

William A. Thomas EXECUTIVE SUMMARY OF CURRICULUM VITAE

Visiting Scientist, Geological Survey of Alabama

James S. Hudnall Professor Emeritus of Geology, University of Kentucky

Professional experience:

1959–1963, petroleum geologist with major oil company.

1963–2010, teaching geology at five institutions.

2010–present, geological research with state geological survey.

Summary of publications and presentations:

More than 180 published articles and guidebooks, more than 140 in peer-reviewed publications.

More than 6,900 citations listed in Google Scholar; h-index = 42; 13 articles with >100 citations each.

More than 200 published abstracts; more than 120 presentations at professional meetings.

Invited seminar speaker at more than 50 institutions and organizations.

Research (current activities and selected publications):

Detrital zircons as indicators of provenance and sediment dispersal pathways.

- Late Paleozoic continent-wide sediment dispersal patterns across Laurentia to test whether sediment from Appalachian sources reached the present location of Grand Canyon, supported by NSF with co-PI George Gehrels.

- Clastic sediment and identity of the accreted Suwannee and Sabine terranes adjacent to the southern Appalachian and Ouachita foreland basins, research in progress with Paul Mueller.

Thomas, W. A., Gehrels, G. E., Sundell, K. E., Greb, S. F., Finzel, E. S., Clark, R. J., Malone, D. H., Hampton, B. A., and Romero, M. C., 2020, Detrital zircons and sediment dispersal in the eastern Midcontinent of North America: *Geosphere*, v. 16, <https://doi.org/10.1130/GES02152.1>.

Thomas, W. A., Gehrels, G. E., Lawton, T. F., Satterfield, J. I., Romero, M. C., and Sundell, K. E., 2019, Detrital zircons and sediment dispersal from the Coahuila terrane of northern Mexico into the Marathon foreland of the southern Midcontinent: *Geosphere*, v. 15, p. 1102-1127. <https://doi.org/10.1130/GES02033.1>.

Thomas, W. A., Gehrels, G. E., Greb, S. F., Nadon, G. C., Satkoski, A. M., and Romero, M. C., 2017, Detrital zircons and sediment dispersal in the Appalachian foreland: *Geosphere*, v. 13, p. 2206-2230.

Thomas, W. A., Gehrels, G. E., and Romero, M. C., 2016, Detrital zircons from crystalline rocks along the Southern Oklahoma fault system, Wichita and Arbuckle Mountains, USA: *Geosphere*, v. 12, p. 1224-1234.

Mueller, P. A., Heatherington, A. L., Foster, D. A., **Thomas, W. A.**, and Wooden, J. L., 2014, The Suwannee suture: Significance for Gondwana-Laurentia terrane transfer and formation of Pangaea: *Gondwana Research*, v. 26, p. 365-373.

Thomas, W. A., 2011, Detrital-zircon geochronology and sedimentary provenance: *Lithosphere*, v. 3, p. 304-308. [143 citations in Google Scholar]

Thomas, W. A., Becker, T. P., Samson, S. D., and Hamilton, M. A., 2004, Detrital zircon evidence of a recycled orogenic foreland provenance for Alleghanian clastic-wedge sandstones: *Journal of Geology*, v. 112, p. 23-37.

Continental rifting, rift-related intracratonic faults, and tectonic inheritance.

- Tectonic history of continental rifting, especially the Iapetan rifted margin of Laurentia (North America) and the rifting of the Argentine Precordillera from Laurentia.
- Tectonic inheritance during successive Wilson cycles of breakup and assembly of supercontinents
- Crustal-scale seismic survey of the rift-parallel intracratonic Mississippi Valley graben, supported by NSF EarthScope in collaboration with University of Memphis. This research has evolved into a hypothesis for concentration of intraplate earthquakes into major seismic zones, such as New Madrid.

Thomas, W. A., 2019, Tectonic inheritance at multiple scales during more than two complete Wilson cycles recorded in eastern North America: *Geological Society of London Special Publications* 470, p. 337-352. doi.org/10.1144/SP470.4.

Thomas, W. A., and Powell, C. A., 2017, Necessary conditions for intraplate seismic zones in North America: *Tectonics*, v. 36, p. 2903-2917, doi.org/10.1002/2017TC004502

Powell, C. A., and **Thomas, W. A.,** 2016, Grenville basement structure associated with the Eastern Tennessee seismic zone: *Geology*, v. 44, p. 39-42.

Thomas, W. A., 2014, A mechanism for tectonic inheritance at transform faults of the Iapetan margin of Laurentia: *Geoscience Canada*, v. 41, p. 321-344.

Thomas, W. A., 2014, The Southern Oklahoma transform-parallel fault system, *in* Suneson, N. H., ed., *Igneous and Tectonic History of the Southern Oklahoma Aulacogen*: Oklahoma Geological Survey Guidebook 38, p. 375-387.

Thomas, W. A., 2011, The Iapetan rifted margin of southern Laurentia: *Geosphere*, v. 7, p. 97-120.

Thomas, W. A., 2006, Tectonic inheritance at a continental margin [2005 Geological Society of America Presidential Address]: *GSA Today*, v. 16, no. 2, p. 4-11. [324 citations in Google Scholar]

Thomas, W. A., 1993, Low-angle detachment geometry of the late Precambrian-Cambrian Appalachian-Ouachita rifted margin of southeastern North America: *Geology*, v. 21, p. 921-924.

Thomas, W. A., 1991, The Appalachian-Ouachita rifted margin of southeastern North America: *Geological Society of America Bulletin*, v. 103, p. 415-431. [385 citations]

Thomas, W. A., 1977, Evolution of Appalachian-Ouachita salients and recesses from reentrants and promontories in the continental margin: *American Journal of Science*, v. 277, p. 1233-1278. [493 citations]

Thomas, W. A., 1976, Evolution of Ouachita-Appalachian continental margin: *Journal of Geology*, v. 84, p. 323-342.

Transverse zones, lateral ramps, and mushwads in foreland thrust belts.

- Structural geometry of lateral ramps and transverse zones in thrust belts.
 - Effects of thick weak-layer rocks and the evolution of mushwads in thrust belts.
 - Geologic mapping and construction of balanced structural cross sections in the Appalachian thrust belt for publications in the Quadrangle Series at the Geological Survey of Alabama.
- Cook, B. S., and **Thomas, W. A.,** 2020 (in press), Three-dimensional model of a mushwad and its implications for the evolution of an Appalachian subrecess in northwestern Georgia, *in*

