dome cap rock formation, surficial processes and earth resource formation, high resolution X-ray computed tomography applications to petrology, adaptive reuse of mining and processing sites, repurposing of mine waste.

PROFESSIONAL SOCIETIES:

American Association of Petroleum Geologists (+Critical Minerals Division)
 Austin Geological Society
 Geological Association of Canada (Fellow)
 Geological Society of America (Fellow)
 International Association on the Genesis of Ore Deposits (+Working Group on Rare Earth Elements)
 (Honorary Life Member)
 Prospectors and Developers Association of Canada
 Society of Economic Geologists (Fellow)
 Society for Geology Applied to Mineral Deposits
 Society for Mining, Metallurgy, and Exploration (Legion of Honor)
 Society for Sedimentary Geology (SEPM)

PROFESSIONAL SERVICES:

Inaugural and continuing participant of the Society of Economic Geologists online mentoring program for students and others concerning the global minerals industry and mineral industry careers
 Society for Mining, Metallurgy, & Exploration, Industrial Minerals and Aggregates Division, Hal Williams Hardinge Award committee (2024 to date)
 Reviewer of multiple manuscripts for *American Association of Petroleum Geologists Bulletin*, *Economic Geology*, *Geological Society of America Bulletin*, *Geology*, *International Geology Reviews*, *Journal of Geophysical Research*, *Journal of Petrology*, *Mineralium Deposita*, *Mining Engineering, Mining, Metallurgy, & Exploration*, *Natural Resources Research*, *Ore Geology Reviews*, *Tectonics*, *Terra Nova*, and others.
 Reviewer of manuscripts for Special Publications of the American Association of Petroleum Geologists, Geological Association of Canada, Society for Mining, Metallurgy, and Exploration, Society for Sedimentary Geology, International Association on the Genesis of Ore Deposits, and Bureau of Economic Geology.
 Reviewer of professional accomplishments of economic geology faculty and research scientists for tenure or promotion for universities in Australia, Canada, Saudi Arabia, and United States (many).
 Reviewer of research proposals for the Petrogenesis and Mineral Resources, Petrology and Geochemistry, Surficial Processes, Special Projects, and Career Award divisions of the National Science Foundation, for the Petroleum Research Fund of the American Chemical Society, and for the U. S. Geological Survey.
 Reviewer of books for *Economic Geology*, *Journal of Geological Education*, *Journal of Sedimentary Petrology*, and *Ore Geology Reviews*, as well as book proposals for many international publishers.
 Field trip leader to examine water and mineral resources of Trans-Pecos Texas (2023): American Institute of Professional Geoscientists
 Convener of a session on Sediment-hosted Base Metal Deposits, at the 125th Anniversary (2013) Annual Meeting of Geological Society of America, Denver, CO
 Chair, Society of Economic Geologists session, Weathering of mineral deposits in semi-tropical to tropical climates: Annual meeting Geological Society of America (2012) Charlotte, NC
 Society of Economic Geologists Program Representative GSA annual meeting (2008) Houston, TX
 Chair, Economic Geology session, Annual Meeting Geological Society of America (2008)
 Chair, Supergene Processes and Regolith Characteristics & Skarns and Replacement Deposits, PACRIM2008 meeting (Gold Coast, Queensland, Australia)
 Society of Economic Geologists Distinguished Lecturer Committee 2004 to 2006, Chair 2006.
 Chair, Central Texas Section, Society for Mining, Metallurgy, and Exploration, 2000–2002.

Leader, Geology & historical mining, Llano Uplift region, central Texas, Austin Geologic Society, 2000
 Secretary, Central Texas Section, Society for Mining, Metallurgy, and Exploration, 1999–2002.
 Editor-in-Chief of *Ore Geology Reviews* (Elsevier) 1990 to 2003.
 Scientific Correspondent, *Chronique de la Recherche Miniere*, BRGM, Orleans, France, 1994–2000
 Petrology and Geochemistry Panel, National Science Foundation (1998)
 Chair, Committee on Committees, Society of Economic Geologists, 1997–1998.
 Short Course Instructor, The Earth Resources Foundation, University of Sydney, Sydney, New South
 Wales, Australia: “Sedimentary Pb-Zn Deposits” (two-day short course)
 Research Committee, Society of Economic Geologists, 1992–1995.
 Board of Advisors, Dept. of Geological Sciences, University of Tennessee, Knoxville, 1993–1996.
 Field trip and core workshop leader to examine Gulf Coast salt dome cap rock geology and mineral
 resources, Society of Economic Geologists (1995)
 Field trip leader to examine salt dome cap rock geology of the North Louisiana Basin, American
 Association of Petroleum Geologists (1993)
 Field trip leader to examine salt dome cap rock and associated features in the North Louisiana Basin,
 New Orleans Geological Society (1992)
 Associate Editor, *Economic Geology*, 1990–1992
 Leader of a Society of Economic Geologists field trip to examine industrial mineral resources of the
 Delaware Basin for the 1990 Geological Society of America Annual Meeting, Dallas, Texas.
 Convener of a Society of Economic Paleontologists & Mineralogists Special Session on “Fluid-rock
 Interactions in the Salt Dome Environment”, 1987 Midyear Meeting, Austin, Texas.
 Program Policy Committee, Society of Economic Geologists, 1983 to 1986.
 Society of Economic Geologists Program Chair for 1986 GSA annual meeting, San Antonio, TX.
 Convener of Society of Economic Geologists Special Session on “Precious Metals in Carbonate
 Replacement & Skarn Environments”, Geological Society of America Annual Meeting, San
 Antonio.

**ADMINISTRATIVE SERVICE TO THE UNIVERSITY, JACKSON SCHOOL OF GEOSCIENCES,
 DEPARTMENT OF GEOLOGICAL SCIENCES & BUREAU OF ECONOMIC GEOLOGY**

2009 – 2012	Jackson School Representative, University Graduate Assembly: Academic Committee (2009-10), Administrative Committee (2010-11), Admissions Committee (2011-12)
1998 to date	Member, Energy & Earth Resources Graduate Studies Committee (Petroleum & Geosystems Engineering; Jackson School of Geosciences)
2016 – 2023	Graduate Advisor, Energy & Earth Resources Masters Program
2022 – 2023	Search Committee, Economic Geologist, Bureau of Economic Geology
2013 – 2021	Chair, Energy & Earth Resources Admissions Committee
2005 – 2021	Energy & Earth Resources Admissions Committee
2020	Search Committee, Economic Geologist, Bureau of Economic Geology
2014 – 2015	Jackson School of Geosciences, Writer in Residence, Search Committee
2014 – 2016	Solid Earth & Tectonics Representative, JSG Admissions & Support Committee
2012	Search Committee, Economic Geologist, Bureau of Economic Geology
2008 – 2016	Assistant Graduate Advisor, Energy & Earth Resources Program
1996 – 1998	College of Natural Sciences Committee on Admissions
1995 – 1996	Search Committee, CNS Director of Corporate Relations and Placement
1992 – 1993	College of Natural Sciences Staff Excellence Awards Committee
1990 – 1995	College of Natural Sciences Undergraduate Education Committee
1982 – 1983	College of Natural Sciences Course and Curriculum Committee
1990 – 2022	Department of Geological Sciences Budget Council
1978 – 2022	Member, DGS Graduate Studies Committee
2007 – 2009	Department of Geological Sciences, JSG Internal Reappointment Committee

2007 – 2008	Department of Geological Sciences Faculty (JG) Promotion Committee
2007 – 2008	Department of Geological Sciences BA Curriculum Review Committee
2003 – 2006	Assistant Graduate Advisor, Department of Geological Sciences
2003 – 2005	Department of Geological Sciences Post-tenure Review Committee
2003 – 2005	Department of Geological Sciences Research Scientist Review Committee
2000 – 2003	Graduate Advisor, Department of Geological Sciences
2000 – 2003	Chair, Department of Geological Sciences Graduate Studies Committee
1998 – 2003	Chair, Dept Geological Sciences, Graduate Admissions & Support Committee
1999 – 2000	Search Committee, Carbonate Geology, Department of Geological Sciences
1995 – 2003	Dept. of Geological Sciences, Graduate Admissions & Support Committee
1992 – 1999	Department of Geological Sciences Gem & Mineral Collections Committee
1992 – 1996	Department of Geological Sciences Library Resources Committee
1985 – 1995	Department of Geological Sciences Undergraduate Advisor
1986 – 1995	Chair, DGS Undergraduate Advising and Awards Committee
1985 – 1992	Chair, DGS Cartography Committee
1988 – 1991	Geology Foundation Faculty Review Committee
1986 – 1987	Department of Geological Sciences Research Scientist Review Committee
1980 – 1982	Department of Geological Sciences Executive Committee
1979 – 1980	Search Committee, Metamorphic Petrologist, Dept. of Geological Sciences

COURSES TAUGHT REGULARLY:

- (1) GEO 401 Physical Geology (summer)
- (2) GEO 335 Geology and Mineral Resources of Texas (Upper Division Elective)
- (3) GEO 341 Mineral Resources, Society, & the Environment (FLAG writing elective)
- (4) GEO 386E Economic Geology (Graduate)
- (5) GEO 381R Regional Studies in Mineral Resources Geology (Graduate)
- (6) GEO 386R/ EER 396 Geology of Earth Resources (Core course for Energy & Earth Resources Masters program of the Jackson School of Geosciences)

Additional Courses Taught (all with experiential activities):

- 1) GEO 330K Petroleum Geology: Basin and Trend Analysis (Upper Division Elective)
- 2) GEO 358K Volcanology (Upper Division Elective; Substantial Writing Component Course)
- 3) GEO 362K Geology of Metallic Ore Deposits (Upper Division Geology Elective)
- 4) GEO 362L Geology of Nonmetallic Ore Deposits (Upper Division Geology Elective)
- 5) GEO 368N Applied Geology of Energy Resources (Upper Division Service Course)
- 6) GEO 660 Field Geology (Geology Major Requirement)
- 7) GEO 391 Ore Deposits in Carbonate Rocks (Graduate)
- 8) GEO 391 Geological and Financial Analysis of Precious Metals Deposits (Graduate)
- 9) GEO 391 Principles of Minerals Exploration (Graduate)
- 10) GEO 391 Seminar on Fluid Inclusions: Theory and Practice (Graduate)
- 11) GEO 391G Ore Deposits in Volcanic Environments (Graduate)
- 12) GEO 391H Ore Deposits in Sedimentary Environments (Graduate)
- 13) GEO 298T Supervised Teaching for Graduate Students

SPECIAL STUDENT SERVICES

In addition to having served as the departmental Undergraduate Advisor from 1985 to 1995 and Graduate Advisor from 2000 to 2003 and EER Program Graduate Advisor from 2016 to 2023, I have served as an informal advisor for students at all levels for career opportunities in the mineral resource industries. I invite and host mineral resources geology speakers, including those from underrepresented groups to talk about economic geology research and careers. I have employed, supervised, and mentored more than 100 undergraduate students on activities in support of mineral resources research and educational activities. I have sponsored many students for membership in and research support from the Society of Economic Geologists and other professional societies and organizations. I have written hundreds of recommendation letters for student employment and for

admission to graduate and professional programs. I also serve in the Faculty Contacts Program coordinated by the University Career Center. I have served as a judge for student research programs in the McCombs School of Business entrepreneur program and for the Texas Energy Research Challenge. I have enhanced my classroom teaching by organizing and leading more than 50 local, regional, and international field trips for students to examine mineral resources within their regional geologic setting and/or to attend major research symposia, thus providing opportunity for interaction with current applied and research activities.

- 2019 Exploration and mining geology of west Texas and New Mexico
- 2018 International research experience for under-represented undergraduates, Slovakia
- 2017 Energy & Earth Resources orientation field trip on Central Texas geology and resources
- 2016 International research experience for under-represented undergraduates, Slovakia
- 2015 Exploration and mining geology of Arizona
- 2014 Cenozoic geology of the Presidio Bolson, Trans-Pecos, Texas
Regional studies of the geology and mineral resources of Fennoscandia
- 2013 Mineral resource geology of West Texas and New Mexico
- 2012 Cenozoic volcanism and mineralization, Trans-Pecos Texas
- 2011 Geology and production of Texas lignite
- 2010 Geology and production of Texas lignite
Geology of Trans-Pecos Texas volcanic field
- 2009 Mineral resource geology of West Texas and New Mexico
Regional studies of the geology and mineral resources of the southern Canadian Shield and the Geological Association of Canada-AGU Spring meeting, Toronto, Ontario
- 2008 Cretaceous volcanism of central Texas
- 2007 Geology of the Llano Uplift.
Geology and production of Texas lignite.
- 2006 Geology of the Llano Uplift.
Geology and production of Texas lignite.
- 2005 Regional studies of the geology and mineral resources of the Great Basin and the Window on the World Geological Society of Nevada meeting, Reno, NV
Cenozoic volcanism and mineralization, Trans-Pecos Texas
Geology of the Austin area
- 2004 Geology of the Austin area; Geology of the Llano Uplift.
- 2003 Regional studies of the geology and mineral resources of Western Australia
- 2003 Diverse carbonate-hosted Zn-Pb-Ag deposits, Trans-Pecos Texas and Chihuahua, Mexico
Cretaceous volcanism of central Texas
- 2001 Regional studies of the geology and mineral resources of the Iberian Peninsula
- 2000 Regional studies of the geology and mineral resources of Peru
Tectonics, magmatism, sedimentation, and mineralization in west Texas & New Mexico
- 1999 Geology and mining of central Texas lignite deposits
Regional studies of the geology and mineral resources of the central Andes, Chile
- 1997 Regional studies of mineral resource geology of West Texas and New Mexico
- 1996 Regional studies of mineral resource geology of the Southwestern United States
- 1993 Tectonic, magmatic, sedimentation, and mineralization history of the southern Midcontinent
- 1992 Mineralization, magmatism, and tectonism in the Southwestern United States
- 1990 Geologic setting of intrusion- and skarn-hosted copper deposits of Arizona & New Mexico
- 1989 Regional geology and ore deposits in Oklahoma, Missouri, Kentucky, and Tennessee
- 1988 Geology and extraction of south Texas uranium deposits
- 1987 Regional geology and ore deposits in Missouri, Arkansas, and Oklahoma
Regional geology and ore deposits in Trans-Pecos Texas and New Mexico and the inaugural meeting of American Current Research on Fluid Inclusions, Socorro, NM
- 1985 Regional geology and mineral resources associated with salt domes in the Gulf Coast
- 1984 Regional geology and ore deposits in Durango, Zacatecas, San Luis Potosi, and Coahuila
- 1983 Regional geology and mineral deposits in the Delaware Basin in Texas and New Mexico
- 1982 International Conference on Mississippi Valley-type Lead-Zinc Deposits, Rolla, Missouri
Regional geology and ore deposits in Guanajuato, Durango, Zacatecas, San Luis Potosi, and Coahuila, Mexico
- 1981 Regional geology and ore deposits in Missouri, Arkansas, and Oklahoma

- 1980 Regional geology and ore deposits in Trans-Pecos Texas and New Mexico, and the symposium on Relations of Tectonics to Ore Deposition in the Southern Cordillera, Tucson, AZ
- 1979 Regional tectonics and ore deposits in Alabama, North Carolina, Tennessee, & Arkansas
Regional geology and ore deposits in Trans-Pecos Texas, New Mexico, and Arizona
Regional geology and ore deposits in Arkansas and Missouri
American Institute of Mining, Metallurgical, & Petroleum Engineers Annual Meeting, New Orleans, LA

Student outreach and other general educational activities

- Served as career-long information source on mineral resources and mining, fielding public and press inquiries, as well as questions from federal and state agencies, directed to the BEG, the DGS, the Jackson School of Geosciences, and the University.
- Served as a judge for student projects in the McCombs School of Business entrepreneur program and for the Texas Energy Research Challenge, as well as providing guest lectures on Earth resources and sustainable energy challenges.
- Contributing Author, *Using Material Resources*, in Holt Science and Technology California, Student Edition 6th grade SE textbook, ISBN: 0-03-042658-8, p. 138-143, 2007.
- The Geologic History of Texas: The Making of Texas over the Past 1.5 Billion Years: Department of Geological Sciences, Outreach Lecture Series, v. 4, University of Texas at Austin, 2000.

GRADUATE STUDENT SUPERVISION (with present or last known positions):

Maintains an environment that welcomes, supports, and mentors students from diverse backgrounds. Due to student privacy laws, DEI information on applicants and enrolled students are not readily available, with gender being the only criterion that generally is apparent. Since 1990, more than half of my graduate student advisees (n = 30) have been women. Several of my graduate and undergraduate mentees have been members of other underrepresented groups.

Ph. D. Dissertations Supervised

- Lyons, James I., 2016, "Arc-related Mesozoic basins of northern Mexico: their origin, tectonic inversion and influence on ore localization" (co-supervisor T. Lawton)
Present Position: Independent minerals exploration geologist, El Paso, TX
- Li, Ning, 1998, "Depositional controls and genesis of the Jinding sandstone-hosted Zn-Pb deposit, Yunnan province, southwest China".
Present Position: Exploration Data Management, Saudi Aramco, Dhahran, Saudi Arabia
- Edgerton, David G., 1997, "Geologic models of sediment-buffered hydrothermal vents: a case study of the Red Dog Zn-Pb-Ag orebody, western Brooks Range, Alaska"
Present Position: Senior Hydrogeologist, U.S. Environmental Protection Agency, New York
- Rubin, Jeffrey N., 1996, "Skarn formation and ore deposition at the Gunung Bijih Timur (Ertsberg East) Complex, Irian Jaya, Indonesia".
Present Position: Emergency Management Program Manager, Tualatin Valley Fire & Rescue, East Division, Oregon City, OR
- Farr, Mark R., 1988, "Compositional variation of late dolomite cement as a guide to parent fluid flow directions in the Cambrian Bonneterre Formation, southeast Missouri" (co-supervisor L. Land).
Present Position: Research Associate, Geology Department, University of Kansas, Lawrence, KS

M. S. Theses Supervised (44 completed 1980 to 2024):

- Short, Shelby, 2024, "Use of satellite and airborne remote sensing techniques to assess critical mineral potential in Trans Pecos Texas" (Co-supervisor Brent Elliott, Bureau of Economic Geology) Energy & Earth Resources Program.
Present Position: Mineral Resources & Mapping Specialist, Bureau of Economic Geology

- Cappelen, Ulrik, 2023, "Optimizing critical minerals extraction from the Fen Carbonatite Complex in Norway: Statistical analysis of rare earth elements and elements of potential secondary value for sustainable mining, reduced mine waste, and an independent European value chain" (Co-supervisor Michael Pycrz, Petroleum & Geosystems Engineering): Energy & Earth Resources Program
Present Position: Geologist, Freeport-McMoRan, Bagdad, AZ
- Ugurhan, Mert, 2018, "Characterization and timing of the Cave Peak porphyry molybdenum system, Culberson County, Texas" (Co-supervisor Brent Elliott, Bureau of Economic Geology)
Present Position: Research Scientist Associate III, Bureau of Economic Geology
- Wright, Kylie A., 2017, "Cu-Fe sulfides and Au mineralization in the Ertzberg-Grasberg District of Papua, Indonesia using volumetric analysis and trace element geochemistry". (Co-supervisor Rich Ketcham)
Present Position: Sustainability Engineer, Southwestern Energy, Houston, TX
- Williams, Nathan, 2017, "Prospectivity for metallic resources in basal Paleozoic strata in central Texas".
Present Position: Geoscientist, U.S. Army Corps of Engineers, Nashville, TN
- Ledvina, Matt (*deceased*), 2017, "Relationship of pluton- and wall rock-hosted Cu-Au mineralization, Ertzberg East Complex, Ertzberg-Grasberg District, Papua, Indonesia."
- Frelinger, Stefanie N., 2015, "Chronology of Laramide magmatism and stockwork fracture filling at the Red Hills porphyry Mo-Cu deposit, Presidio County, Texas" (Co-supervisor Brent Elliott, BEG)
Present Position: Development Geologist, Cantium Oil & Energy, Covington, LA
- O'Neill, L. Christine, 2014, "REE-Be-U-F mineralization of the Round Top laccolith, Sierra Blanca Peaks, Trans-Pecos Texas"
Present Position: Senior Geologist, AngloGold Ashanti, Reno, NV
- Pierre, Jon Paul, 2014, "Impacts of above-ground activities in the Eagle Ford Shale Play on landscapes and hydrologic flows, La Salle County, Texas" (Co-supervisor Michael Young, BEG)
Energy & Earth Resources Program.
Present Position: Bureau of Economic Geology, University of Texas at Austin, Austin, TX
- Kallstrom, Michael, 2012, "Fluid and metal sourcing for the native silver deposits in the Batopilas Mining District, Chihuahua, Mexico".
Present Position: Manager, Nature's Treasures, Austin, TX
- Michaelides, Michael, 2011, "Depositional and diagenetic processes in the formation of the Eocene Jackson Group bentonites, Gonzales County, Texas"
Present Position: Geoscientist, Tokyo Gas America, Houston, TX
- Gryger, Sean M., 2010, "Geologic framework of the Sierra Mojada Mining District, Coahuila, Mexico: An integrative study of a Mesozoic platform-basin margin"
Present Position: Geologist, BMO Capital Markets, Houston, TX
- Ahn, Hyein, 2010, "Mineralogy and geochemistry of the non-sulfide zinc deposits in the Sierra Mojada District, Coahuila, Mexico"
Present Position: SEM specialist, ConocoPhillips, Bartlesville, OK
- Baline, Lorraine, 2007, "Hydrothermal fluids and Cu-Au mineralization of the Deep Grasberg Porphyry Deposit, Papua, Indonesia".
Present Position: Lead Geologist, EOG Resources Inc., Fort Worth, TX
- Gandler, Laurel, 2006, "Calc-silicate alteration and Cu-Au mineralization of the Deep MLZ skarn, Ertzberg District, Papua, Indonesia".
Present Position: Staff Geoscientist, W&T Offshore, Houston, TX
- Rambaud, Fabienne, 2005, "Nature and source of the mineralizing fluids at the Presidio mine, Shafter district, Presidio County, Texas".
Present Position: Geoscientist, Texas Commission on Environmental Quality, Austin, TX
- Mote, Alison, 2004, "A kinematic investigation of the Cripple Creek District, central Colorado: Implications regarding structural controls influencing the location and distribution of gold ore zones".
Present Position: Geoscience Course Manager, OnRamps program, Office of Strategy and Policy, University of Texas at Austin
- McGuire, James, 2003, "Geology and carbonate-replacement Zn-Pb-Ag mineralization in the Hecla area, southwestern Montana".

- Present Position: Partner, Holland & Knight LLP, Dallas, TX
- Head, Jennifer, 2002, "Stratigraphic and structural controls of Permian carbonate-hosted silver (Pb-Zn) mineralization, Shafter Presidio County, Texas".
- Present Position: Staff Geologist, Conoco-Phillips Inc., Anchorage, AK
- Muzaffar, Asif, 2001, "Relations among sedimentation, diapirism, and cap rock formation at the Davis Hill salt dome, Liberty Co., Texas".
- Present Position: Geologist, Saudi Aramco, Dharan, Saudi Arabia
- Gilmer, Amy K., 2001, "Age and characterization of the Red Hills porphyry copper-molybdenum deposit and its relationship to the Chinati Mountains caldera, Presidio County, Texas".
- Present Position: Geologist, US Geological Survey, Denver, CO
- Harrison, Jeffrey, 1999, "Hydrothermal alteration and fluid evolution of the Grasberg porphyry Cu-Au deposit, Irian Jaya, Indonesia".
- Present Position: Geologist, Conoco-Phillips, Anchorage, AK
- Smith, Virginia, 1998, "Geology and geochemistry of hydrothermal alteration at the Tyrone porphyry copper deposit, New Mexico".
- Present Position: Geoscientist, Offshore Division, Chevron-Texaco, New Orleans, LA
- Smith, Jennifer S., 1996, "Origins of calcite and pyrite cements in the Carrizo Sandstone on the flank of Butler dome, East Texas Basin: Petrographic and isotopic evidence for fluid circulation near salt domes".
- Present Position: VP of Geoscience, Ensign Natural Resources, Houston, TX
- Mertig, Heidi J., 1995, "Origin of the Dom copper skarn deposit, Ertzberg district, Irian Jaya, Indonesia".
- Present Position: Engineering Geologist, Barrick Corp., Elko, NV
- Agee, William N., Jr., 1990, "Relation of metal sulfide mineralization to anhydrite cap rock formation, Hockley salt dome, Harris County, Texas".
- Present Position: VP Global Operations, Harvey Rock Physics, Sugar Land, Texas
- Coel, Becky J., 1990, "Biogeochemical cycling of gold in a placer deposit, Livengood, Alaska".
- Present Position: Los Alamos National Laboratory, Los Alamos, NM
- Prikryl, James P., 1989, "Origin of salt dome limestone cap rocks in the U.S. Gulf Coast".
- Present Position: Research Scientist, Southwest Research Institute, San Antonio, TX
- Chieruzzi, Gianni O., 1988, "Geochemical flow modeling of supergene alteration of porphyry copper deposits". (Co-supervised with L. Lake, Department of Petroleum Engineering).
- Present Position: Chester Engineers, Pittsburgh, PA
- Standen, Allan R., 1987, "Mineralization of the Scotia-Vanderbilt vein system, Silverton, Colorado".
- Present Position: Geologist, LBG-Guyton; Austin, TX
- Gutierrez, Gay N., 1987, "Controls on ore deposition in the Lamotte Sandstone, Goose Creek mine, Indian Creek subdistrict, southeast Missouri".
- Present Position: Project Hydrogeologist; OHM Corporation; Austin, TX
- Vasconcelos, Paulo, 1987, "Gold geochemistry in a semiarid weathering environment: a case study of the Fazenda Brasileiro deposit, Bahia, Brazil".
- Present Position: Professor, University of Queensland, Brisbane, Queensland, Australia.
- Rubin, Jeffrey N., 1986, "Mineralogy and ore genesis at the San Martin mine, Zacatecas, Mexico".
- Present Position: Emergency Management Program Manager, Tualatin Valley Fire & Rescue, East Division, Oregon City, OR
- Boback, Patricia A., 1985, "Igneous petrology and structural geology of Nine-Point Mesa, Brewster County, Texas". (co-supervised with D. Barker)
- Present Position: Geologist; Texas Natural Resources and Conservation Commission; Austin, TX
- Hardwick, James F., Jr., 1984, "Epithermal vein and carbonate replacement mineralization related to caldera development, Cunningham Gulch, Silverton, Colorado".
- Present Position: Consulting Geologist; Lafayette, LA
- Barrie, Tucker, 1984, "Geology of the Khayyam and Stumble-on Deposits, Prince of Wales Island, Alaska"
- Present Position: Research Scientist; Geological Survey of Canada; Ottawa, Ontario

Johns, David A., 1983, "Geologic controls of massive sulfide mineralization in late Mesozoic metamorphic rocks, Tizapa, Estado de Mexico, Mexico".

Present Position: Geologist, City of Austin Department of Environmental Protection, Austin, TX

Logan, William S., 1983, "Geology of the Agalteca magnetite skarn deposit, central Honduras".

Present Position: Director, International Center for Integrated Water Resources Management (UNESCO), Alexandria, VA

Herwig, Jonathan C., 1982, "Stratigraphy, structure, and massive sulfide potential of late Mesozoic metamorphic rocks near El Cirian, Estado de Mexico, Mexico".

Present Position: Technical Director; Ogden Consultants; Honolulu, HI

Craig, Lisa E., 1982, "Silicification and porosity development in upper Knox Group carbonate rocks, Burkesville, Kentucky".

Present Position: Geologist; Environmental consulting group; New Orleans, LA

Allie, Adrienne D., 1981, "Stratigraphic controls of carbonate-hosted sulfide mineralization, Iron Rock Creek area, Blanco and Gillespie Counties, Texas".

Present Position: Senior Geologist; Shell Offshore, Inc.; New Orleans, LA

Immitt, James P., 1981, "Skarn and epithermal vein mineralization in the San Carlos caldera region, northeastern Chihuahua, Mexico".

Present Position: Independent Geologist and Financial Analyst, Houston, TX

Masterson, W. Dallam, 1981, "Hydrothermal alteration and mineralization, Velvet district, Nevada".

Present Position: Manager, North Slope Satellite Exploration, Phillips Alaska, Anchorage, AK

Fredericks, Paul E., 1980, "Volcanic lithofacies and massive sulfide mineralization, East Shasta, California"

Present Position: Principal; MineraLogic; Missoula, MT

I have served on supervisory committees of more than 20 Ph.D. candidates and more than 40 Master's candidates in the Department of Geological Sciences. I have served on supervisory committees of one Ph.D. and three Master's candidates in the Department of Petroleum & Geosystems Engineering. I have served on the supervisory committees of more than 10 Master's students in the Energy & Earth Resources program.

I served as External Examiner for Ph.D. dissertations at the University of North Carolina (H. Posey, 1986), Dalhousie University (C. Ravenhurst, 1987; N. Wilson, 1998), University of Queensland (S. Andrews, 1998), and University of Western Australia (R. Kempton, 1999).

Undergraduate Honors and Jackson Scholars Students

Hoffman, Collin, 2024, "Critical mineral resource assessment using Leapfrog modeling, Cave Peak porphyry Mo system, Culberson County, Texas"

Present Position: Geologist, Freeport McMoRan, Bagdad, AZ

Quintero, Thomas, 2020, "Cementation of Solution-Collapse Breccias in the Lower Ordovician Upper Knox Group, Central Tennessee"

Present Position: GIS Analyst, Freese and Nichols, Inc., Houston, TX

Mills, Stephanie, 2009, "Relation of calcite chemistry and fluorescence in silver-rich veins, Batopilas, Mexico".