- Avary, K. L., Hasson, K. O., and Diecchio, R. J., eds., *The Appalachian Geology of John M. Dennison: Geological Society of America Special Paper 545*, [https://doi.org/10.1130/2019.2545\(12\)](https://doi.org/10.1130/2019.2545(12)).
- Thomas, W. A.**, 2019, Evolution of the concept and structure of a MUSHWAD: *Journal of Structural Geology*, v. 125, p. 311-318. doi.org/10.1016/j.jsg.2018.05.001.
- Thomas, W. A.**, Irvin, G.D., and Osborne, W. E., eds., 2017, *The Anniston transverse zone in the Appalachian thrust belt: Alabama Geological Society, Fifty-Fourth Annual Field Trip Guidebook*, 78 p.
- Thomas, W. A.**, 2011, Cambrian-Devonian stratigraphy along the Southwest Montana transverse zone and tectonic history of the Willow Creek fault system: *Montana Bureau of Mines and Geology, Geologic Map 55*, 39 p., 1 plate.
- Thomas, W. A.**, 2010, Interactions between the southern Appalachian–Ouachita orogenic belt and basement faults in the orogenic footwall and foreland: *Geological Society of America Memoir 206*, p. 897-916.
- Thomas, W. A.**, Kanda, R. V. S., O’Hara, K. D., and Surlis, D. M., 2008, Thermal footprint of an eroded thrust sheet in the southern Appalachian thrust belt, Alabama, USA: *Geosphere*, v. 4, p. 814-828.
- Thomas, W. A.**, 2007, Balancing tectonic shortening in contrasting deformation styles through a mechanically heterogeneous stratigraphic succession: *Geological Society of America Special Paper 433*, p. 277-290.
- Thomas, W. A.**, 2007, Role of the Birmingham basement fault in thin-skinned thrusting of the Birmingham anticlinorium, Appalachian thrust belt in Alabama: *American Journal of Science*, v. 307, p. 46-62.
- Thomas, W. A.**, and Bayona, G., 2005, *The Appalachian thrust belt in Alabama and Georgia: thrust-belt structure, basement structure, and palinspastic reconstruction: Geological Survey of Alabama Monograph 16*, 48 p., 2 plates.
- Thomas, W. A.**, and Bayona, G., 2002, Palinspastic restoration of the Anniston transverse zone in the Appalachian thrust belt, Alabama: *Journal of Structural Geology*, v. 24, p. 797-826.
- Thomas, W. A.**, 2001, Mushwad: Ductile duplex in the Appalachian thrust belt in Alabama: *American Association of Petroleum Geologists Bulletin*, v. 85, p. 1847-1869.
- Thomas, W. A.**, 1990, Controls on locations of transverse zones in thrust belts: *Eclogae Geologicae Helveticae*, v. 83, p. 727-744.
- Thomas, W. A.**, 1966, Late Mississippian folding of a syncline in the western Appalachians, West Virginia and Virginia: *Geological Society of America Bulletin*, v. 77, p. 473-494.
- Terrane transfer of the Argentine Precordillera from Laurentia to Gondwana.**
- Thomas, W. A.**, Astini, R. A., Mueller, P. A., and McClelland, W. C., 2015, Detrital-zircon geochronology and provenance of the Oclroyic synorogenic clastic wedge, and Ordovician accretion of the Argentine Precordillera terrane: *Geosphere*, v. 11, p. 1749-1769.
- Thomas, W. A.**, Tucker, R. D., Astini, R. A., and Denison, R. E., 2012, Ages of pre-rift basement and synrift rocks along the conjugate rift and transform margins of the Argentine Precordillera and Laurentia: *Geosphere*, v. 8, p. 1366-1383.
- Thomas, W. A.**, and Astini, R. A., 2007, Vestiges of an Ordovician west-vergent thin-skinned thrust belt in the Argentine Precordillera, southern Central Andes: *Journal of Structural Geology*, v. 29, p. 1369-1385.

- Thomas, W. A.**, Astini, R. A., Mueller, P. A., Gehrels, G. E., and Wooden, J. L. 2004, Transfer of the Argentine Precordillera terrane from Laurentia: Constraints from detrital-zircon geochronology: *Geology*, v. 32, p. 965-968.
- Thomas, W. A.**, and Astini, R. A., 2003, Ordovician accretion of the Argentine Precordillera terrane to Gondwana: A review: *Journal of South American Earth Sciences*, v. 16, p. 67-79. [205 citations in Google Scholar]
- Thomas, W. A.**, Astini, R. A., and Denison, R. E., 2001, Strontium isotopes, age, and tectonic setting of Cambrian salinas along the rift and transform margins of the Argentine Precordillera and southern Laurentia: *Journal of Geology*, v. 109, p. 231-246.
- Thomas, W. A.**, and Astini, R. A., 1999, Simple-shear conjugate rift margins of the Argentine Precordillera and the Ouachita embayment of Laurentia: *Geological Society of America Bulletin*, v. 111, p. 1069-1079.
- Thomas, W. A.**, and Astini, R. A., 1996, The Argentine Precordillera: A traveler from the Ouachita embayment of North American Laurentia: *Science*, v. 273, p. 752-757. [280 citations]

Subsidence history of orogenic foreland basins.

- Distributions of time and magnitude of foreland subsidence as record of tectonic loading along the Appalachian-Ouachita foreland.
 - Quantitative three-dimensional subsidence history of the Black Warrior basin in the Ouachita foreland at the intersection with the Appalachian thrust belt.
- Mars, J. C., and **Thomas, W. A.**, 1999, Sequential filling of a late Paleozoic foreland basin: *Journal of Sedimentary Research*, v. 69, p. 1191-1208.
- Thomas, W. A.**, and Whiting, B. M., 1995, The Alabama promontory: Example of the evolution of an Appalachian-Ouachita thrust-belt recess at a promontory of the rifted continental margin, *in* Hibbard, J. P., van Staal, C. R., and Cawood, P. A., eds., *Current perspectives in the Appalachian-Caledonian orogen*: Geological Association of Canada Special Paper 41, p. 3-20.
- Thomas, W. A.**, 1988, The Black Warrior basin, *in* Sloss, L. L., ed., *Sedimentary cover--North American craton*: U. S.: Geological Society of America, *The Geology of North America*, v. D-2, p. 471-492, Plate 8. [124 citations in Google Scholar]
- Thomas, W. A.**, and Mack, G. H., 1982, Paleogeographic relationship of a Mississippian barrier-island and shelf bar system (Hartselle Sandstone) in Alabama to the Appalachian-Ouachita orogenic belt: *Geological Society of America Bulletin*, v. 93, p. 6-19.

Appalachian-Ouachita orogenic belt beneath the Gulf Coastal Plain.

- Construction of balanced cross sections, using seismic reflection data, of the Appalachian and Ouachita thrust belts beneath the Gulf Coastal Plain. Integration of regional stratigraphy and thrust-belt structure, using data from deep wells in coordination with seismic reflection profiles.
- Thomas, W. A.**, 1989, The Appalachian-Ouachita orogen beneath the Gulf Coastal Plain between the outcrops in the Appalachian and Ouachita Mountains, *in* Hatcher, R. D., Jr., **Thomas, W. A.**, and Viele, G. W., eds., *The Appalachian-Ouachita orogen in the United States*: Geological Society of America, *The Geology of North America*, v. F-2, p. 537-553.
- Thomas, W. A.**, Viele, G. W., Arbenz, J. K., Nicholas, R. L., Denison, R. E., Muehlberger, W. R., and Tauvers, P. R., 1989, Tectonic map of the Ouachita orogen, *in* Hatcher, R. D., Jr., **Thomas, W. A.**, and Viele, G. W., eds., *The Appalachian-Ouachita orogen in the United States*: Geological Society of America, *The Geology of North America*, v. F-2, Plate 9.

- Viele, G. W., and **Thomas, W. A.**, 1989, Tectonic synthesis of the Ouachita orogenic belt, *in* Hatcher, R. D., Jr., **Thomas, W. A.**, and Viele, G. W., eds., The Appalachian-Ouachita orogen in the United States: Geological Society of America, The Geology of North America, v. F-2, p. 695-728. [230 citations in Google Scholar]
- Thomas, W. A.**, 1985, The Appalachian-Ouachita connection: Paleozoic orogenic belt at the southern margin of North America: Annual Review of Earth and Planetary Sciences, v. 13, p. 175-199. [103 citations]
- Thomas, W. A.**, 1973, Southwestern Appalachian structural system beneath the Gulf Coastal Plain: American Journal of Science, Cooper Volume, v. 273A, p. 372-390.
- Thomas, W. A.**, 1972, Regional Paleozoic stratigraphy in Mississippi between Ouachita and Appalachian Mountains: American Association of Petroleum Geologists Bulletin, v. 56, p. 81-106.

Highlights of professional activities:

- invited keynote speaker, Arthur Holmes Meeting, The Wilson cycle: Plate tectonics and structural inheritance during continental deformation: Geological Society of London (2016)
- plenary speaker, EarthScope–GeoPRISMS Workshop: Eastern North America (2011)
- Treasurer, Council of Scientific Society Presidents (2008), Past-Treasurer (2009)
- Executive Board, Council of Scientific Society Presidents (2007)
- President, Geological Society of America (2004-2006), Past-President (2006-2007)
- keynote speaker, EarthScope Workshop: Mid-America (2004)
- lead author with contributions by 29 others, 2004, *Meeting Challenges with Geologic Maps*: American Geological Institute, Environmental Awareness Series 7, 64 p.
- presented papers at international symposia, in Germany (1999), Scotland (2000), Switzerland (2001), Uruguay (2001), New Zealand (2002), Argentina (2005), Norway (2008), Canada (2010 and 2011), England (2016)
- presented testimony to hearing on H.R. 1528, the National Geological Mapping Reauthorization Act of 1999; United States House of Representatives, Committee on Resources, Subcommittee on Energy and Mineral Resources, Washington, D.C. (1999)

Summary of advising of graduate students:

University of Alabama

- 1979-1990, advised and directed thesis research of 15 graduate students who completed M.S. degrees
- 1984-1990, advised and directed dissertation research of 2 graduate students who completed Ph.D. degrees [the first two degrees awarded by the Ph.D. program, which was initiated in 1984]
- both Ph.D. students received University Outstanding Research Assistant Awards, Robert A. Hines (1987), Benjamin A. Ferrill (1988)

University of Kentucky

- 1991-2010, advised and directed thesis research of 10 graduate students who completed M.S. degrees; co-advisor of 1 additional M.S. student
- 1991-2011, advised and directed dissertation research of 12 graduate students who completed Ph.D. degrees; co-advisor of 2 additional Ph.D. students
- two Ph.D. students received Graduate School Dissertation Enhancement Awards, Germán Bayona (2001), Thomas P. Becker (2003); one Ph.D. student received Graduate School Visiting Distinguished Faculty Award for dissertation defense, Germán Bayona (2003)

William A. Thomas

CURRICULUM VITAE

Visiting Scientist, Geological Survey of Alabama
James S. Hudnall Professor Emeritus of Geology, University of Kentucky

Education:

B.S.	Geology	University of Kentucky	1956
M.S.	Geology	University of Kentucky	1957
Ph.D.	Geology	Virginia Polytechnic Institute	1960

Professional Experience:

2010-	Geological Survey of Alabama , Visiting Scientist
1991-2010	University of Kentucky , Department of Geological Sciences, Department of Earth and Environmental Sciences, 1991-2010 Professor; James S. Hudnall Professor, 2001-2010 1991-1997; Chair of Department 2006-2009
1997-1998; 2004-2005	Geological Survey of Alabama Visiting Scientist
1979-1990	University of Alabama , Department of Geology, Professor
1987	Cornell University , Institute for the Study of the Continents, Visiting Scientist
1972-1979	Georgia State University , Department of Geology, Professor and Chair of Department
1970-1972	Queens College of City University of New York , Department of Earth and Environmental Sciences, 1970-1972 Associate Professor 1971-1972 Chair of Department
1963-1970	Birmingham-Southern College , Department of Geology, 1963-1968 Associate Professor 1968-1970 Professor 1967-1970 Chair of Department
1969-1970	Geological Survey of Alabama , Visiting Scientist
1959-1963 1959-1960	The California Company (now Chevron), geologist, development geologist; well evaluation and field development in Louisiana, Mississippi, and Florida; Jackson, Mississippi
1960-1961	executive assistant; development geology, Gulf Coast region; New Orleans, Louisiana
1961-1963	exploration geologist; subsurface Jurassic of Gulf Coastal Plain; Jackson, Mississippi
summer, 1957	The California Company , summer geologist; Devonian-Mississippian stratigraphy of southwestern Montana; Billings, Montana
summer, 1956	The California Company , summer geologist; structural mapping in Cretaceous of northwestern Colorado; Grand Junction, Colorado

Professional Awards and Honors:

Burnum Distinguished Faculty Award, University of Alabama, 1987

Distinguished Service Award, Geological Society of America, 1988

Distinguished Service Award, Alabama Geological Society, 2005

Distinguished Alumnus Award, Department of Geological Sciences,
University of Kentucky, 2005

Technical Program Session: Evolution of Appalachian-Ouachita salients and recesses from reentrants [embayments] and promontories in the continental margin: Thirtieth anniversary celebration of advances derived from Bill Thomas' 1977 American Journal of Science paper, Annual Meeting of the Geological Society of America, 2007

Best Paper Award, Structural Geology and Tectonics Division, Geological Society of America, 2008

Marcus Milling Legendary Geoscientist Medal, American Geosciences Institute, 2018

Professional Organizations:

Geological Society of America, Fellow

General Chair, Annual Meeting in Atlanta, Georgia, 1980

Special Publications Study Committee, Vice-Chair, 1980-1981

Committee on Membership, Member, 1981-1983, Chair, 1982-1983

Editor, *Geological Society of America Bulletin*, 1981-1988

Committee on Publications, Member, 1981-1988; Chair, 1985-1986

Committee on Committees, Member, 1983

Councilor, 1984-1986

Committee on Nominations, Member, 1989

Vice Chair, Southeastern Section, 1989-1990

General Chair, Southeastern Section Meeting in Tuscaloosa, Alabama, 1990

Committee on Penrose Medal Award, Member, 1992-1994

Chair, Southeastern Section, 1992-1993

Southeastern Section Committee on Nominations, Chair, 1993-1994

Structural Geology and Tectonics Division Committee on Career Contribution Award,
Member, 1994-1996; Chair, 1996

Sedimentary Geology Division Committee on Nominations, Chair, 1998

Vice President, 2003-2004

President, 2004-2006

Past-President, 2006-2007

Associated and Allied Societies, Chair, 2003-2007

Programmatic Overview Committee, Member, 2003-2007; Chair, 2006; Member, 2008

Budget Committee, Member, 2003-2006

Finance Committee, Member 2003-2007

Presiding Officer of Executive Committee and Council, 2004-2006

Membership Committee, Member, 2005
 Education Committee, Member, 2006-2007
 Ad Hoc Committee on Academic Accreditation, Chair, 2006-2008
 Committee on Public Service Award, Chair, 2007
 Ad Hoc Committee on Associated and Allied Societies, Chair, 2007-2008