Present Position: Senior Geologist - Metals Mining, Utah Geological Survey, Salt Lake City, UT

Undergraduate Visiting Student

Ferraz da Costa, Marilia, 2019, "Orogenic gold ores in three-dimensions: A case study of distinct mineralization styles at the world-class Cuiabá deposit, Brazil, using high-resolution X-ray computed tomography on gold particles". (awarded first prize for the 2020 Society of Economic Geologists' Student Research Showcase, in competition with graduate students – see <https://www.jsge.utexas.edu/dgs/2020/12/undergraduate-images-gold-to-win-gold/>) (study published in *Ore Geology Reviews* doi.org/10.1016/j.oregeorev.2021.104584)

POST-DOCTORAL AND VISITING SCIENTISTS:

- Huan-Zhang Lu, Professor, Université du Québec à Chicoutimi, Chicoutimi, Québec, Canada, 1998 Stay in Austin, Research on porphyry ore formation and on bacteriogenic calcite formation; funding from the Université du Québec à Chicoutimi (sabbatical).
- Eric James, Research Scientist, University of Texas at Austin, 1995-97, Research on isotopic character of Ertsberg district Cu-Au deposits, Irian Jaya, Indonesia; Funding from Freeport-McMoRan.
- Youn-Ho Jang, Associate Professor, Samchock Technical College, Kangwon-do, Korea, 1989-90 Stay in Austin, Research on Samhwa skarn iron deposits, Korea (co-sponsored with D. Barker); funding from Korean federal science agency.
- Aroldo Misi, Professor, Federal University of Bahia, Salvador, Bahia, Brazil, 1988-90 Stay in Austin, Research on phosphate and metal sulfide deposits in Late Proterozoic carbonate strata, Irece, Bahia; funding from CNPQ (Brazilian federal science agency).
- Harry H. Posey, 1987-88 Stay in Austin, Research on salt dome cap rock geochemistry; funding from National Science Foundation grant EAR-8709319.

MAJOR RESEARCH SUPPORT:

- 2021-24 Department of Energy, NETL Carbon Ore, Rare Earth and Critical Mineral (CORE-CM) Initiative for U.S. Basins: "Assessment of rare earth elements and critical minerals in coal and coal ash in the U.S. Gulf Coast" (Total award, \$1.5 million; PI B. Scanlon, BEG)
- 2015-21 National Science Foundation, International Research Experiences for Underrepresented Undergraduate Students (\$250,000): "Closing Oceans: Assessing the dynamics of Turkish suture zones" (PI E. Catlos; Co-PI R. Kyle, B. Elliott)
- 2015-18 Designated Fellowship, Studies of Gold Mineralization in Switzerland: Swiss Gold (\$7,500)
- 2014 JSG Solid Earth Theme Seed Grant (\$15,230), Source Terranes in Southern Laurentia during the Drowning of the Great Unconformity: Detrital Zircon Geochronology of the Cambrian Hickory Sandstone in Central Texas (Co-PI Stockli, Elliott, and McBride)
- JSG Surface & Hydrologic Processes Theme Seed Grant (\$11,325), Integration of the Modern Rio Grande from west Texas to the Gulf of Mexico: Magnetostratigraphy of the Presidio Bolson, Trans-Pecos, Texas (Co-PI Jack Holt)
- 2011-18 PT Freeport Indonesia Research Grant (\$500,000): "Ertsberg District Ore Studies"
- 2009-10 PT Freeport Indonesia Research Grant (\$60,000): "Ertsberg District Ore Studies"
- 2008-09 PT Freeport Indonesia Research Grant (\$20,000): "Ertsberg District Ore Studies"
- 2007-08 PT Freeport Indonesia Research Grant (\$40,000): "Ertsberg District Ore Studies"
- 2006-07 PT Freeport Indonesia Research Grant (\$40,000): "Ertsberg District Ore Studies"
- 2005-06 Geology Foundation Seed Grant (\$20,000): HRXCT Investigations of Fluid Inclusions" (Kyle and Ketcham)
- 2005-06 PT Freeport Indonesia Research Grant (\$40,000): "Ertsberg District Ore Studies"
- 2005-06 National Science Foundation Equipment Grant (\$107,400): "Acquisition of a Fourier Transform Infrared (FTIR) Spectroscopy System: Measuring Volatiles in Magmatic and Ore-Forming Systems" (Co-PI J. Gardner and J. Lassiter).
- 2004-05 PT Freeport Indonesia Research Grant (\$40,000): "Use of High Resolution X-ray Computed Tomography in Ore Mineralogy".
- 1997-00 American Chemical Society Petroleum Research Fund Grant PRF#32557-AC8 (\$50,000): "Bacterial Processes in Sedimentary Environments: Origin of "Bacteriogenic" Calcite-Sulfur Concentrations in the Delaware Basin, West Texas".
- 1994-00 Freeport Indonesia Ertsberg (Gunung Bijih) District Research Grant (\$355,000): "Tectonics and Mineral Deposits of Irian Jaya, Indonesia: Phase II Ore Studies".

- 1995-98 National Science Foundation Research Grant EAR-9405546 (\$110,000): "Genesis of Metallic Mineralization in Continental Rift Basins: A Study of Sandstone-hosted Pb-Zn-Sr Deposits in a Tertiary Rift Basin, Yunnan, China".
- 1989-93 Freeport Indonesia Ertsberg (Gunung Bijih) District Research Grant (\$662,000): "Tectonics and Mineral Deposits of Irian Jaya, Indonesia" (M. Cloos Co-PI).
- 1987-89 National Science Foundation Research Grant EAR-8709319 (\$105,730): "Petrologic, Geochemical, and Isotopic Investigation of Gulf Coast Salt Dome Cap Rocks".
- 1987-89 American Chemical Society Petroleum Research Fund Grant PRF#19624-AC2 (\$32,595): "Paleomagnetic Investigation of Salt Dome Growth Rates" (W. Gose Co-PI).
- 1985-87 National Science Foundation Research Grant EAR-8407736 (\$117,000): "Nature and Origin of Sulfide Deposits in Gulf Coast Salt Dome Cap Rocks".

I have conducted field investigations in more than 60 countries, interacting with government scientists and officials, private sector employees, and local societies. More than 40 companies have provided in-kind and local logistical support for student research projects totaling several million dollars, exclusive of invaluable proprietary data. In addition, cooperative research agreements have been established at various times with federal agencies in the United States (U. S. Geological Survey), Canada (Geological Survey of Canada), China (Institute for Geosciences), Mexico (Centro de Geociencias, Consejo de Recursos Minerales), Honduras (Instituto Geografico Nacional), and Brazil (CNPQ), as well as many local, state, and regional organizations. These agencies provided logistical, per diem, and analytical support for research projects in their countries. The University Research Institute, the College of Natural Sciences, the Department of Geological Sciences, the Bureau of Economic Geology, and the Jackson School of Geosciences have contributed funding in support of other research activities, typically as seed money acquired through competitive awards to stimulate the development of external grant proposals.

INVITED LECTURES (Last 25 Years):

- 2024 "Critical mineral potential of the Gulf Coast region" (Keynote, Critical Minerals Session, presented by Brent Elliott): 40th Annual GCSSEPM Foundation Perkins-Rosen Research Conference, Houston, TX
- 2023 "Minerals exploration: discovery and evaluation of future mineral resources", GEO 386R Geology of Earth Resources, University of Texas at Austin
 "Geology of precious and critical metals deposits", GEO 386R Geology of Earth Resources, University of Texas at Austin
 "Critical minerals under our feet?", OLLI Program, University of Texas at Austin
- 2022 "Minerals exploration: discovery and evaluation of future mineral resources", GEO 386R Geology of Earth Resources, University of Texas at Austin
 "Geology of precious and critical metals deposits", GEO 386R Geology of Earth Resources, University of Texas at Austin
 "The role of industrial minerals in the low-carbon energy future": 58th Forum on the Geology of Industrial Minerals
 "Gas analysis from domal salt: Implications for subsurface energy storage": GEOH2 Workshop, Bureau of Economic Geology (w/ Moscardelli and Zhang)
- 2021 "Waste not, want not: Potential contributions to U.S. critical minerals supply from expatriated bauxite residue" GeoGulf 2021, Critical elements for renewable energy and storage, Austin.

- 2020 “Earth resources and sustainable energy challenges”, BDP 101 Environmental Change and Sustainability, University of Texas at Austin
- 2018 “Giant Pliocene porphyry-skarn Cu-Au deposits, Ertsberg-Grasberg District, Papua, Indonesia: Exploration, production, and research in a challenging environment” and “Application of high resolution X-ray computed tomography in the geosciences”: Earth Sciences Department, Tennessee Technological University, Cookeville, TN
- 2016 “High resolution X-ray computed tomography applications in petrology”: Geology Department, Comenius University, Bratislava, Slovakia
 “High resolution X-ray computed tomography applications in the geosciences: Geology Department, University of Nebraska Omaha, Omaha, NE.
 “Texas Industrial Mineral and Metal Resources – An Extended Permian Basin Perspective”: Permian Basin Section – SEPM, Midland, TX
- 2014 “Stratigraphic inheritance controls of skarn-hosted metal concentrations: Ore controls for Ertsberg-Grasberg District Cu-Au skarns, Papua, Indonesia” (Keynote presentation) International Association on the Genesis of Ore Deposits, Kunming, China
 “Giant Pliocene porphyry-skarn Cu-Au deposits, Ertsberg-Grasberg District, Papua, Indonesia: Exploration, production, and research in a challenging environment”, and “High resolution X-ray computed tomography studies of geological materials: Contributions to gold ore genesis and processing”: Geology Department, University of Barcelona, Spain.
- 2013 “Lone Star Silver rides again: The reopening of the Shafter silver mine”: Austin Geological Society
 “Geology and mineralogy of the Shafter silver deposit, Presidio County, Texas”: Austin Gem & Mineral Society
 “Giant Pliocene porphyry-skarn Cu-Au deposits, Ertsberg-Grasberg District, Papua, Indonesia: Exploration, production, and research in a challenging environment”, and “High resolution X-ray computed tomography studies of geological materials: Emphasis on Contributions to Gold Ore Genesis and Processing”: Geology Department, Dokuz Eylül Üniversitesi, İzmir, Turkey
- 2012 “Sierra Mojada Ag-Pb-Zn District, Coahuila: An Endmember Carbonate Replacement Mineralization System?” Cordilleran Section, Geological Society of America, Ore Deposits of the Cordillera Session.
- 2010 “The Central Texas Lead District: Geologic, geochemical, and genetic comparisons to the supergiant MVT deposits of southeast Missouri”: Geological Society of America, North Central–South Central Sectional Meeting, Ore Deposits of the Central U.S. Symposium
- 2009 “Stratigraphic controls of calc-silicate alteration and Cu-Au mineralization in the Deep MLZ skarn, Ertsberg District, Papua, Indonesia” 2009 Joint Assembly, American Geophysical Union and Geological Association of Canada, Toronto, Ontario, Canada
- 2008 “Geology of Texas Industrial Minerals”: 44th Forum on the Geology of Industrial Minerals, Oklahoma City, OK
 “Regional Geology of Texas and Oklahoma”: Transportable Array Earthquake Recording Station Reconnaissance Workshop (IRIS), Jackson School of Geosciences, The University of Texas at Austin

- 2007 “High Resolution X-ray Computed Tomography Studies of Geological Materials: Emphasis on Contributions to Gold Ore Genesis and Processing”: Department of Earth Sciences, The University of Hong Kong.
 “Application of high resolution X-ray computed tomography to fluid inclusion studies of opaque minerals”: International Conference on Geofluids and Fluid Inclusions (Guangzhou, China)
- 2006 “High Resolution X-ray Computed Tomography Studies of Geological Materials: Emphasis on Contributions to Gold Ore Genesis and Processing”: Seminario de Geociencias, Centro de Geociencias, UNAM, Queretaro, Mexico
- 2005 “Texas Energy Resources”: UT Forum Adult Enrichment Program, University of Texas at Austin Continuing Education Program, Austin, TX
- 2004 “Geology of Texas Dimension Stone”, Association for Preservation Technology Texas Chapter and the Building Industry Council of Preservation, 2004 Preservation Day Seminar, Austin, TX
- 2003 “Historical Silver Mining in Central Texas: Myth vs. Reality”, Society for Mining, Metallurgy, and Exploration, Central Texas Section, Austin, TX.
- 2002 “The Economic Geology of Microbes: Relation between Mineral Resources and Bacterial Processes”, and “Giant Pliocene porphyry-skarn Cu-Au deposits, Ertzberg District, Papua, Indonesia: Exploration, production and research in a challenging environment”: Society of Economic Geologists Thayer Lindsley Lecture Tour (*17 presentations at 12 sites in the U.S., Canada, & Mexico*)
- 2001 “Origin of the Tertiary sandstone-hosted Jinding Zn-Pb-Ag deposit, Yunnan, China” Society of Economic Geologists’ Symposium on Sediment-Hosted Lead-Zinc Deposits, Geological Society of America Annual Meeting, Boston, MA.
- 2000 “Formation of giant Pliocene porphyry-skarn Cu-Au deposits, Ertzberg District, Irian Jaya, Indonesia”, and “Dynamic interaction of salt tectonics, depositional and diagenetic systems, and mineralization in the Gulf of Mexico Basin”, Institute for Science and Technology, Xian, China.
 “Formation of giant Pliocene porphyry-skarn Cu-Au deposits, Ertzberg District, Irian Jaya, Indonesia”, and “Dynamic interaction of salt tectonics, depositional and diagenetic systems, and mineralization in the Gulf of Mexico Basin”, Xinjiang Bureau of Geology and Mineral Resources, Urumqi, China.
 “Origin of the Tertiary sandstone-hosted Jinding Zn-Pb-Ag deposit, Yunnan, China”, Society of Economic Geologists’ Symposium on New Silver Deposits, Society for Mining, Metallurgy, and Exploration, Salt Lake City, UT.
 “Relation of energy and mineral resources in the Gulf of Mexico Basin to the dynamic interaction of salt tectonics, depositional systems, and formation waters”, Department of Geosciences, The University of Tulsa, Tulsa, OK
 “The Geologic History of Texas: The Making of Texas over the Past 1.5 Billion Years”, Outreach Lecture Series, Department of Geological Sciences, University of Texas at Austin www.esi.utexas.edu/k-12-a-the-community/hot-science-cool-talks/lecture-archives/geologic-history-of-texas
- 1999 “A Century of Fire and Brimstone: The Rise and Fall of the Gulf Coast Frasch Sulfur Industry”, Austin Geological Society, Austin, TX

- “Delaware Basin sulfur deposits: Genetic relations among evaporites, petroleum, bacteria, formation waters, and tectonics”, New Mexico Bureau of Mines and Mineral Resources, Socorro, NM
- “Formation of the supergiant Grasberg porphyry Cu-Au deposit, Irian Jaya, Indonesia”, Department of Geology, University of Chile, Santiago, Chile.
- “Metallogeny of Zn-Pb-Ag deposits in sedimentary basins: characteristics and genesis of the Tertiary sandstone-hosted Jinding Zn-Pb deposit, Yunnan, China”, Denver Regional Exploration Geologists Society, Denver, CO.
- “A century of fire and brimstone: The rise and fall of the Gulf Coast Frasch sulfur industry”, Society for Mining, Metallurgy, and Exploration, Central Texas Section, San Marcos, TX.
- 1998 “Formation of giant porphyry-skarn Cu-Au deposits associated with Pliocene intrusions into a continental margin, Ertzberg District, Irian Jaya, Indonesia”, Department of Earth Science, Dalhousie University, Halifax, Nova Scotia, Canada.
- “Dynamic interaction of salt tectonics, depositional and diagenetic systems, and mineralization in the Gulf of Mexico Basin”, Centre for Petroleum Geology and Geophysics, University of Adelaide, South Australia, Australia.
- “Exploration and production of mineral resources in a challenging environment, Ertzberg Cu-Au District, Irian Jaya, Indonesia”, and “Dynamic interaction of salt tectonics, depositional and diagenetic systems, and mineralization in the Gulf of Mexico Basin”, Geological Society of Australia, Broken Hill Section, New South Wales, Australia
- “Sedimentary Pb-Zn Deposits” (two-day short course), The Earth Resources Foundation, University of Sydney, Sydney, New South Wales, Australia
- “Dynamic interaction of salt tectonics, depositional and diagenetic systems, and mineralization in sedimentary basins: The Gulf of Mexico Basin example” (Turner Lecture), and “Exploration and production of mineral resources in a challenging environment, Ertzberg Cu-Au District, Irian Jaya, Indonesia”, Dept. of Geological Sciences, University of Michigan, Ann Arbor, MI
- 1997 “Formation of giant porphyry-skarn Cu-Au deposits associated with Pliocene intrusions into a continental margin, Ertzberg District, Irian Jaya, Indonesia”, Mackay School of Mines, University of Nevada, Reno, NV
- “Challenges in exploration and production of mineral resources in a dynamic environment, Ertzberg Cu-Au District, Irian Jaya, Indonesia”, Society for Mining, Metallurgy, and Exploration, Central Texas Section, San Antonio, TX.
- 1996 “Magmatic-hydrothermal – epithermal transition in the Ertzberg district, Irian Jaya, Indonesia”, Society of Economic Geologists symposium on the magmatic-hydrothermal – epithermal transition, Geological Society of America Annual Meeting, Denver, CO
- “Bacterial processes in salt dome cap rock formation, Gulf Coast Basin, southern North America”, Symposium on Geomicrobiology, Geological Association of Canada, Winnipeg
- “Pliocene porphyry-skarn Cu-Au deposits of the Ertzberg district, Irian Jaya, Indonesia”, Department of Geological Sciences, University of Tennessee, Knoxville, TN
- 1995 “Development of giant copper-gold deposits associated with Pliocene intrusions into a continental margin, Ertzberg district, Irian Jaya, Indonesia”, Economic Geology Division, Geological Society of South Africa - Kalahari Branch, Kuruman, South Africa.

“Metallic deposits in the Gulf Coast Basin of southern North America: Diverse mineralization styles in a young sedimentary basin”, Society of Economic Geologists, International Field Conference on Carbonate-hosted Lead-Zinc Deposits, St. Louis, MO.

“The origin of zinc-barite-fluorite deposits in Lower Ordovician carbonates, Tennessee”, Irish Association for Economic Geology Weekend Course, Models for Carbonate-hosted Base Metal Deposits, Killarney, Ireland.

“Metallic deposits in the Gulf Coast Basin of southern North America: Diverse mineralization styles in a young sedimentary basin”, Irish Association for Economic Geology Weekend Course, Models for Carbonate-hosted Base Metal Deposits, Killarney, Ireland.

“Diverse styles of sediment-hosted mineralization in the Gulf Coast Basin”, Symposium on The Impact of New Ideas in Southeastern Geology on Ore Depositional Models, Geological Society of America Southeastern Section, Knoxville, TN.

“Pliocene porphyry-skarn Cu-Au deposits of the Ertsberg district, Irian Jaya, Indonesia”, Department of Geological Sciences, University of Texas at El Paso, El Paso, TX

“Pliocene porphyry-skarn Cu-Au deposits of the Ertsberg district, Irian Jaya, Indonesia”, Department of Geological Sciences, New Mexico State University, Las Cruces, NM.

“Pliocene porphyry-skarn Cu-Au deposits of the Ertsberg district, Irian Jaya, Indonesia”, Department of Earth Sciences, Tennessee Technological University, Cookeville, TN.

PUBLICATIONS

BOOKS & REPORTS:

- Gale, J. and others, Economic mineral resources of Texas, Bureau of Economic Geology, Report of Investigations (in development)
- Short, S., Kyle, J.R., Elliott, B.A., 2025, Compilation of geologic samples and information produced during historic minerals exploration in Texas, relevant to U.S. critical minerals resource assessment: Contract report for FY 2023, National Geological & Geophysical Data Preservation Program: University of Texas at Austin, Bureau of Economic Geology. (see Geochemical Analyses of Texas Rock Samples to Assess Critical Mineral Potential DOI: 10.5066/P13WXE4Y)
- Short, S., Elliott, B.A., Ugurhan, M., Kyle, J.R., 2024, Mineral resource potential for Brewster Ranches, Brewster County, Texas: Contract report for the Texas General Land Office, University of Texas at Austin, Bureau of Economic Geology, 83 p.
- Kyle B.J., Kyle J.R., 2024, Lithium mining and political institutions in Argentina, Bolivia, and Chile, *in* Hyles, J., ed., *The Americas Reach Out—Exchanges of Culture, Policy, and Goods from 1492 to the Future*, Ch. 16, Proceedings, Eugene Scassa Mock Organization of American States Conference: Cambridge Scholars Press, p. 228-259.
- Kyle, J.R., Hoffman, C., Short, S., Averett, A.R., Elliott, B.A., DeJarnett, B.B., 2024, Compilation of geologic samples and information produced during historic minerals exploration in Texas, relevant to U.S. critical minerals resource assessment: Contract report for FY 2021 and FY 2022, National Geological & Geophysical Data Preservation Program: University of Texas at Austin, Bureau of Economic Geology.
- Kyle, J.R., Paine, J.G., Elliott, B.A., and Childress, T.M., 2023, Opportunities and challenges for adaptive reuse of bauxite residue for U.S. critical minerals supply, geohazard reduction, and land restoration, Copano Bay, Texas: Progress report, University of Texas at Austin, Bureau of Economic Geology, 42 p., 14 figures, 4 tables.
- Elliott, B.A., DeJarnett, B.B., Kyle, J.R., Andrews, J.R., Averett, A.R., Childress, T.M., 2023, Contract report for FY 2019 and FY 2020, National Geological & Geophysical Data Preservation Program, NGDPP G19AS00009 & G20AS00008: Final Report prepared for NGGDPP: University of Texas at Austin, Bureau of Economic Geology, 46 p.

- Paine, J.G., Andrews, J.R., Morris, J.N., Saylam, K., Kyle, J.R., 2023, Airborne and ground surveys of the April 2023 Daisetta sinkhole, Liberty County, Texas: University of Texas at Austin, Bureau of Economic Geology, Open File Report 23-1, 19 p.
- Nicot, J-P., Hebel, A.K., Ritter, S.M., Walden, S., Baier, R., Galusky, P., Beach, J., Kyle, R., Symank, L., Breton, C., 2011, Current and projected water use in the Texas mining and oil and gas industry: Texas Water Development Board Contract No. 0904830939: University of Texas at Austin, Bureau of Economic Geology, 344 p.
- Tanner, A., Cliff, S., Kyle, J.R., 2010, The Mineral Industry of Texas: Area Reports – Domestic: U. S. Geological Survey Minerals Yearbook 2007, v. II, p. 46-0 – 46-7.
- Kyle, J.R., Editor-in-Chief, 1990 to 2003, Ore Geology Reviews: v. 6 - 23.
- Kyle, J.R., ed., 2000, Geology and historical mining, Llano Uplift region, central Texas: Austin Geological Society, Guidebook 20, 111 p.
- Kyle, J.R., ed., 2000, Exploration geochemistry: Ore Geology Reviews (Special Issue), v. 16, no. 3-4, p. 107-204.
- Kyle, J.R., ed., 1995, Mineral resources of the Gulf Coast salt dome province: Society of Economic Geologists, Guidebook Series, v. 24, 126 p.
- Kyle, J.R., 1994, The barite industry and resources of Texas: University of Texas at Austin, Bureau of Economic Geology, Mineral Resources Circular No. 85, 86 p.
- Kyle, J.R., Ulrich, M.R., 1993, A tour of salt dome cap rock features, WinnRock quarry, Winn Parish, Louisiana: Fossil analog of modern petroleum seeps associated with salt structures in the offshore Gulf: AAPG field trip guidebook, New Orleans Geological Society, 48 p.
- Coel, R.J., Crock, J.G., Kyle, J.R., 1991, Biogeochemical studies of gold in a placer deposit, Livengood, Alaska: Open-File Report 91-142, U. S. Geological Survey, 51 p.
- Kyle, J.R., ed., 1990, Industrial mineral resources of the Delaware Basin, Texas and New Mexico: Society of Economic Geologists, Guidebook Series, v. 8, 203 p.
- Posey, H.H., Kyle, J.R., eds., 1988, Fluid-rock interactions in the salt dome environment: Chemical Geology (Special Issue), v. 74, No.1/2, 188 p.
- Seni, S.J., Kyle, J.R., eds., 1986, Comparison of cap rocks, mineral resources, and surface features of salt domes in the Houston diapir province: Guidebook, Annual Meeting, Geological Society of America, 260 p.

OTHER MAJOR PUBLICATIONS:

- Williams, N.D., Kyle, J.R., A predictive exploration model for MVT Pb-Zn mineralization in Central Texas: Insights from the Southeast Missouri Lead District (in preparation).
- Kyle, J.R., Holt, J.W., Galloway, W., Dating the integration of the Rio Grande from the southern Rocky Mountains to the Gulf of Mexico (in preparation)
- Drumheller, S.K., Sumrall, C.D., Kyle, J.R., Crunchy on the outside, chewy on the inside: Evidence for vertebrate predation and recovery in the Mississippian blastoid *Pentremites spicatus*: *Lethaia* (in review).
- Scanlon, B.R., Reedy, R.C., Elliott, B.A., Hower, J.C., Kyle, J.R., Locmelis, M., Theaker, N., Warwick, P.D., Assessment of rare earth element potential in Gulf Coast coals and coal ash: *International Journal of Coal Science & Technology* (in review)
- Kyle, J.R., Paine, J.G., Elliott, B.A., Childress, T.M., Scanlon, B.R., Opportunities and challenges for adaptive reuse of bauxite residue for US critical minerals supply, geohazard reduction, and land restoration, Texas Gulf Coast, USA: *GSA Today* (in review)
- Kyle, J.R., Ugurhan, M., Elliott, B.A., Edey, D.R., Hoffman, C.P., Stein, H.J., Growth and physical transport of molybdenite spherules in a Na-Al-F-rich melt, Cave Peak porphyry Mo deposit, Texas, USA: *Geology* (in press)
- King, S.A., Ciobanu, C.L., Cook, N.J., Slattery, A.D., Gilbert, S.E., Kyle, J.R., Ehrig, K., Yao, J., 2025, The state and fate of noble metals in bornite and digenite: *Lithos*, v. 514-515, no. 108198, 22 p. doi.org/10.1016/j.lithos.2025.108198
- Kyle, J.R., Fall, A., Nicot, J.-P., 2025, Mississippi Valley-type mineralization in the Jurassic Smackover Formation, Gulf Coast Basin, USA: Controls on the origin of Zn-Pb-Ag systems in deep

- sedimentary basins: *Journal of Geochemical Exploration*, v. 277, 107807, 14 p.
doi.org/10.1016/j.gexplo.2025.107807
- Hoffman, C.P., Kyle, J.R., 2025, Opportunities and challenges for assessing critical mineral resource potential using legacy drilling results, Cave Peak porphyry Mo deposit, Texas, USA: *Natural Resources Research*, v. 34, p. 1987-2005. doi.org/10.1007/s11053-025-10484-z (shared link: <https://rdcu.be/elAQg>)
- Kyle, J.R., Gilg, H.A., Appold, M., 2024, Formation of an active giant non-sulfide zinc system, Jinding, China: Relations among tectonics, climate, and supergene metal remobilization: *Economic Geology*, v. 119, p. 1667-1684. doi:10.5382/econgeo.5110
- Reedy, R.C., Scanlon, B.R., Bagdonas, D.A., Hower, J.C., James, D., Kyle, J.R., Uhlman, K., 2024, Coal ash resources and potential for rare earth element production in the United States: *International Journal of Coal Science & Technology*, 11:74. doi.org/10.1007/s40789-024-00710-z
- Darvari, R., Nicot, J.-P., Scanlon, B.R., Kyle, J.R., Elliott, B.A., Uhlman, K., 2024, Controls on lithium content of oilfield waters in Texas and neighboring states: *Journal of Geochemical Exploration*, v. 257, no. 107363, 15 p. doi.org/10.1016/j.gexplo.2023.107363
- Ugurhan M., Elliott B.A., Kyle J.R., Stockli, D.S., Mathur, R., 2024, Geochemical evolution of the REE-enriched Cave Peak porphyry Mo deposit, Trans-Pecos Texas, USA: *Lithos*, v. 464-465, no. 107434, 20 p. doi.org/10.1016/j.lithos.2023.107434
- Kyle, J.R., Stockli, D.F., McBride, E.F., Elliott, B.A., 2023, Covering the Great Unconformity in southern Laurentia: Detrital zircon studies of provenance evolution during Cambrian marine transgression (Llano Uplift, Texas): *Geological Society of America Bulletin*, v. 135, p. 1163-1177. doi.org/10.1130/B36389.1.
- Kyle, J.R., Quintero, T.R., Ukar, E., Miller, N.R., Elliott, S.J., Colbert, M., 2023, Dolomite cement microstratigraphy: A record of brine evolution and ore precipitation mechanisms, upper Knox Group, Tennessee and Kentucky, USA: *Geology*, v. 51, p. 392–396. doi.org/10.1130/G50689.1
- Callahan, O.A, Eichhubl, P., Kyle, J.R., 2023, Factors influencing rock strength and fluid flow at the basement-sediment interface from field and core-based observations, Llano Uplift, Texas, in Callahan, O.A, and Eichhubl, P., eds., *The geologic basement of Texas: A volume in honor of Peter Flawn*: Bureau of Economic Geology, University of Texas at Austin, Report of Investigations 286, ch. 8, 28 p.. doi.org/10.23867/RI0286C8
- Catlos, E.J., Broska, I., Kohút, M., Etzel, T.M., Kyle, J.R., Stockli, D.F., Miggins, D.P., Campos, D., 2023, Geochronology, geochemistry, and geodynamic evolution of Tatric granites from crystallization to exhumation (Tatra Mountains, Western Carpathians): *Geologica Carpathica*, v. 73, p. 517-544. doi.org/10.31577/GeolCarp.73.6.1
- Ferraz da Costa, M., Kyle, J.R., Lobato, L.M., Ketcham, R.A., Figueiredo e Silva, R.M., Fernandes, R.C., 2022, Orogenic gold ores in three-dimensions: A case study of distinct mineralization styles at the world-class Cuiabá deposit, Brazil, using high-resolution X-ray computed tomography on gold particles: *Ore Geology Reviews*, v. 140. doi.org/10.1016/j.oregeorev.2021.104584
- Kyle, J.R., Elliott, B.A., 2021, Texas mineral resources within or affected by Proterozoic basement architecture, in Callahan, O.A, and Eichhubl, P., eds., *The geologic basement of Texas: A volume in honor of Peter Flawn*: Bureau of Economic Geology, University of Texas at Austin, Report of Investigations 286, ch. 4, 15 p. doi.org/10.23867/RI0286C4
- Villaseñor, G., Catlos, E.J., Broska, I., Kohút, M., Hraško, L., Aguilera, K., Etzel, T.M., Kyle, J.R., Stockli, D.F., 2021, Western Carpathian mid-Permian magmatism: Petrographic, geochemical, and geochronological data: *Data in Brief*, v. 36, #107026, 17 p. doi.org/10.1016/j.dib.2021.107026
- Villaseñor, G., Catlos, E.J., Broska, I., Kohút, M., Hraško, M., Aguilera, K., Etzel, T.M., Kyle, J.R., Stockli, D., 2021, Evidence for widespread mid-Permian magmatic activity related to rifting following the Variscan orogeny (Western Carpathians): *Lithos*, v. 390-391, #106083, 16 p. doi.org/10.1016/j.lithos.2021.106083
- Magnall, J.M., Gleeson, S.A., Creaser, R.A., Paradis, S., Glodny, J., Kyle, J.R., 2020, A sub-seafloor barite replacement model at Macmillan Pass (Yukon, Canada) – Implications for the deposit footprint of clastic-dominant (CD-type) Zn-Pb±Ba systems: *Economic Geology*, v. 115, p. 961–979. doi.org/10.5382/econgeo.4730