American Association of Petroleum Geologists
 Committee on Governmental Affairs, Communicator, 1975-1988
 Technical Program Coordinator, Annual Meeting in Atlanta, Georgia, 1986

American Geological Institute
 Communications and Publications Advisory Committee, Member, 1996-1997
 Treasurer, 1997-1999
 Finance Committee, Member, 1997-1999, Chair, 1999-2001
 Geotimes Circulation Task Force, Member, 1998

Association of Earth Science Editors
 Board of Directors, 1993-1996
 Committee on Membership Development, Chair, 1993-1996

Alabama Geological Society, Charter Member
 Editor, 1964-1966
 Secretary, 1966-1967
 Vice President, 1967-1968
 President, 1968-1969

Geological Society of Kentucky

Society of Economic Paleontologists and Mineralogists
 Subcommittee to Nominate the Special Publications Editor, Member, 1992

Council of Scientific Society Presidents
 International Science Committee, co-chair, 2005
 Ad Hoc Working Group for Statement on Teaching of Evolution, member, 2005-2006
 Executive Board, Member, 2007
 Treasurer, 2008
 Past-Treasurer, 2009

Honorary Organizations:

Phi Beta Kappa
 Sigma Xi
 Sigma Gamma Epsilon

Grants, Fellowships, and Contracts:

- 1956-1957, **University of Kentucky**; University Fellowship
- 1957-1958-1959, **National Science Foundation Fellowship**; Virginia Polytechnic Institute
- 1959, **Geological Society of America**, dissertation research; Virginia Polytechnic Institute
- 1963-1964, **National Science Foundation**, Undergraduate Research Participation, research director; Mississippian stratigraphy of central Alabama; Birmingham-Southern College
- 1964-1966, **The California Company**; Mississippian stratigraphy of northern Alabama; Birmingham-Southern College
- 1969, **Birmingham-Southern College Faculty Research Fund**; Paleozoic stratigraphy and structure between the Ouachita and Appalachian Mountains
- 1969-1970, **Geological Survey of Alabama**; Stratigraphy and structure of part of the Valley and Ridge province in Alabama
- 1973-1974, **Geological Survey of Alabama**; Geology of the Coosa deformed belt; Georgia State University
- 1978 (with Greg H. Mack), **Georgia State University Arts and Sciences Research Fund**; Stratigraphy and depositional environments of Hartselle Sandstone in Alabama
- 1980-1982, **Geological Survey of Alabama**; Structural geology of the Coosa deformed belt in the Alabama Appalachians; University of Alabama
- 1980-1982, **Geological Survey of Alabama**; Coal sampling; University of Alabama
- 1981-1982, **University of Alabama Research Grants Committee**; Depositional environments of Parkwood Formation, an ancient delta in central Alabama
- 1981-1982, **Office of Surface Mining**; Coal stratigraphy of the deeper Black Warrior basin and the Cahaba and Coosa synclines; University of Alabama
- 1981-1984, **National Science Foundation**; Variation in time of orogeny along orogenic belts from the perspective of clastic wedges; University of Alabama
- 1981-1983, **National Science Foundation - University of Texas at Austin**; North American continent-ocean transect program, on-land portion of transect F-2 in Alabama; University of Alabama
- 1983-1986, **National Science Foundation**; Synsedimentary structures in foreland fold-thrust belts; University of Alabama
- 1984-1985, **University of Alabama School of Mines and Energy Development**; Geologic controls on coal-bed methane productivity
- 1984-1986, **Conoco Inc.**; Synsedimentary structural deformation in the fold-thrust belt of Alabama and west Georgia; University of Alabama
- 1985-1987, **Petroleum Research Fund of the American Chemical Society**; Foreland basin evolution—Sedimentation and tectonics; University of Alabama
- 1985-1989, **University of Alabama School of Mines and Energy Development**; Palynological correlation and reflectance studies, Black Warrior and Cahaba basins
- 1986-1987, **University of Alabama School of Mines and Energy Development**; Geological studies related to coalbed methane in the Cahaba coal basin
- 1986-1987, **National Science Foundation - Incorporated Research Institutions for Seismology**; Gathering and analysis of array seismic data from deep crustal structure in the Ouachita system; University of Alabama
- 1987-1989, **Gas Research Institute - Texas Bureau of Economic Geology**; Geologic evaluation of critical production parameters for coalbed methane resources; University of Alabama

Grants, Fellowships, and Contracts (continued):

- 1989-1992, **National Science Foundation**; The role of lateral (cross-strike) connectors in fold-thrust belts; University of Alabama; University of Kentucky
- 1990-1993, **Petroleum Research Fund of the American Chemical Society**; Controls on locations of lateral ramps in fold-thrust belts; University of Alabama; University of Kentucky
- 1992-1993, **ARCO Oil and Gas Company**; Black Warrior basin stratigraphic mapping and subsidence modeling; University of Kentucky
- 1993-1996, **Petroleum Research Fund of the American Chemical Society**; Causes of reactivation of intracratonic basement faults; University of Kentucky
- 1994-1996, **National Science Foundation**; Subsidence history of a foreland basin within a thrust-belt recess: The need for a three-dimensional approach; University of Kentucky
- 1996-1997, **U. S. Geological Survey**; Geologic mapping in the Appalachian thrust belt in northwest Georgia; University of Kentucky
- 1997-1999, **U. S. Geological Survey**; Geologic mapping in the Appalachian thrust belt in northeast Alabama; University of Kentucky
- 1997-2000, **National Science Foundation**; The Argentine Precordillera: When and how was it transferred from Laurentia to Gondwana?; University of Kentucky
- 1997-1998, **National Geographic Society**; Paleogeography of paired continental margins: Argentine Precordillera and southern Laurentia; University of Kentucky
- 1998-1999, **U. S. Geological Survey**; Geologic mapping in the Bessemer transverse zone, Appalachian thrust belt, Alabama; University of Kentucky
- 1998-2002, **Petroleum Research Fund of the American Chemical Society**; Geometry and kinematics of lateral ramps in thrust belts: Keys to translation direction and three-dimensional balancing; University of Kentucky
- 1999-2000, **U. S. Geological Survey**; Geologic mapping in the Bessemer transverse zone, Appalachian thrust belt, Alabama; University of Kentucky
- 2000-2001, **U. S. Geological Survey**; Geologic mapping in the Appalachian thrust belt in Alabama; University of Kentucky
- 2001-2002, **U. S. Geological Survey**; Geologic mapping in the Appalachian thrust belt in eastern Alabama; University of Kentucky
- 2002-2003, **U. S. Geological Survey**; Geologic mapping in Pennsylvanian rocks in the Appalachian thrust belt; University of Kentucky
- 2003-2007, **National Science Foundation**; Time and mechanism(s) of accretion of the Laurentia-derived Argentine Precordillera to western Gondwana: The record in the foreland; University of Kentucky
- 2003-2008, **Petroleum Research Fund of the American Chemical Society**; Mushwads (ductile duplexes) in thrust belts: Thermal and structural constraints; University of Kentucky
- 2007-2008, **U.S. Geological Survey**; Geologic mapping along the Transylvania fault zone in the Appalachian thrust belt in Pennsylvania; University of Kentucky
- 2007-2008, **Weyerhaeuser Mineral Resources**; Stratigraphy of the Floyd Shale and related units in the Black Warrior basin; University of Kentucky
- 2008-2009, **U.S. Geological Survey**; Palinspastic reconstruction around a recess in the Appalachian thrust belt in Georgia; University of Kentucky