- Williams, N.D., Elliott, B.A., Kyle, J.R., 2020, A predictive geospatial exploration model for Mississippi Valley type Pb-Zn mineralization in the Southeast Missouri Lead District: *Natural Resources Research*, v. 29, p. 285-310. doi:10.1007/s11053-020-09618-2
- Leys, C., Schwarz, A., Cloos, M., Widodo, S., Kyle, J.R., Sirait, J., 2020, Grasberg Cu-Au-(Mo) deposit: product of two overlapping porphyry systems, in Sillitoe, R.H., and others, eds., *Geology of the World's Major Gold Deposits and Provinces: Society of Economic Geologists, Spec. Publ., Vol. 23*, ch. 29, p. 599-620. doi:10.5382/SP.23.29
- Piccione, G., Rasbury, E.T., Elliott, B.A., Kyle, J.R., Jaret, S.J., Acerbo, A.S., Lanzirotti, A., Northrup, P., Wootton, K., Parrish, R.R., 2019, Vein fluorite U-Pb dating demonstrates post-6.2 Ma rare earth element mobilization associated with Rio Grande rifting: *Geosphere*, v. 15, p. 1958–1972. doi.org/10.1130/GES02139.1.
- Caesar, K.H., Kyle, J.R., Lyons, T.W., Tripathi, A., Loyd, S.J., 2019, Salt dome cap rock calcite formation by the anaerobic oxidation of methane: *Nature Communications*, v. 10, article 808. doi.org/10.1038/s41467-019-08687-z
- Kyle, J.R., Elliott, B.A., 2019, Past, present, and future of Texas industrial minerals: *Mining, Metallurgy & Exploration*, v. 36, p. 475–486. doi.org/10.1007/s42461-019-0050-1
- Kyle, J.R., 2018, *Industrial Minerals of Texas: University of Texas at Austin, Bureau of Economic Geology, State Map Series, SM0011*. <https://store.beg.utexas.edu/state-maps/2146-sm0011.html>
- Wafforn, S., Seman, S., Kyle, J.R., Stockli, D., Leys, C., Sonbait, D., Cloos, M., 2018, Andradite garnet U/Pb geochronology of the Big Gossan skarn, Ertzberg-Grasberg Mining District, Indonesia: *Economic Geology*, v. 113, p. 769-778. doi: 10.5382/econgeo.2018.4569
- Kubač, A., Chovan, M., Koděra, P., Kyle, J.R., Žitňan, P., Lexa, J., Vojtko, R., 2018, Mineralogy of the epithermal precious and base metal deposit Banská Hodruša at the Rozália Mine (Slovakia): *Mineralogy and Petrology*, v. 112, p. 705-731. doi.org/10.1007/s00710-018-0558-y
- Kyle, J.R., Ahn, H., Gilg, H.A., 2018, Nature and origin of the nonsulfide Zn deposits in the Sierra Mojada district, Coahuila, Mexico: Constraints from regional geology, petrography, and isotope analyses: *Mineralium Deposita*, v. 53, p. 1095-1116. doi.org/10.1007/s00126-018-0797-1
- O'Neill, L.C., Elliott, B.A., Kyle, J.R., 2017, Mineralogy and crystallization history of a highly differentiated REE-enriched hypabyssal rhyolite: Round Top laccolith, Trans-Pecos, Texas: *Mineralogy and Petrology*, v. 111, p. 569-592. doi:10.1007/s00710-017-0511-5
- Elliott, B.A., Verma, R., Kyle, J.R., 2016, Prospectivity modeling for Cambrian-Ordovician hydraulic fracturing sand resources around the Llano Uplift, central Texas: *Natural Resources Research*, v. 25, p. 389-415. doi: 10.1007/s11053-016-9291-6
- Frelinger, S.N., Ledvina, M.D., Kyle, J.R., Zhao, D., 2015, Scanning electron microscopy cathodoluminescence of quartz: principles, techniques and applications in ore geology: *Ore Geology Reviews*, v. 65, p. 840-852. doi: org/10.1016/j.oregeorev.2014.10.008
- Kyle, J.R., Ketcham, R.A., 2015, Application of high resolution X-ray computed tomography to mineral deposit origin, evaluation, and processing: *Ore Geology Reviews*, v. 65, p. 821-839. doi: org/10.1016/j.oregeorev.2014.09.034
- Kyle, J.R., McBride, E.F., 2014, Geology of the Voca frac sand district, western Llano Uplift, Texas, in Conway, F.M., ed., *Proceedings, 48th Annual Forum on the Geology of Industrial Minerals: Arizona Geological Survey Special Paper 9, Chapter 2*, p. 1-13. http://repository.azgs.gov/uri_gin/azgs/dlio/1563
- Kyle, J.R., 2011, Geology of Texas industrial minerals, in Hunt, B. ed., *Austin Geological Society Bulletin*, v. 7, p. 29-43
- Becker, G.R., Kyle, J.R., 2011, Geographic Distribution of Metal and Industrial Minerals Occurrences in Trans-Pecos Texas and Border Regions: A Google Earth® Database and Compilation: University of Texas at Austin, Bureau of Economic Geology www.beg.utexas.edu/transpecos/index.htm
- Mills, S.E., Kyle, J.R., 2011, Relation of trace-metal concentrations to the luminescence of hydrothermal calcite veins, Batopilas Silver District, Chihuahua, Mexico, in Pennell, W. et al., eds., *Proceedings, Geological Society of Nevada 2010 Symposium: Great Basin Evolution and Metallogeny, Vol. 2*, p. 1111-1117.
- Clift, S., Kyle, J.R., 2008, Texas, in *Annual Review 2007: Mining Engineering*, v. 60, p. 120-122.

- Kyle, J.R., Mote, A.S., Ketcham, R.A., 2008, High resolution X-ray computed tomography studies of Grasberg porphyry Cu-Au ores: *Mineralium Deposita*, v. 43, p. 519-532. DOI 10.1007/s00126-008-0180-8
- Kyle, J.R., 2008, *Industrial Minerals of Texas*: Univ. Texas, Bur. Econ. Geol., Austin, State Map Series, SM0011.
- Clift, S., Kyle, J.R., 2007, Texas, *in Annual Review 2006: Mining Engineering*, v. 59, p. 113-115.
- (Kyle, J. Richard), 2007, *Using Material Resources*, *in Earth Sciences*, California: Holt Science and Technology, 6th grade textbook, p. 138-143.
- Mauk, J.L., Kyle, J.R., Simpson, M.P., Atkinson, P., 2006, Ore mineralogy of the BM37 shoot of the Karangahake deposit, New Zealand: *Proceedings, 39th Annual Conference of the New Zealand of the Australian Institute of Mining and Metallurgy*, p. 233-242.
- Clift, S., Kyle, J.R., 2006, Texas, *in Annual Review 2005: Mining Engineering*, v. 58, p. 114-115.
- Kyle, J.R., Ketcham, R.A., 2006, Contributions of high resolution X-ray computed tomography to industrial minerals, *in Reid, J.C., ed., Proceedings of the 42nd Forum on the Geology of Industrial Minerals: North Carolina Geological Survey, Information Circular 34 (CD-ROM), Powerpoint Presentation (2.1 Mb)*.
- Mote, A.S., Kyle, J.R., Ketcham, R.A., Melker, M.D., Jahraus, M.J., Brown, T.R., Wawrzyniec, T.F., 2005, High resolution X-ray computed tomography investigations of high-grade gold ore zones in the Cripple Creek District, Colorado, *in Rhoden, H.N. et al., eds., Geological Society of Nevada Symposium 2005: Window to the World Symposium*, Reno, Nevada, p. 1169-1175.
- Clift, S., Kyle, J.R., 2005, Texas, *in Annual Review 2004: Mining Engineering*, v. 57, p. 116-117.
- Kyle, J.R., Ketcham, R.A., Mote, A.S., 2004, Contributions of high resolution X-ray computed tomography to ore studies, *in Muhling, J., et al., eds., Extended Abstracts, Predictive Mineral Discovery Under Cover: Univ. Western Australia*, p. 387-390.
- Kesler, S.E., Chesley, J.T., Christensen, J.N., Hagni, R. D., Heijlen, W., Kyle, J.R., Misra, K.C., Muechez, P., van der Voo, R., 2004, Discussion of "Tectonic Controls of Mississippi Valley-type Lead-Zinc Mineralization in Orogenic Forelands" by D.C. Bradley and D.L. Leach: *Mineralium Deposita*, v. 39, p. 512-514. doi.org/10.1007/s00126-004-0422-3
- Clift, S., Kyle, J.R., 2004, Texas, *in Annual Review 2003: Mining Engineering*, v. 56, p. 93-94
- Kyle, J.R., Ketcham, R.A., 2003, In-situ distribution of gold in ores using high resolution X-ray computed tomography: *Econ. Geol.*, v. 98, p. 1697-1701. doi.org/10.2113/gsecongeo.98.8.1697
- Clift, S., Kyle, J.R., 2003, Texas, *in Annual Review 2002: Mining Engineering*, v. 55, no. 5, p. 94-95.
- Gilmer, A.K., Kyle, J.R., Connelly, J.N., Mathur, R.D., Henry, C.D., 2003, Extension of Laramide magmatism in southwestern North America into Trans-Pecos Texas: *Geology*, v. 31, p. 447-450.
- Kyle, J.R., Li, N., 2002, Jinding: A giant Tertiary sandstone-hosted Zn-Pb deposit, Yunnan, China: *Society of Economic Geologists Newsletter*, No. 50, p. 1, 9-16. doi.org/10.5382/SEGnews.2002-50.fea
- Kyle, J.R., 2002, A century of fire and brimstone: The rise and fall of the Frasch sulphur industry in the Gulf of Mexico basin, *in Scott, P.W., and Bristow, C.M., eds., Industrial Minerals and Extractive Industry Geology: Geological Society of London, Special Publication*, p. 189-198.
- Clift, S., Kyle, J.R., 2002, Texas, *in Annual Review 2001: Mining Engineering*, v. 54, no. 5, p. 80.
- Enos, J.S., Kyle, J.R., 2002, Diagenesis of the Carrizo Sandstone at Butler salt dome, East Texas Basin, U.S.A.: Evidence for fluid-sediment interaction near halokinetic structures: *Jour. Sed. Research*, v. 72, p. 72-85. doi.org/10.1306/061101720068
- Muzaffar, A., Kyle, J.R., Vendeville, B., 2001, Relation between sedimentation and diapirism at the Davis Hill salt dome, Liberty Co., Texas, *in Wyche, T., ed., Trans. Gulf Coast Assoc. Geol. Socs.*, v. 51, p. 249-257.
- Eastoe, C.J., Long, A., Land, L.S., Kyle, J.R., 2001, Stable chlorine isotopes in halite and brine from the Gulf Coast Basin: Brine genesis and evolution: *Chem. Geol.*, v. 176, p. 343-360. doi.org/10.1016/S0009-2541(00)00374-0
- Kyle, J.R., 2000, *The Geologic History of Texas: The Making of Texas over the Past 1.5 Billion Years*: Department of Geological Sciences, Outreach Lecture Series, v. 4 (CD-ROM), University of Texas at Austin. www.esi.utexas.edu/k-12-a-the-community/hot-science-cool-talks/lecture-archives/geologic-history-of-texas