Grants, Fellowships, and Contracts (continued):

2011-2015, **National Science Foundation**; Northern Embayment lithosphere experiment;
University of Memphis, independent contractor, PI Charles Langston
2013-2015, **National Science Foundation**; Testing the hypothesized Grand Canyon-
Appalachian connection; University of Arizona, co-PI with George Gehrels

Professional Activities:

- 1962-1963, lecturer, Mississippi Petroleum Committee, Senior Petroleum Scientists High School Visitation Program [various Mississippi high schools]
- 1966, participant, National Science Foundation, summer field conference; Stratigraphy and structure of the Appalachians [Pennsylvania to Virginia]
- 1968, participant, National Science Foundation, summer field conference; Geology of the Canadian Rockies [Alberta and British Columbia]
- 1969, participant, National Science Foundation, summer field conference; Geology of the Basin and Range [Nevada, Utah, and California]
- 1971, leader (substitute for Byron N. Cooper, who died just before the trip), field trip, Southeastern Section of Geological Society of America; Appalachian structural and topographic front between Narrows and Beckley, Virginia and West Virginia
- 1971, participant, National Science Foundation, summer field conference; Geology of the Colorado Plateau [Colorado, Utah, and Arizona]
- 1972, participant, Geological Society of America Penrose Conference; Geology and geophysics of the northern Appalachians [Amherst, Massachusetts]
- 1976, participant, Geological Society of America Penrose Conference; Late orogenic sedimentation and related tectonics in the Cordilleran and Appalachian orogens [Banff, Alberta]
- 1978, participant, Geological Society of America Penrose Conference; Chronology of thrusting in orogenic terranes [Helen, Georgia]
- 1979, speaker and participant, conference and field trips, International Geological Correlation Program - Caledonide Orogen Project; Caledonides in the USA [Blacksburg, Virginia; field trips in New England Appalachians and southern Appalachians]
- 1979, speaker, New York State Geological Association and New England Intercollegiate Geological Conference Symposium; Sedimentary strata and tectonic movements [Albany, New York]
- 1980, co-convenor (and Greg H. Mack), Symposium, Southeastern Section of Geological Society of America; Stratigraphy, sedimentology, and paleoecology of Mississippian-Pennsylvanian rocks [Birmingham, Alabama]
- 1980, 1981, 1982, discussion leader, American Association of Petroleum Geologists Field Seminar (John M. Dennison, leader); Paleozoic stratigraphy and Appalachian exploration trends [Alabama Appalachians]
- 1980, participant, Society of Economic Paleontologists and Mineralogists Research Conference; Modern shelf and ancient cratonic sedimentation [Madison, Wisconsin]
- 1981, speaker and field trip leader, University of Alabama, Conference on Petroleum Geology of Alabama [Tuscaloosa, Alabama]
- 1981, co-convenor (and James F. Tull), Geological Society of America Penrose Conference; Timing of orogenic activity in the Appalachian-Caledonian system [Alexander City, Alabama]
- 1981, speaker and participant, conference and field trip, International Geological Correlation Program - Caledonide Orogen Project; Caledonides in Scandinavia [Uppsala, Sweden; field trip in northern Norway]
- 1981, speaker, Appalachian Basin Industrial Associates, seminar [Pittsburgh, Pennsylvania]
- 1982, speaker, Conference on Aeromagnetic Mapping [Kansas City, Missouri]

Professional Activities (continued):

- 1982, co-convenor (and James F. Tull), Symposium, Southeastern and Northeastern Sections of Geological Society of America; Timing of orogenic events in the Appalachians [Washington, D. C.]
- 1982, participant, North American Continent-Ocean Transects Program, workshop [Boulder, Colorado]
- 1982, speaker, Appalachian Basin Industrial Associates, seminar [Knoxville, Tennessee]
- 1982, co-convenor (and George W. Viele), Geological Society of America Penrose Conference; Tectonic history of the Ouachita orogen [Arkadelphia, Arkansas]
- 1982, speaker, Alabama Geological Survey, Conference on Energy [Tuscaloosa, Alabama]
- 1982, speaker, field trip, Geological Society of America Annual Meeting; Geology of Ouachita Mountains [Arkansas]
- 1982, co-convenor (and George W. Viele), Symposium, Geological Society of America Annual Meeting; The Ouachita orogen [New Orleans, Louisiana]
- 1983, speaker, Conference on Aeromagnetic Mapping [San Antonio, Texas]
- 1983, participant, field trip in the Marathon region, Texas, led by William R. Muehlberger
- 1983, speaker, Appalachian Basin Industrial Associates, seminar [Chapel Hill, North Carolina]
- 1984, participant, Geological Society of America Penrose Conference; The West African connection [Giens, France]
- 1984, co-convenor (and Wallace D. Lowry), Symposium, Southeastern and North-Central Sections of Geological Society of America; Tectonics and sedimentation of the southern Appalachians [Lexington, Kentucky]
- 1984, co-convenor (and Laurence L. Sloss), Symposium, Southeastern and North-Central Sections of Geological Society of America; Tectonics and sedimentation of the eastern North American craton [Lexington, Kentucky]
- 1984, participant, North Atlantic Treaty Organization Advanced Studies Institute; Geological synthesis of the Caledonian rocks of the United Kingdom [field trip from southern Wales to northern Scotland]
- 1984, speaker, conference, International Geological Correlation Program - Caledonide Orogen Project; Caledonides in the British Isles [Glasgow, Scotland]
- 1984, participant, Consortium for Continental Reflection Profiling (COCORP), meeting [Ithaca, New York]
- 1984-1987, member, Review Committee, Geologic Map of Alabama, Geological Survey of Alabama
- 1985, convenor, Appalachian Basin Industrial Associates, seminar [Tuscaloosa, Alabama]
- 1985, speaker (and R. G. Martin), Symposium, Cornell Program for the Study of the Continents; The structure and evolution of the Gulf of Mexico and surrounding regions [Ithaca, New York]
- 1985, speaker, University of Alabama School of Mines and Energy Development, External Advisory Council [Tuscaloosa, Alabama]
- 1985, speaker, Appalachian Basin Industrial Associates, seminar [Morgantown, West Virginia]
- 1986, speaker, EDGE (A Program for Deep Seismic Reflection Exploration of the Submerged Part of the Continental Lithosphere), workshop [The Woodlands, Texas]
- 1986, participant, Geological Society of America Penrose Conference; Southern Oklahoma aulacogen [Lone Wolf, Oklahoma]

Professional Activities (continued):