- Kyle, J.R., 2000, Metallic mineral deposits and historical mining in the Llano region: Austin Geological Society, Guidebook 20, p. 49-63.
- Kyle, J.R., 1999, Industrial mineral resources associated with salt domes, Gulf of Mexico basin, U.S.A., *in* Johnson, K.S., ed., Proceedings of the 34th forum on the geology of industrial minerals: Oklahoma Geol. Surv., Circ. 102, p. 161-178.
- Misi, A., Iyer, S.S., Tassinari, C.C.G., Coelho, C.E., Kyle, J.R., Franca-Rocha, W.J.S., Gomes, A.S.R., Cunha, I.A., Carvalho, I.G., 1999, Geological and isotopic constraints on the metallogenic evolution of the Proterozoic sediment-hosted Pb-Zn (Ag) deposits of Brazil: *Gondwana Research*, v. 2, p. 47-65.
- Price, P.E., Kyle, J.R., 1998, Salt Dome Hosted Zn-Pb-Ag Deposits: Northwest Mining Association, Geology, Geophysics, Geochemistry and Economics of Silver Deposits, 10 p.
- Rubin, J.N., Kyle, J.R., 1998, The Gunung Bijih Timur (Ertsberg East) skarn complex, Irian Jaya, Indonesia: Geology and genesis of a large, magnesian Cu-Au skarn, *in* Lentz, D.R., ed., Mineralized Intrusion-related Skarn Systems: Geol. Assoc. Canada, Short Course Notes, v. 26, p. 245-288.
- Li, N., Kyle, J.R., 1997, Geologic controls of sandstone-hosted Zn-Pb-(Sr) mineralization, Jinding deposit, Yunnan Province, China: A new environment for sediment-hosted Zn-Pb deposits, *in* Rongfu, P., ed., Proceedings, 30th Int. Geol. Congress, v. 9: VSP, Amsterdam, p. 67-82.
- Kyle, J.R., Misi, A., 1997, Origin of Zn-Pb-Ag sulfide mineralization in Upper Proterozoic phosphate-rich carbonate strata, Irece Basin, Bahia, Brazil: *Int. Geol. Review*, v. 39, p. 383-399.
- Rubin, J.N., Kyle, J.R., 1997, Precious metal mineralogy in porphyry-, skarn-, and replacement-type ore deposits of the Ertsberg (Gunung Bijih) District, Irian Jaya, Indonesia: *Econ. Geol.*, v. 92, p. 335-350.
- Kyle, J.R., Saunders, J.A., 1996, Metallic deposits in the Gulf Coast Basin of southern North America: Diverse mineralization styles in a young sedimentary basin, *in* Sangster, D.F., ed., Proceedings, Soc. Econ. Geol., Intern. Conf. on Carbonate-hosted Lead-Zinc Deposits, p. 218-229.
- Jones, H.D., Kesler, S.E., Furman, F.C., Kyle, J.R., 1996, Sulfur isotope geochemistry of southern Appalachian Mississippi Valley-type deposits: *Econ. Geol.*, v. 91, p. 355-367.
- Kyle, J.R., 1995, Origin of barite and sulfur deposits in the Delaware Basin: *West Texas Geol. Soc. Bull.* v. 35, p. 5-16 (discussion in v. 35, p. 5-12).
- Kesler, S.E., Appold, M.S., Martini, A.M., Walter, L.M., Huston, T.J., Kyle, J.R., 1995, Na-Cl-Br systematics of mineralizing brines in Mississippi Valley-type deposits: *Geology*, v. 23, p. 641-644.
- Kyle, J.R., Saunders, J.A., 1995, Nature and origin of mineral resources in the Gulf Coast Basin: *Soc. Econ. Geol., Guidebook Series*, v. 24, p. 3-29.
- Kyle, J.R., Ulrich, M.R., 1995, Geology of Winnfield dome, Winn Parish, Louisiana: *Soc. Econ. Geol., Guidebook Series*, v. 24, p. 31-65.
- Spera, S.J., Kyle, J.R., 1995, Preliminary petrographic and isotopic investigation of the Main Pass 299 cap rock-hosted sulfur deposit: *Soc. Econ. Geol., Guidebook Series*, v. 24, p. 85-96.
- Kesler, S.E., Jones, H.D., Furman, F.C., Sassen, R., Anderson, W.H., Kyle, J.R., 1994, Role of crude oil in the genesis of Mississippi Valley-type deposits: Evidence from the Cincinnati Arch: *Geology*, v. 22, p. 609-612.
- Posey, H.H., Kyle, J.R., Agee, W.N., 1994, Relations between diapiric salt structures and metal concentrations, Gulf Coast sedimentary basin, southern North America, *in* Fontboté, L., and Boni, M., eds., *Sediment-hosted Zn-Pb Ores*: Springer-Verlag, Berlin, p. 139-164.
- Mertig, H.J., Rubin, J.N., Kyle, J.R., 1994, Skarn Cu-Au orebodies of the Gunung Bijih (Ertsberg) district, Irian Jaya, Indonesia: *Jour. Geochem. Expl.*, v. 50, p. 179-202.
- Misi, A., Kyle, J.R., 1994, Upper Proterozoic carbonate stratigraphy, diagenesis, and stromatolitic phosphorite formation, Irecê Basin, Bahia, Brazil: *Jour. Sed. Research: Section A: Sedimentary Petrology and Processes*, v. A64, p. 299-310.
- Gose, W., Kyle, J.R., 1993, Paleomagnetic dating of sulfide mineralization and cap rock formation in Gulf Coast salt domes, *in* Aissaoui, D.M., McNeill, D.F., and Hurley, N.F., eds., *Applications of Paleomagnetism to Sedimentary Geology*: Soc. Sed. Geol. (SEPM), Spec. Publ. 49, p. 157-166.

- Nakai, S., Halliday, A.N., Kesler, S.E., Jones, H.D., Kyle, J.R., Lane, T.E., 1993, Rb-Sr dating of sphalerites from Mississippi Valley type (MVT) ore deposits: *Geochim. Cosmochim. Acta.*, v. 57, p. 417-428.
- Jones, H.D., Kesler, S.E., Spry, P.G., Richardson, C.K., Kyle, J.R., Anderson, W.H., Furman, F.C., 1992, Determination of the limits of Mid-continental brine flow by sulfur isotopes from Mississippi Valley-type deposits, *in* Goldhaber, M.B., and Eidel, J.J.(eds.), *Mineral Resources of the Illinois Basin in the context of basin evolution*: U. S. Geol. Survey, Open-File Report 92-0001, p. 32-33, chart.
- Misi, A., Kyle, J.R., 1992, Dados isotópicos de enxôfre em sulfetos e sulfatos da Bacia de Irecê: Contribuição ao conhecimento da gênese das concentrações de sulfetos, *in* Proceedings, I Simpósio Regional de Geologia Bahia-Sergipe, Salvador, Bahia, p. 150-154.
- Vasconcelos, P.M., Kyle, J.R., 1992, Supergene geochemistry and crystal morphology of gold in a semi-arid weathering environment: Application to gold exploration: *Jour. Geochem. Explor.*, v. 40, p. 115-132.
- Kyle, J.R., 1991, Evaporites, evaporative processes, and mineral resources, *in* Melvin, J.L., ed., *Evaporites, Petroleum, and Mineral Resources*: Elsevier, Amsterdam, p. 477-533.
- Kyle, J.R., Posey, H.H., 1991, Halokinesis, cap rock development, and salt dome mineral resources, *in* Melvin, J.L., ed., *Evaporites, Petroleum, and Mineral Resources*: Elsevier, Amsterdam, p. 413-474.
- Kyle, J.R., 1990, Geologic history and mineral resources development of the northern Trans-Pecos region, Texas and New Mexico: *Soc. Econ. Geol., Guidebook Series*, v. 8, p. 85-96.
- Kyle, J.R., 1990, Geology of the barite deposits of the Delaware Basin, west Texas: *Soc. Econ. Geol., Guidebook Series*, v. 8, p. 163-180.
- Kyle, J.R., Clark, K.F., 1990, Geology of the Allamoore talc district, west Texas: *Soc. Econ. Geol., Guidebook Series*, v. 8, p. 181-190.
- Rubin, J.N., Price, J.G., Henry, C.D., Kyle, J.R., 1990, Geology of the beryllium-rare earth element deposits at Sierra Blanca, west Texas: *Soc. Econ. Geol., Guidebook Series*, v. 8, p. 191-203.
- Cumming, G.L., Kyle, J.R., Sangster, D.F., 1990, Pine Point: A case history of lead isotope homogeneity in a Mississippi Valley-type district: *Econ. Geol.*, v. 85, p. 133-144.
- Hallager, W.S., Ulrich, M.R., Kyle, J.R., Price, P.E., Gose, W.A., 1990, Evidence for episodic basin dewatering in salt dome cap rocks: *Geology*, v. 18, p. 716-719.
- Kyle, J.R., Agee, W.N., Johnson, T.W., Shanks, W.C., III, 1990, Sulfur isotope evidence for the origin of cap rock-hosted sulfide deposits, Hockley salt dome, Texas: *U. S. Geol. Surv. Circ.* 1060, p. 46-48.
- Fisher, R.S., Posey, H.H., Kyle, J.R., 1989, Successive pore fluid generations in a Lower Permian brine aquifer, Palo Duro Basin, Texas Panhandle, U.S.A.: *Applied Geochem.*, v. 4, p. 455-464.
- Gose, W. A., Kyle, J.R., Farr, M.R., 1989, Direct dating of salt diapir growth by means of paleomagnetism, *in* Gulf Coast Salt Tectonics, Associated Processes, and Exploration Potential, Society of Economic Paleontologists and Mineralogists, Gulf Coast Section, p. 48-53.
- Sassen, R., McCabe, C., Kyle, J.R., Chinn, E.W., 1989, Deposition of magnetic pyrrhotite during alteration of crude oil and reduction of sulfate: *Organic Geochem.*, v. 14, p. 381-392.
- Posey, H.H., Kyle, J.R., 1988, Fluid-rock interactions in the salt dome environment: an introduction and review: *Chem. Geol.*, v. 74, p. 1-24.
- Kyle, J.R., Agee, W.N., 1988, Evolution of metal ratios and $\delta^{34}\text{S}$ composition of sulfide mineralization during anhydrite cap rock formation, Hockley dome, Texas, U.S.A.: *Chem. Geol.*, v. 74, p. 37-55.
- Prikryl, J.D., Posey, H.H., Kyle, J.R., 1988, A petrographic and geochemical model for the origin of calcite cap rock at Damon Mound salt dome, Texas, U.S.A.: *Chem. Geol.*, v. 74, p. 67-97.
- Kyle, J.R., Gutierrez, G.N., 1988, Origin of the Indian Creek sandstone-hosted lead deposits, southeast Missouri, USA: *Proceedings of the Seventh IAGOD Symposium, Lulea, 1986*: E. Schweizerbart'sche, Stuttgart, p. 669-684.
- Sharp, J.M., Jr., Kyle, J.R., 1988, The role of ground-water processes in the formation of ore deposits, *in* Back, W., Rosenshein, J.S., and Seaber, P.R., eds., *Hydrogeology: The Geology of North America*, v. O-2, Geol. Soc. Amer., Boulder, ch. 47, p. 461-483.
- Rubin, J.N., Kyle, J.R., 1988, Mineralogy and geochemistry of the San Martín skarn deposit, Zacatecas, Mexico: *Econ. Geol.*, v. 83, p. 1782-1801.

- Barrie, C.T, Kyle, J.R., 1988, Geology, geochemistry, and tectonic setting of the Khayyam and Stumble-On massive sulfide deposits, Prince of Wales Island, Alaska: *Econ. Geol.*, v. 83, p. 182-196.
- Posey, H.H., Kyle, J.R., Jackson, T.J., Hurst, S.D., Price, P.E., 1987, Multiple fluid components of salt diapirs and salt dome cap rocks, Gulf Coast, U.S.A.: *Applied Geochem.*, v. 2, p. 523-534.
- Kyle, J.R., Ulrich, M.R., Gose, W.A., 1987, Textural and paleomagnetic evidence for the mechanism and timing of anhydrite cap rock formation, Winnfield salt dome, Louisiana, *in* Lerche, I, and O'Brien, J.J., eds., *Dynamical Geology of Salt and Related Structures*: Academic Press, Orlando, p. 497-542.
- Light, M.P.R., Posey, H.H., Kyle, J.R., Price, P.E., 1987, Model for the origins of geopressed brines, hydrocarbons, cap-rocks, and metallic mineral deposits, Gulf Coast, U.S.A., *in* Lerche, I, and O'Brien, J.J., eds., *Dynamical Geology of Salt and Related Structures*: Academic Press, Orlando, p. 787-830.
- Posey, H.H., Price, P.E., Kyle, J.R., 1987, Mixed carbon sources for calcite cap rocks of Gulf Coast salt domes, *in* Lerche, I., and O'Brien, J.J., eds., *Dynamical Geology of Salt and Related Structures*: Academic Press, Orlando, p. 593-630.
- Kyle, J.R., 1986, Nature and controls of sulfide mineralization, K57 orebody, Pine Point Pb-Zn district, Canada, *in* Janelidze, T., et al., eds., *Proceedings of the Sixth IAGOD Symposium*, Tbilisi, 1982: *NAUKA*, Moscow, v. 1, p. 68-77.
- Kyle, J.R., Price, P.E., 1986, Sulfide mineralization in salt dome cap rocks of the Houston diapir province, *in* Seni, S.J., and Kyle, J.R., eds., *Comparison of cap rocks, mineral resources, and surface features of salt domes in the Houston diapir province*: Guidebook, 1986 Geol. Soc. Amer. Ann. Meeting, p. 43-63.
- Kyle, J.R., Agee, W.N., Walter, T.G., Price, P.E., 1986, Geology and sulfide mineralization of Hockley dome, *in* Seni, S.J., and Kyle, J.R., eds., *Comparison of cap rocks, mineral resources, and surface features of salt domes in the Houston diapir province*: Guidebook, 1986 Geol. Soc. Amer. Ann. Meeting, p. 169-184.
- Prikryl, J.D., Kyle, J.R., 1986, Nature and origin of the Damon Mound cap rock, *in* Seni, S.J., and Kyle, J.R., eds., *Comparison of cap rocks, mineral resources, and surface features of salt domes in the Houston diapir province*: Guidebook, 1986 Geol. Soc. Amer. Ann. Meeting, p. 119-146.
- Kyle, J.R., Price, P.E., 1986, Metallic sulphide mineralization in salt-dome cap rocks, Gulf Coast, U.S.A.: *Trans. Instn. Min. Metall.*, v. 95, Sect. B, p. B6-B16.
- Price, P.E., Kyle, J.R., 1986, Genesis of salt dome-hosted metallic sulfide deposits: the role of hydrocarbons and related fluids, *in* Dean, W. E., ed., *Proceedings of the Symposium on Organics and Ore Deposits*: Denver Region Exploration Geologists Society, p. 171-184.
- Gose, W.A., Kyle, J.R., Ulrich, M.R., 1985, Preliminary paleomagnetic investigations of the Winnfield salt dome cap rock, Louisiana, *in* Ewing, T., ed., *Trans. Gulf Coast Assoc. Geol. Socs.*, v. 35, p. 97-106.
- Kyle, J.R., Price, P.E., 1985, Mineralogical investigation of sulfide concentrations in the Hockley salt dome cap rock, Texas, *in* Park, W. C., et al., eds., *Applied Mineralogy: Metallurgical Society of AIME*, p. 1065-1082.
- Standen, A.R., Kyle, J.R., 1985, Geologic characteristics of the Scotia-Vanderbilt vein, Silverton, Colorado: implications for epithermal precious metal exploration in volcanic settings, *in* Park, W. C., et al., eds., *Applied Mineralogy: Metallurgical Society of AIME*, p. 1051-1063.
- Ulrich, M.R., Kyle, J.R., Price, P.E., 1984, Metallic sulfide deposits in the Winnfield salt dome, Louisiana: evidence for episodic introduction of metalliferous brines during cap rock formation, *in* White, B.R., ed., *Trans. Gulf Coast Assoc. Geol. Socs.*, v. 34, p. 435-442.
- Masterson, W.D., Kyle, J.R., 1984, Geological, geochemical, stable isotope, and fluid inclusion characteristics of epithermal gold mineralization, Velvet district, Nevada: *Jour. Geochem. Expl.*, v. 20, p. 55-74.
- Price, P.E., Kyle, J.R., 1983, Metallic sulfide deposits in Gulf Coast salt dome cap rocks, *in* Bograd, M. B.E., ed., *Trans. Gulf Coast Assoc. Geol. Socs.*, v. 33, p. 189-193.
- Price, P.E., Kyle, J.R., Wessel, G.R., 1983, Salt dome related zinc-lead deposits, *in* Kisvarsanyi, G., et al., eds., *Proceedings, International Conference on Mississippi Valley Type Lead-Zinc Deposits*: Univ. Missouri-Rolla, p. 558-571.

- Kyle, J.R., 1983, Temporal and spatial aspects of mineralization in the K57 orebody, Pine Point district, Northwest Territories, Canada, *in* Kisvarsanyi, G., et al., eds., Proceedings, International Conference on Mississippi Valley Type Lead-Zinc Deposits: Univ. Missouri-Rolla, p. 338-345.
- Smith, N.G., Kyle, J.R., Magara, K., 1983, Geophysical log documentation of fluid migration from compacting shales: a mineralization model from the Devonian strata of the Pine Point area, Canada: *Econ. Geol.*, v. 78, p. 1364-1374.
- Kyle, J.R., 1983, Economic aspects of subaerial exposure of carbonate strata, *in* Scholle, P., et al., eds., Carbonate Depositional Environments: Am. Assoc. Petrol. Geol. Memoir 33, p. 73-92.
- Kyle, J.R., 1981, Geology of the Pine Point lead-zinc district, *in* Wolf, K.H., ed., Handbook of Stratiform and Strata-bound Ore Deposits: Elsevier, v. 9, ch. 11, p. 643-741.
- Kyle, J.R., 1980, Controls of sulfide mineralization, Pine Point lead-zinc district, Northwest Territories, Canada, *Min. Eng.*, v. 32, p. 1617-1626. (Robert Peele award)
- Kyle, J.R., 1976, Brecciation, alteration, and mineralization in the Central Tennessee zinc district: *Econ. Geol.*, v. 71, p. 892-903.

PUBLISHED ABSTRACTS OF PRESENTATIONS (Selected presentations 2010 to date)

- Elliott BA, Short SR, Kyle JR, 2026, Heavy minerals mine waste from Central Texas sand mines: A potential source for critical minerals: Soc. Min. Metall. Expl. Annual Meeting, Salt Lake City, Utah
- Short SR, Elliott BA, Kyle JR, 2026, Re-evaluating historic graphite resources in the Central Texas graphite district: Soc. Min. Metall. Expl. Annual Meeting, Salt Lake City, Utah
- Elliott BA, Kyle JR, Scanlon BR, Short SR, 2025, Alumina processing waste from the U.S. Gulf Coast: A potential source for critical minerals: *Geol. Soc. Amer.*, Abstracts with Program, v. 57.
- Short SR, Elliott BA, Kyle JR, 2025, Mineralogical characterization of legacy graphite resources in the Central Texas graphite district: *Geol. Soc. Amer.*, Abstracts with Program, v. 57.
- Short SR, Elliott BA, Kyle JR, 2025, Historic resources and critical mineral opportunities in the central Texas graphite district: Critical Minerals Workshop, University of Texas at Austin.
- Elliott BA, Short SR, Kyle JR, 2025, Critical mineral potential in heavy minerals from industrial sand mines, central Texas: Critical Minerals Workshop, University of Texas at Austin.
- Ugurhan M, Kyle JR, Elliott BA, 2025, Mineralogy and geochemistry of REE-enriched cryolite-molybdenite melt in a porphyry molybdenum deposit, Trans-Pecos Texas, USA: Soc. Econ. Geol. Conference, Brisbane, Australia
- King SA, Ciobanu CL, Cook NJ, Kyle JR, Ehrig K, 2025, The state and fate of noble metals in bornite and digenite: Soc. Econ. Geol. Conference, Brisbane, Australia
- Rasbury ET, et al., 2025, Synchrotron U-XAS and U-Pb dating of fluorite: Insights into the role of F in U transport: Goldschmidt Conference, Prague, Czech Republic
- Revillon S, et al., 2025, Refining Middle to Late Jurassic evaporite stratigraphy of the Mexican Gulf of Mexico through a strontium isotope stratigraphy (SIS) approach: Geogulf 25, Program and Abstracts.
- Elliott BA, Kyle JR, 2024, Critical mineral potential of the Gulf Coast region (Keynote, Critical Minerals Session): 40th Annual GCSSEPM Foundation Perkins-Rosen Research Conference
- Short SR, et al., 2024, Application of satellite and airborne remote sensing techniques to assess critical mineral potential in Trans-Pecos Texas: *Geol. Soc. Amer.*, Abstracts with Program, v. 56 (accepted, withdrawn)
- Ugurhan M, et al., 2024, Molybdenite spherules in Na-Al-F-rich melt, Cave Peak porphyry Mo deposit, Trans-Pecos Texas: Evidence for growth and physical transport of metal sulfides in magmatic systems: *Geol. Soc. Amer.*, Abstracts with Program, v. 56
- Darvari R, et al., 2024, Lithium in oilfield waters in Texas and neighboring states: Geogulf 24, Program and Abstracts.
- Paine JG et al., 2024, Ground and airborne surveys to determine size, identify precursors, and assess growth potential after the April 23 Daisetta sinkhole collapse, southeastern Texas: SAGEEP 2024, Abstracts with Program.

- Elliott BA, Kyle JR, 2023, Critical element potential of Tertiary intrusive complexes in the Trans-Pecos region of Texas: A comparison of the silica-undersaturated alkaline Cornudas Complex: Geol. Soc. Amer., Abstracts with Program, v. 55
- Paine JG, et al., 2023, Some quick, helpful, and low-risk things that can be done when a major sinkhole forms: Ground and airborne surveys after the April 2023 Daisetta sinkhole collapse, southeastern Texas: Geol. Soc. Amer., Abstracts with Program, v. 55
- Reedy R, et al., 2023, Evaluation of coal resources and rare element levels in the U.S. Gulf Coast: Geol. Soc. Amer., Abstracts with Program, v. 55
- Ugurhan M, et al., 2023, Geology, geochemistry, and geochronology of the REE-enriched Cave Peak porphyry Mo deposit, Trans-Pecos Texas: Geol. Soc. Amer., Abstracts with Program, v. 55
- Kyle JR, Elliott BA, 2023, Industrial mineral resources of the Llano Uplift, central Texas: 59th Forum on the Geology of Industrial Minerals, Abstracts with Program.
- Elliott BA, Kyle JR, 2023, Geology of Texas industrial minerals: 59th Forum on the Geology of Industrial Minerals, Abstracts with Program.
- Reedy R, et al., 2022, Characterization of coal resources in the U.S. Gulf Coast and Rare Earth Element potential: Geol. Soc. Amer., Abstracts with Programs, v. 54
- Childress TM, Kyle JR, 2022, Mantle-derived volatile-rich fluids induced HREE enrichment of previously differentiated Precambrian crust to form the Round Top Laccolith, Trans-Pecos, Texas: Soc. Econ. Geol. Conference: Minerals for our Future
- Catlos EJ, et al., 2022, Geochronology, geochemistry, and geodynamic evolution of Tatric granites from crystallization to exhumation (Tatra Mountains, Western Carpathians): XXII International Congress of the CBGA, Plovdiv, Bulgaria, Program with Abstracts
- Kyle BJ, Kyle JR, 2021, Lithium mining and political institutions in Argentina, Bolivia, and Chile: The Eugene Scassa Mock Organization of American States Program Academic Conference, "The Americas Reach Out—Exchanges of Culture, Policy, and Goods from 1492 to the Future", San Antonio, Texas
- Kyle JR, Childress TM, Paine JG, 2021, Waste not, want not: Potential contributions to U.S. critical minerals supply from expatriated bauxite residue: GeoGulf 2021, Critical elements for renewable energy and storage, Austin, Texas
- Edey DR, Kyle JR, Ugurhan M, Childress TM, 2021, Analysis of molybdenite grain shapes in an igneous matrix using Dragonfly@: Tomography for Scientific Advancement (ToScA) symposium, Program with Abstracts.
- Kyle JR, 2020, Texas state industrial minerals geologic map: 56th Forum on the Geology of Industrial Minerals, Georgia.
- Kyle JR, 2020, Adaptive reuse of central Texas industrial mineral production sites: Long-lived developments whose time has come: 56th Forum on the Geology of Industrial Minerals, Georgia.
- Ferraz M, Kyle JR, Lobato LM, Ketcham RA, Figueiredo e Silva RC, 2020, Three-dimensional studies of gold ore using high resolution X-ray CT: the case of quartz-carbonate veins hosted in the lower metamafic unit at the world-class Cuiabá deposit, Brazil: Simexmin, Brazilian Symposium on Mineral Exploration, Ouro Preto, Minas Gerais, Brazil (postponed).
- Ferraz M, Kyle JR, Lobato LM, Ketcham RA, Figueiredo e Silva RC, 2020, Orogenic gold in three-dimensions: case study of distinct mineralization styles at the world-class Cuiabá deposit, Brazil: Soc Econ Geologists, Whistler, British Columbia, Canada (postponed).
- Villasenor G, Catlos EJ, Elliott BA, Kohut M, Broska I, Etzel T, Kyle JR, Stockli D, 2020, Timing of rifting in the Central Western Carpathians post-Variscan orogeny and ages of sediments overlying Meliata Ocean ophiolites (Slovakia): Geol. Soc. Amer., South Central Section, Abstracts with Program, v. 52
- Elliott BA, Kyle, JR, 2020, Critical Element Potential in the Trans-Pecos Igneous Belt of west Texas, USA: 36th International Geologic Congress, Dei, India (invited, postponed)
- Quintero T, Kyle JR, Miller N, Ukar E, 2020, Solution-Collapse Breccia Development and Cementation in the Lower Ordovician Upper Knox Group, Central Tennessee: AAPG annual meeting, Houston (accepted, meeting cancelled)
- Kyle JR, Elliott BA, 2019, Past, present, and future of Texas industrial minerals: Mining Engineering, v. 71, no. 5, p. 71-72.

- Kyle BJ, Kyle JR, 2019, Opportunity for development or one more resource curse? Lithium mining and political institutions in Argentina, Bolivia, and Chile: Latin American Studies Association, "Nuestra América: Justice and Inclusion", Economics and Development, Boston, MA
- Kyle JR, 2019, University of Texas at Austin thesis sample collections at the Bureau of Economic Geology, Austin Core Research Center: UT Faculty/Researcher Works, University of Texas Libraries, DSpace <https://hdl.handle.net/2152/73562>
- Ferraz M, Kyle JR, Lobato LM, Ketcham RA, Vitorino ALA, Figueiredo e Silva RC, 2019, High resolution X-ray computed tomography studies of gold-bearing quartz-carbonate veins hosted in the lower metamafic unit at the world-class Cuiabá Deposit, Brazil: South American Gold Deposits and Metallogeny session, South American Metallogeny meeting, Soc Econ Geol., Santiago, Chile
- Elliott BA, Kyle JR, 2019, Economic potential of industrial minerals from oilfield brines in Texas: Association of Engineering Geologists, Annual Meeting, Program with Abstracts, p. 81.
- Callahan OA, Eichubl P, Kyle JR, Zahm C, Hennings PH, 2019, Factors influencing rock strength and fluid flow at the basement-sediment interface from field- and core-based observations, Llano Uplift, Texas: Geol. Soc. Amer., Abstracts with Programs, v. 51
- Elliott BA, Ugurhan M, Kyle JR, 2019, Characterization of the Marble Canyon and Cave Peak granitoids in Trans-Pecos, Texas: Insights into the petrogenesis of high-silica Y+REE-enriched magmas: Geol. Soc. Amer., South-Central/North-Central/Rocky Mtn section meeting
- Piccione GG, Rasbury ET, Elliott BA., Kyle JR, Jaret SJ, Acerbo A, Lanzirotti A, Northrup P, Wooten K, Parrish RR, 2019, Geochemistry and U-Pb dating of fluorite and nacrite from the Round Top rhyolite: Constraints on magmatism and tectonism in Trans-Pecos Texas: Geol. Soc. Amer., South-Central/North-Central/Rocky Mtn section meeting
- Wooten KM, Kyle JR, Rasbury ET, 2018, U-Pb dating of Knox dolomitization: Placing a maximum age constraint on mineralization at Sweetwater, eastern Tennessee: Goldschmidt Conference
- Kyle JR, Ukar E, Garcia R, Miller NR, Fall A., 2018, Structural diagenetic evolution and correlation of mineralized solution-collapse breccias, Lower Ordovician Knox Group, Tennessee-Kentucky: FRAC consortium annual meeting, Abstracts with Program
- Loyd SJ, Kyle JR, Tripathi AE, 2018, Microbial versus thermochemical methane oxidation-coupled sulfate reduction in salt dome environments of the Gulf Coast USA: Insights from clumped isotope geochemistry: AGU annual meeting.
- Drumheller, SK, Sumrall, CD, Kyle, JR, 2018, Crunchy on the outside, chewy on the Inside: Evidence for Vertebrate Predation and Recovery in the Mississippian Blastoid *Pentremites spicatus*: Geological Society of America, Abstracts with Programs, v. 51.
- Catlos, EJ, Tandon, S, Etzel, TM, Kohút, M, Broska, I, Elliott, BA, Stockli, D, Kyle, JR, Aguilera, K, Yin, Z, 2018, Comparing *in situ* U-Pb zircon and Th-Pb monazite ages from High Tatra granitoids, Slovakia: Central European Mineralogical Conference
- Ugurhan M, Elliott BA, Kyle JR, and Stockli D, 2018, Timing and characterization of the Cave Peak porphyry molybdenum deposit, Culberson County, Texas: Soc. Econ. Geol. Meeting (accepted, withdrawn)
- Kyle JR, Wright KA, Ketcham RA, Miller NR, 2018, High resolution X-ray computed tomography studies of gold-Cu sulfide relationships in the Grasberg Porphyry Cu-Au Deposit, Papua, Indonesia: 15th International Association on the Genesis of Ore Deposits Symposium, Proceedings, p. 248-249.
- Wooten, KM, Kyle, JR, Rasbury, ET, 2018, U-Pb dating of Knox dolomitization: Placing a maximum age constraint on mineralization at Sweetwater, eastern Tennessee: Goldschmidt Conference
- Kyle, JR, 2018, Constraining 500 million years of fluid-rock interactions, Lower Ordovician Knox Group, Tennessee-Kentucky: Geol. Soc. Amer., Abstracts with Programs, v. 50.
- Kyle JR, Garcia R, Miller NR, 2018, Solution-collapse breccia development and multi-scale protracted pore-filling, Lower Ordovician Knox Group, Tennessee-Kentucky: Geological Society of America, Abstracts with Programs, v. 50.
- Kyle JR, 2018, Geology of the central Texas industrial sand district, Llano Uplift, Texas: Program with Abstracts, 54th Forum on the Geology of Industrial Minerals, p. 30
- Kyle JR, Elliott BA, 2018, Geology of Texas industrial minerals: Program with Abstracts, 54th Forum on the Geology of Industrial Minerals, p. 6-7
- Kyle JR, Garcia R, Miller NR, 2017, Solution-collapse breccia development and multi-scale protracted