- 1986-1990, member, Steering Committee, EDGE (A Program for Deep Seismic Reflection Exploration of the Submerged Part of the Continental Lithosphere)
- 1986, speaker, Coalbed Methane Forum [Tuscaloosa, Alabama]
- 1986-1990, member, Board of Associates, Department of Geological Sciences, University of Kentucky
- 1986, member, Steering Committee, ADCOH (Appalachian Ultradeep Core Hole)
- 1986, co-convenor (and Donald L. Baars), Geological Society of America Penrose Conference; Synsedimentary tectonics [Durango, Colorado]
- 1987, lecturer, University of Alabama Burnum Distinguished Faculty Award, Public Forum [Tuscaloosa, Alabama]
- 1987, participant, field trip in the Jura led by Hans Laubscher [Basel, Switzerland]
- 1987, speaker, Jarestagung der Geologische Vereinigung; Detachment and shear [Basel, Switzerland]
- 1987, speaker, Conference on Aeromagnetic Mapping [Reston, Virginia]
- 1987, speaker, Appalachian Basin Industrial Associates, seminar [Knoxville, Tennessee]
- 1987, speaker, Consortium for Continental Reflection Profiling (COCORP), meeting [Ithaca, New York]
- 1988, participant, Workshop on Continental Scientific Drilling [Stanford, California]
- 1988, speaker, EDGE, meeting [The Woodlands, Texas]
- 1989, panel chair, Workshop on Continental Dynamics [Chandler, Arizona]
- 1989, speaker, University of Kentucky Department of Geological Sciences Enrichment Colloquium; The structure of the Appalachian basin [Lexington, Kentucky]
- 1989, co-convenor (with David G. Gee and Robert D. Hatcher, Jr.), Symposium, 28th International Geological Congress; Tectonic styles of thrust belts [Washington, D. C.]
- 1990, participant, EDGE, workshop [Philadelphia, Pennsylvania]
- 1990, speaker, Swiss Tectonics Studies Group, meeting [Basel, Switzerland]
- 1990, speaker, EDGE, workshop [The Woodlands, Texas]
- 1991, speaker, Texas A. & M. University/University of Texas Institute for Geophysics, Gulf of Mexico structural and stratigraphic synthesis project, meeting [Austin, Texas]
- 1991, faculty member, Indiana University, Field Research Seminar; Structural and stratigraphic controls on location of the Southwest Montana transverse zone [Cardwell, Montana]
- 1991, participant, Geological Society of America Penrose Conference; Development and evolution of foreland basins [Olina, Spain]
- 1992, co-convenor (with Dan Walker), Symposium, Southeastern Section of Geological Society of America; Tectono-stratigraphic evolution of the Laurentian-Iapetus margin in the southern Appalachians [Winston-Salem, North Carolina]
- 1992, speaker, Oklahoma Geological Survey, Workshop; Structural styles in the southern Midcontinent [Norman, Oklahoma]
- 1992, member, LITHOPROBE (Canada's National Geoscience Project) New Transects Evaluation Subcommittee
- 1992, co-convenor (with James W. Skehan), Theme Session, Geological Society of America; Time and place of compressional events in the Appalachian orogen [Cincinnati, Ohio]
- 1993, cover photographs, American Association of Petroleum Geologists Bulletin, v. 77, no. 4; Appalachian-Ouachita thrust belt

Professional Activities (continued):

- 1993, participant, American Association of Petroleum Geologists Hedberg Research Conference; Basement and basins of eastern North America [Ann Arbor, Michigan]
- 1994, participant, Geological Society of Canada Nuna Conference, Symposium and Field Trip; New perspectives in the Appalachian-Caledonian orogen, a conference in honour of Dr. Harold Williams [Grand Falls, Newfoundland]
- 1994, speaker and panelist, Association of Earth Science Editors, Panel Discussion; Ethics in publishing [Oak Ridge, Tennessee]
- 1995, participant, field trip in the Qinling Mountains led by Gouwei Zhang [Xi'an, Shaanxi Province, China]
- 1995, participant, Geological Society of America Penrose Conference; The Argentine Precordillera: A Laurentian terrane? [San Juan, Argentina]
- 1996, co-convenor (with Christopher J. Schmidt and Donald S. Stone), Theme Session, Geological Society of America; History of recurrent basement faulting in cratonic North America and its orogenic margins [Denver, Colorado]
- 1997, speaker, Kentucky Geoscience Symposium [Lexington, Kentucky]
- 1999, testimony to hearing on H.R. 1528, the National Geological Mapping Reauthorization Act of 1999; United States House of Representatives, Committee on Resources, Subcommittee on Energy and Mineral Resources [Washington, D.C.]
- 1999, presenter, International Symposium on Andean Geodynamics [Göttingen, Germany]
- 2000, convenor, Symposium, Southeastern Section of Geological Society of America; A century of progress in southern Appalachian tectonics [Charleston, South Carolina]
- 2000, participant, Geological Society of America Penrose Conference; The Iapetus Ocean [Edinburgh, Scotland]
- 2001, speaker, Hudnall Symposium, Department of Geological Sciences, University of Kentucky; Appalachian crust and mantle deformation as viewed in 2001 (Nicholas Rast retirement symposium) [Lexington, Kentucky]
- 2001, co-convenor (with Kent C. Neilsen), Symposium, Rocky Mountain and South-Central Sections of Geological Society of America; Ouachita-Marathon tectonics: Current research and speculations--A tribute to George Viele [Albuquerque, New Mexico]
- 2001, participant, International Geological Correlation Program, Project 453 Collision orogens [Lausanne, Switzerland]
- 2001, speaker, International Geological Correlation Program, Project 436 Pacific Gondwanan margin [Montevideo, Uruguay]
- 2002, co-convenor (with Russell L. Wheeler and John H. McBride), Theme Session, Southeastern and North-Central Sections of Geological Society of America; Ancient basement faults and modern earthquakes [Lexington, Kentucky]
- 2002, speaker, American Association of Petroleum Geologists Hedberg Research Conference, Late Paleozoic tectonics and hydrocarbon systems of western North America—The Greater Ancestral Rocky Mountains [Vail, Colorado]
- 2002, speaker, Gondwana 11 – Correlations and connections [Christchurch, New Zealand]
- 2002, participant, Workshop: priorities in solid earth sciences; National Science Foundation, Geological Society of America [Denver, Colorado]
- 2003, co-convenor (with Kent C. Nielsen), Theme Session, Southeastern and South-Central Sections of Geological Society of America; Connections and timing in the Appalachian-Ouachita orogen [Memphis, Tennessee]

Professional Activities (continued):