- pore-filling, Lower Ordovician Knox Group, Tennessee-Kentucky: SEPM Mountjoy Carbonate Research Conference, Carbonate Pore Systems, Abstracts with Program, p. 83.
- Wright KA, Ketcham, RA, Kyle, JR, 2017, Correlating Cu-Fe sulfides and Au mineralization in the Ertsberg-Grasberg district of Papua, Indonesia using high-resolution x-ray computed tomography: Modified Voronoi Regions in Cu-Sulfide Pathways: Tomography for Scientific Advancement (ToScA) symposium, Program with Abstracts, p. 35.
- Wafforn S, Stockli DF, Seman S, Kyle JR, Cloos M, Stockli, LD, 2017, Andradite garnet U-Pb geochronology by LA-ICP-MS: Procedures, standardization, and mineral exploration case studies: North American Workshop on Laser Ablation, Program with Abstracts, p. 31.
- Kyle JR, Miller N, 2017, LA-ICP-MS analysis of hydrothermal dolomites: Revisiting cement microstratigraphy in carbonate breccias: North American Workshop on Laser Ablation, Program with Abstracts, p. 71.
- Wright KA, Miller NR, Kyle JR, 2017, Correlating Cu-Fe sulfides and Au mineralization in the Ertsberg-Grasberg district of Papua, Indonesia using LA-ICP-MS: Comparing bornite, chalcopyrite, and native gold trace element variation: North American Workshop on Laser Ablation, Program with Abstracts, p. 79.
- Wafforn S, Seman S, Kyle JR, Stockli DF, Cloos, M, 2017, Andradite garnet U-Pb geochronology of the Big Gossan skarn, Ertsberg-Grasberg mining district, Papua, Indonesia: Round-up Meeting, Vancouver.
- Yin Z, Tandon S, Aguilera KN, Etzel TN, Catlos EJ, Elliott BA, Kyle, JR, 2017, Lessons learned from an international research experience from the underrepresented student perspective: Geol. Soc. Amer., Abstracts with Programs, v. 49.
- Williams, N., and Kyle, J.R., 2016, Toward an efficient predictive model for MVT mineralization in central Texas: Insights from the southeast Missouri lead district: Geol. Soc. Amer., Abstracts with Programs, v. 48
- Kyle, J.R., 2016, Texas industrial mineral and metal resources – A Permian Basin perspective: Bulletin, West Texas Geological Society:
- Wright, K.A., Miller, N.R., Ketcham, R.A., Kyle, J.R., 2016, Correlating Cu-sulfide and Au mineralization in the Ertsberg-Grasberg District using LA-ICP-MS and HRXCT: AGU Annual Meeting
- Kyle, J.R., 2016, Role of stratigraphic inheritance in controlling stratabound metal concentrations in carbonate strata: MVT to skarn systems: Geol. Soc. Amer., Abstracts with Programs, v. 48
- Wright, K.A., Miller, N.R., Ketcham, R.A., Kyle, J.R., 2016, Correlating Cu-sulfide and Au mineralization in the Ertsberg-Grasberg District using LA-ICP-MS and HRXCT: Geol. Soc. Amer., Abstracts with Programs, v. 48
- Young, D.J., Ledvina, M.D., Kyle, J.R., 2016, Characterizing the structure, mineralogy, and paragenetic sequence of sheeted quartz veins in the Ertsberg East Skarn System, Papua, Indonesia: Geol. Soc. Amer., Abstracts with Programs, v. 48
- Caesar, K.H., Kyle, J.R., Lyons, T.W., Loyd, S.J., 2016, Sulfate-dependent anaerobic oxidation of methane as a generation mechanism for calcite cap rock in Gulf Coast salt domes: GSA Cordilleran section meeting, Ontario, CA, April 4-6.
- Caesar, K., Kyle, R., Lyons, T., Loyd, S.J., 2016, Sulfate-dependent anaerobic oxidation of methane as a generation mechanism for calcite cap rock in Gulf Coast salt domes, USA: CSUF Geology Research Day, Fullerton, CA, April 22.
- Caesar, K., Kyle, R., Lyons, T., Loyd, S.J., 2016, Sulfate-dependent anaerobic oxidation of methane as a generation mechanism for calcite cap rock in Gulf Coast salt domes, USA: Oral, Invited: Southern California Geobiology Symposium, Pasadena, CA, May 7.
- Loyd, S.J., Lu, L., Caesar, K.H., Kyle, R., 2015, Depleted $\delta^{13}\text{C}$ values in salt dome cap rock organic matter and implications for microbial metabolism and fixation: AGU annual meeting.
- Caesar, K.H., Kyle, R., Loyd, S.J., 2015, Sulfate-dependent anaerobic oxidation of methane as a generation mechanism for calcite cap rock in Gulf Coast salt domes: AGU annual meeting.
- Caesar, K.H., Kyle, J.R., Loyd, S.J., 2015, Geochemical modeling of the role of sulfate in the precipitation of calcite cap rocks for Gulf of Mexico salt domes: Geol. Soc. Amer., Abstracts with Programs, v. 47.

- Hill, J.M., Kyle, J.R., Caesar, K.H., Loyd, S.J., 2015, Petrographic and isotopic evidence for microbial influence in the origin of the Boling salt dome calcite cap rock, Houston Diapir Province, Texas: Geol. Soc. Amer., Abstracts with Programs, v. 47 (best poster Energy Minerals Division)
- Elliott, B.A., Verma, R., Kyle, J.R., 2015, Industrial sand resources of central Texas: 51st Forum on the Geology of Industrial Minerals, Program with Abstracts
- Caesar, K.H., Kyle, J.R., Loyd, S.J., 2015, Identification of sulfate reduction as a mechanism for salt dome cap rock formation: 12th Annual Southern California Geobiology Symposium, University of California, Riverside.
- Kyle, J. R., 2015, Applications of high resolution X-ray computed tomography in economic geology: Geol. Soc. Amer., Abstracts with Programs, v. 47.
- Kyle, J. R., Ledvina, M., Frelinger, S., 2015, A record of Cu-Au mineralizing fluids over a 2-km vertical range in the Ertzberg East Skarn System, Ertzberg-Grasberg District, Papua, Indonesia, *in* Banks, D.(ed.), ECROFI XXIII Abstracts, Leeds, UK, p. 88-89.
- Elliott, B., Kyle, J. R., 2014, Mineral resources of Texas: American Mining and Exploration Association, Program, 120th annual meeting
- Elliott, B., O'Neill, L. C., Kyle, J. R., 2014, Magmatic evolution and hydrothermal alteration of the REE-enriched Round Top rhyolite laccolith in the Trans-Pecos region of Texas: Geol. Soc. Amer., Abstracts with Programs, v. 46.
- Ledvina, M., Kyle, J. R., 2014, Investigating the pathways and P-T-X conditions of hydrothermal fluid flow responsible for Cu-Au mineralization in the Ertzberg East Skarn System, Papua, Indonesia: International Association on the Genesis of Ore Deposits, Kunming, China: Acta Geologica Sinica, v. 88, p. 578-579.
- Kyle, J. R., Gandler, L., Mertig, H., Rubin, J., Ledvina, M., 2014. Stratigraphic inheritance controls of skarn-hosted metal concentrations: Ore controls for Ertzberg-Grasberg District Cu-Au skarns, Papua, Indonesia (Keynote presentation): International Association on the Genesis of Ore Deposits, Kunming, China: Acta Geologica Sinica, v. 88, p. 529-531.
- Frelinger, S., Kyle, J. R., Elliott, B., Gilmer, A. K., Stockli, D., 2014, Scanning electron microscopy - cathodoluminescence of vein quartz from the Red Hills porphyry Mo-Cu deposit, west Texas: Geol. Soc. Amer., 2014 Conference, Program and Extended Abstracts.
- Ledvina, M., Kyle, J. R., 2014, Investigating the pathways and P-T-X conditions of hydrothermal fluid flow responsible for Cu-Au mineralization in the Ertzberg East Skarn System, Papua, Indonesia: Round Up, Vancouver
- O'Neill, L. C., Kyle, J. R., Elliott, B.E., 2014, REE-Be-U-enriched fluorite mineralization of the Round Top and Little Round Top laccoliths, Sierra Blanca Peaks, Trans-Pecos Texas: Round Up, Vancouver
- Kyle, J. R., 2013, Role of stratigraphic inheritance in controlling stratabound base metal concentrations in carbonate strata: MVT to skarn systems: Geol. Soc. Amer., Abstracts with Programs, v. 45.
- Frelinger, S., Kyle, J. R., 2013, Stockwork fracturing and veining history of the Red Hills porphyry Mo-Cu deposit, Trans-Pecos Texas: Geological Society of America, Abstracts with Programs, v. 45.
- Elliott, B., O'Neill, L. C., Kyle, J. R., 2013, Magmatic evolution of the early Tertiary rhyolite and associated intrusive rocks of Sierra Blanca and Round Top in the Trans-Pecos Region of Texas: Geol. Soc. Amer., Abstracts with Programs, v. 45.
- Saunders, J., Kyle, J. R., Reed, M., 2013, Formation of base metal and silver sulfide occurrences in Gulf Coast salt dome cap rocks from formation fluids: Geol. Soc. Amer., Abstracts with Programs, v. 45.

- Rasbury, E.T., Parrish, R. R., Austin-Gidding, W., Lanzirrotti, A., Tomascak, P., Kyle, J.R., 2013, U-Pb dating of carbonates and fluorite: Prospects for understanding fluids from deposition through burial (invited lecture, frontiers in geochronology session), Goldschmidt Conference.
- Kyle, J. R., Gilmer, A., Rambaud, F., Frelinger, S., 2013, Fluid inclusion and other evidence for the relation of porphyry Cu-Mo and carbonate-replacement Ag-Pb-Zn mineralization, Red Hills-Shafter district, west Texas, U.S.A., *in* Hanilci N. and Bozkaya G. (eds.), ECROFI XXII Abstracts, Antalya, Turkey, p. 118-119.
- McBride, E. F., Kyle, J. R., 2013, Geology of the Late Cambrian Hickory Sandstone in the Voca Frac Sand District, western Llano Uplift, Texas: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 45.
- O'Neill, L. C., Kyle, J. R., Elliott, B., 2013, REE-Be-U-enriched fluorite mineralization of the Round Top and Little Round Top laccoliths, Sierra Blanca Peaks, Trans-Pecos Texas: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 45.
- Kyle, J. R., Gilmer, A. K., Vasconcelos, P. M., Galloway, W., 2013, Late Neogene tectonic history of the Presidio Bolson and the integration of the Rio Grande from Trans-Pecos Texas to the Gulf of Mexico: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 45.
- Kyle, J. R., Gilmer, A. K., Vasconcelos, P. M., 2012, Pliocene supergene weathering and exhumation history of the Red Hills porphyry Cu-Mo system and the tectonic history of the Presidio Bolson, Trans-Pecos Texas: Geol. Soc. Amer., Abstracts with Programs, v. 44
- O'Neill, L. C., Bloch, E. A., Kyle, J. R., 2012, REE-Be-U-enriched fluorite mineralization of the Round Top laccolith-Cretaceous limestone contact zone, Sierra Blanca Peaks, Trans-Pecos Texas: Geol. Soc. Amer., Abstracts with Programs, v. 44
- Gryger, S. M., Kyle, J. R., 2012, Stratigraphy of a Mesozoic platform-basin margin, Sierra Mojada, western Coahuila, Mexico: Gulf Coast Association of Geological Societies, Austin, TX
- Kyle, J. R., 2012, Role of stratigraphic inheritance in controlling calc-silicate alteration and Cu-Au mineralization, Ertzberg-Grasberg District, Papua, Indonesia: Society of Economic Geologists, 2012 Conference, Lima, Peru (extended abstract and poster)
- Kyle, J. R., Becker, G. R., 2012, Industrial mineral occurrences in Trans-Pecos Texas and border regions: A Google Earth® database and compilation: 48th Forum on the Geology of Industrial Minerals, Program with Abstracts.
- Kyle, J. R., McBride, E. F., 2012, Geology of the Voca Frac Sand District, western Llano Uplift, Texas: 48th Forum on the Geology of Industrial Minerals, Program with Abstracts.
- Kyle, J. R., 2012, Sierra Mojada Ag-Pb-Zn District, Coahuila: An endmember carbonate replacement mineralization system?: Cordilleran Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- Lyons, J. I., Kallstrom, M., Kyle, J. R., 2012, Metallogeny of the Batopilas native silver-calcite vein district, Chihuahua, Mexico: Cordilleran Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- Ahn, H. I., Kyle, J. R., Miller, N. R. 2012, Mineralogy and geochemistry of the non-sulfide Zn deposits, Sierra Mojada district, Coahuila, Mexico: Cordilleran Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- Becker, G. R., Kyle, J. R., 2012, Geographic distribution of metal and industrial mineral occurrences in Trans-Pecos Texas and border regions: A Google Earth® database and compilation: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- Rambaud, F.M., Head, J. A., Kyle, J. R., 2012, Controls of carbonate-replacement Ag-Pb-Zn mineralization, Shafter district, Presidio County, Texas: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- Kyle, J. R., Gilmer, A. K., Vasconcelos, P. M., 2012, Laramide magmatism in Trans-Pecos Texas: Geologic history of the Red Hills intrusive center, Presidio County, Texas: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- O'Neill, L. C., Bloch, E. A., Kyle, J. R., 2012, REE-Be-U-enriched fluorite mineralization of the Round Top laccolith-Cretaceous limestone contact zone, Sierra Blanca Peaks, Trans-Pecos Texas: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- Ahn, H. I., Kyle, J. R., Miller, N. R. 2012, Mineralogy and geochemistry of the non-sulfide Zn deposits, Sierra Mojada district, Coahuila, Mexico: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.

- Gryger, S. M., Kyle, J. R., 2012, Stratigraphy of a Mesozoic platform-basin margin, Sierra Mojada, western Coahuila, Mexico: South-Central Section, Geol. Soc. Amer., Abstracts with Programs, v. 44.
- Kyle, J.R., 2011, Exploration potential for Pb-dominant Mississippi Valley Type deposits in central Texas: Austin Geological Society, Newsletter.
- Hanson, C.M., Kyle, J.R., Lassiter, J.C., 2011, Isotopic stratigraphy and fluid tracing in the Gunung Bijih skarn, Ertzberg district, Papua, Indonesia: Geol. Soc. Amer., Abstracts with Programs, v. 43,
- Kyle, J. R., 2010, Exploration potential of central Texas for Pb-dominant MVT deposits: Society of Economic Geologists 2010 Conference – The Challenge of Finding New Mineral Resources, Keystone, CO (extended abstract and poster)
- Ahn, H., Kyle, J. R., Gilg, H. A., Miller, N., Kolvoord, R., 2010. Mineralogy and geochemistry of the non-sulfide Zn deposits in the Sierra Mojada district, Coahuila, Mexico: Society of Economic Geologists 2010 Conference – The Challenge of Finding New Mineral Resources, Program and Extended Abstracts, p. 35.
- Kyle, J. R., Housh, T., 2010, The Central Texas Lead District: Geologic, geochemical, and genetic comparisons to the supergiant MVT deposits of southeast Missouri: Geol. Soc. Amer., Abstracts with Programs, v. 42, p. 54.
- Mills, S. E., Kyle, J. R., 2010, Impact of trace metal concentrations on the luminescence of hydrothermal calcite veins, Batopilas Mining District, Chihuahua, Mexico: Geological Society of Nevada 2010 Symposium, Program with Abstracts, p. 65.
- Kyle, J. R., 2010, Fluid inclusion studies of Mississippi Valley Type Zn-Pb-Ag sulfides in the Jurassic Smackover Formation, Gulf of Mexico Basin, U.S.A.: Pan American Current Research on Fluid Inclusions X, Abstracts with Program, p. 49-50.

PUBLISHED ABSTRACTS OF PRESENTATIONS (1973-2009, additional 144)