- 2004, keynote speaker, Workshop: EarthScope science for Mid-America, National Science Foundation [Memphis, Tennessee]
- 2004, participant, Workshop: Research frontiers in Appalachian geology and tectonics: An EarthScope perspective, National Science Foundation [Ballston, Virginia]
- 2005, co-convenor (with Paul Mueller and Allen J. Dennis), Theme Session, Southeastern Section of Geological Society of America; Exotic terranes in the southern Appalachians: Evidence from igneous, sedimentary, and metamorphic rocks [Biloxi, Mississippi]
- 2006, co-convenor (with Robert D. Hatcher, Jr.), Symposium, Southeastern Section of Geological Society of America; Frontiers of Appalachian tectonics [Knoxville, Tennessee]
- 2007, co-convenor (with Christopher M. Bailey), Theme Session, Southeastern Section of Geological Society of America; “Great” unconformities in the Appalachians: Their temporal and tectonic significance [Savannah, Georgia]
- 2008, co-convenor (with Paul A. Mueller and David A. Foster), Theme Session, Geological Society of America; Gondwana-Laurentia terrane transfers during the Pangean and Rodinian supercontinent cycles [Houston, Texas]
- 2009, resource expert presenter, Workshop on Alternative Interpretations, Electric Power Research Institute; Seismic Source Characterization Project, Central and Eastern United States [Palo Alto, California]
- 2010, co-convenor (with Denis Lavoie), Theme Session, Northeastern and Southeastern Sections of the Geological Society of America; The Iapetan rifted margin and rift history of eastern Laurentia [Baltimore, Maryland]
- 2010, co-convenor (with Jim Hibbard, Cees van Staal, and Sandra Barr), Theme Session, Northeastern and Southeastern Sections of the Geological Society of America; Laurentian-Gondwanan interactions in the Paleozoic [Baltimore, Maryland]
- 2011, plenary speaker, EarthScope–GeoPRISMS Science Workshop for eastern North America [Bethlehem, Pennsylvania]
- 2013, co-convenor (with Brendan Murphy and Cees van Staal), Theme Session, Geological Society of America; Rifting, drifting, and accretion of microcontinental terranes—A recipe for accretionary orogens [Denver, Colorado]
- 2014, overview speaker, Central and Eastern United States, Earthquake Hazards Research Review and Planning Workshop, National Earthquake Hazards Reduction Program [Memphis, Tennessee]
- 2014, participant and speaker, Geological Society of America Penrose Conference; Linkages and feedbacks in orogenic systems [Asheville, North Carolina]
- 2014, speaker, Alabama Oil and Gas Conference [Tuscaloosa, Alabama]
- 2014, speaker, Alabama Mining Institute [Tuscaloosa, Alabama]
- 2015, speaker, Retirement Symposium for Rob Van der Voo, University of Michigan [Ann Arbor, Michigan]
- 2015, speaker, workshop on intraplate earthquakes, Center for Earthquake Research and Information, University of Memphis [Memphis, Tennessee]
- 2016, invited keynote speaker, Arthur Holmes Meeting 2016, The Wilson cycle: Plate tectonics and structural inheritance during continental deformation: Geological Society of London [London, England]
- 2016, co-convenor (with George Gehrels, Emily Finzel, and Brian Hampton), Theme Session, Geological Society of America; Detrital zircons on the North American continental interior [Denver, Colorado]

2018, co-convenor (with William T. Jackson, Jr.), Theme Session, Geological Society of America Southeastern Section; Tectonics, geochronology, and thermochronology [Knoxville, Tennessee]

Professional Activities (continued):

Field trip leader and editor of guidebook (guidebooks listed in bibliography):

- 1965, Annual Field Trip of Alabama Geological Society; Structural development of the southernmost Appalachians
- 1974, Annual Field Trip of Alabama Geological Society; The Coosa deformed belt in the Alabama Appalachians
- 1980, field trip, Southeastern Section of Geological Society of America; Depositional setting of the Mississippian Hartselle Sandstone and lower Bangor Limestone in northwest Alabama
- 1980, field trip, Geological Society of America Annual Meeting; Tectonic framework of the Appalachian orogen in Alabama
- 1982, field trip, Geological Society of America Annual Meeting; Appalachian thrust belt in Alabama: Tectonics and sedimentation
- 1983, field trip, Gulf Coast Association of Geological Societies; Appalachian thrust belt in Alabama: Tectonics and sedimentation
- 1984, Annual Field Trip of Alabama Geological Society; Appalachian thrust belt in Alabama
- 1986, field trip, American Association of Petroleum Geologists Annual Meeting; Appalachian thrust belt, Alabama
- 1991, Annual Field Trip of Alabama Geological Society; Mississippian-Pennsylvanian tectonic history of the Cahaba synclinorium
- 1994, Annual Field Trip of Alabama Geological Society; The Harpersville transverse zone in the Appalachian thrust belt
- 1995, field trip, Geological Society of America Annual Meeting; The Appalachian thrust belt in Alabama: Influences on structural geometry
- 2000, Annual Field Trip of Alabama Geological Society; The Conasauga Formation and equivalent units in the Appalachian thrust belt in Alabama
- 2011, Annual Field Trip of Alabama Geological Society; Of mushwads and mayhem: Disharmonically deformed shale in the southern Appalachian thrust belt
- 2013, Annual Field Trip of Alabama Geological Society; From the Gulf Coastal Plain to the Appalachian Plateau (50th Anniversary of the Alabama Geological Society)
- 2014, field trip, American Geosciences Institute; Geology and mineral resources of the Appalachian thrust belt in Alabama
- 2017, Annual Field Trip of Alabama Geological Society; The Anniston transverse zone in the Appalachian thrust belt

Site-discussion leader on field trip and author of stop descriptions in guidebook:

- 1967, Annual Field Trip of Coal Division, Geological Society of America; Carboniferous detrital rocks in northern Alabama
- 1967, Annual Field Trip of Alabama Geological Society; Mississippian sediments in northern Alabama and south-central Tennessee
- 1969, Annual Field Trip of Alabama Geological Society; The Appalachian structural front in Alabama
- 1973, Annual Field Trip of Alabama Geological Society; Talladega metamorphic front
- 1977, Annual Field Trip of Alabama Geological Society; Cambrian and Devonian stratigraphic problems of eastern Alabama

1997, Annual Field Trip of Alabama Geological Society; Coosa synclinorium in the Appalachian thrust belt

Professional Activities (continued):

Presented more than 120 papers at professional meetings (abstracts listed in bibliography):

Geological Society of America
 Southeastern Section of Geological Society of America
 South-Central Section of Geological Society of America
 Northeastern Section of Geological Society of America
 North-Central Section of Geological Society of America
 Gulf Coast Association of Geological Societies
 Alabama Academy of Science
 Virginia Academy of Science
 International Conference on Basement Tectonics
 International Congress of Carboniferous Stratigraphy and Geology
 American Association of Petroleum Geologists
 Geologische Vereinigung
 International Geological Congress
 Swiss Tectonics Studies Group
 Rocky Mountain Section of Geological Society of America
 Cordilleran Section of Geological Society of America
 Geological Association of Canada Nuna Conference
 Geological Association of Canada
 Congreso Latinoamericano de Geología/Congreso Uruguayo de Geología
 Association of Environmental and Engineering Geologists
 American Geophysical Union
 Geological Society of London

Invited speaker:

1968 Mississippi Geological Society
 1969 Alabama Geological Society
 University of North Carolina
 1970 Louisiana State University
 Queens College of City University of New York
 1973 Auburn University
 University of Georgia
 1975 Georgia Institute of Technology
 1977 West Georgia College
 1978 University of Kentucky
 1979 University of Georgia
 University of Alabama
 Florida State University
 1980 Monmouth College (Visiting Distinguished Scholar)

Professional Activities (continued):

Invited speaker (continued):

- 1982 United States Geological Survey, Reston
University of Alabama at Birmingham
Texas A&M University
New Orleans Geological Society
- 1983 University of Texas at Austin
- 1984 American Institute of Mining Engineers, Alabama Chapter
University of Kentucky (McFarlan Lecture)
Columbus College
University of New Orleans
- 1985 University of Oklahoma
University of Kentucky
Appalachian State University
Memphis State University
University of Southwestern Louisiana
- 1987 Dallas Geological Society
University of Connecticut
Cornell University
Pennsylvania State University
State University of New York at Binghamton
- 1990 University of Kentucky
Indiana University, Geologic Field Station
University of Texas, Institute for Geophysics
- 1992 University of Tennessee, Knoxville
Western Michigan University
Indiana-Kentucky Geological Society
ARCO Oil and Gas Corporation, Houston, Texas
Indiana University
Kentucky Geological Survey
- 1995 Northwest University, Xi'an, China
- 1996 George Mason University
- 1998 Auburn University
University of Alabama
Academia Nacional de Ciencias and Universidad Nacional de Córdoba, Argentina
Universidad Nacional de San Juan, Argentina
- 1999 University of Texas at El Paso
New Mexico State University
- 2001 Syracuse University
- 2003 Universidad Nacional de Córdoba, Argentina
- 2006 University of Kentucky (McFarlan Lecture)
Universidad Nacional de Córdoba, Argentina
Miami University
- 2007 Texas A&M University
- 2009 University of Florida

Professional Activities (continued):

Invited speaker (continued):

- 2010 University of Alabama
- 2012 Auburn University
- 2013 University of Memphis, Center for Earthquake Research and Information
University of Tennessee, McClung Museum Lecture
University of Tennessee
University of Texas at Arlington
- 2014 Angelo State University and San Angelo Geological Society
- 2015 University of Iowa
University of Kentucky
- 2017 Texas Christian University

Professional Activities (continued):

Reviewer of manuscripts and proposals for:

Geological Society of America Bulletin
American Journal of Science
National Science Foundation
Nuclear Regulatory Commission
Southeastern Geology
American Association of Petroleum Geologists Bulletin
Petroleum Research Fund of American Chemical Society
Georgia Geological Survey
Geological Survey of Alabama
Geology
Tectonics
Journal of Foraminiferal Research
International Conference on Basement Tectonics Proceedings
Decade of North American Geology
Journal of Geology
Society of Economic Paleontologists and Mineralogists
United States Geological Survey
Journal of Sedimentary Petrology/Journal of Sedimentary Research
Consejo Nacional de Ciencia y Tecnología (Mexico)
Engineering Geology
Northeastern Geology and Environmental Science
Geological Society of London
Tectonophysics
Bulletin of the Seismological Society of America
Geological Society of America Special Paper
Journal of South American Earth Sciences
Lithos

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- Eldridge, C. A., **Thomas, W. A.**, Langenheim, R. L., and Mallory, W. W., 1957, Crested Butte measured section, *in* McKee, E. D., ed., Colorado measured sections: Rocky Mountain Association of Geologists, Measured Section No. 10.
- Thomas, W. A.**, 1959, Upper Mississippian stratigraphy of southwestern Virginia, southern West Virginia, and eastern Kentucky [Ph.D. thesis]: Virginia Polytechnic Institute, 322 p.
- Thomas, W. A.**, and Mann, C. J., 1963, Correlation chart of upper Cotton Valley sands: Shreveport Geological Society Reference Volume 5, p. 9-17.
- Mann, C. J., and **Thomas, W. A.**, 1964, Cotton Valley Group (Jurassic) nomenclature, Louisiana and Arkansas: Gulf Coast Association of Geological Societies Transactions, v. 14, p. 143-152.
- Thomas, W. A.**, editor, 1965, Structural development of the southernmost Appalachians: Alabama Geological Society, Third Annual Field Trip Guidebook, 69 p.
- Thomas, W. A.**, 1965, Southernmost Appalachians: Alabama Geological Society, Third Annual Field Trip Guidebook, p. 1-2.
- Thomas, W. A.**, 1965, Ouachita influence on Mississippian lithofacies: Alabama Geological Society, Third Annual Field Trip Guidebook, p. 23-28.
- Thomas, W. A.**, and Copeland, C. W., 1965, Generalized stratigraphic sections: Alabama Geological Society, Third Annual Field Trip Guidebook, p. 3-4.
- Thomas, W. A.**, and Joiner, T. J., 1965, Attalla Conglomerate: Alabama Geological Society, Third Annual Field Trip Guidebook, p. 13-15.
- Thomas, W. A.**, and Mann, C. J., 1966, Late Jurassic depositional environments, Louisiana and Arkansas: American Association of Petroleum Geologists Bulletin, v. 50, p.178-182. [also, 1974, American Association of Petroleum Geologists Reprint Series 13, p. 105-109.]
- Thomas, W. A.**, 1966, Late Mississippian folding of a syncline in the western Appalachians, West Virginia and Virginia: Geological Society of America Bulletin, v. 77, p. 473-494.
- Thomas, W. A.**, 1967, Mississippian facies in Alabama, *in* Ferm, J. C., Ehrlich, R., and Neathery, T. L., A field guide to Carboniferous detrital rocks in northern Alabama: Annual Field Trip Guidebook, Coal Division, Geological Society of America, p. 21-23.
- Thomas, W. A.**, 1967, Mississippian stratigraphy of the Tennessee Valley, Alabama: Alabama Geological Society, Fifth Annual Field Trip Guidebook, p. 4-9.

Bibliography (continued):

- Moser, P. H., and **Thomas, W. A.**, 1967, Pre-Hartselle Mississippian sandstone in Colbert County, Alabama: Alabama Geological Society, Fifth Annual Field Trip Guidebook, p. 25-39.
- Mann, C. J., and **Thomas, W. A.**, 1968, The Ancient Mississippi River: Gulf Coast Association of Geological Societies Transactions, v. 18, p. 187-204.
- Thomas, W. A.**, 1968, Contemporaneous normal faults on flanks of Birmingham anticlinorium, central Alabama: American Association of Petroleum Geologists Bulletin, v. 52, p. 2123-2136.
- Thomas, W. A.**, and Bearce, D. N., 1969, Sequatchie anticline in north-central Alabama: Alabama Geological Society, Seventh Annual Field Trip Guidebook, p. 26-43.
- Thomas, W. A.**, 1971, Devonian stratigraphy north of the Uncompahgre uplift, Colorado: Mountain Geologist, v. 8, p. 85-88.
- Thomas, W. A.**, 1972, Regional Paleozoic stratigraphy in Mississippi between Ouachita and Appalachian Mountains: American Association of Petroleum Geologists Bulletin, v. 56, p. 81-106.
- Thomas, W. A.**, 1972, Mississippian stratigraphy of Alabama: Alabama Geological Survey Monograph 12, 121 p.
- Thomas, W. A.**, 1972, Regional Paleozoic stratigraphy in Mississippi between Ouachita and Appalachian Mountains: Replies to discussions by F. F. Mellen and S. W. Welch: American Association of Petroleum Geologists Bulletin, v. 56, p. 2459-2460 and 2462-2463.
- Thomas, W. A.**, 1973, Southwestern Appalachian structural system beneath the Gulf Coastal Plain: American Journal of Science, Cooper Volume, v. 273A, p. 372-390.
- Thomas, W. A.**, 1973, Review of Stratigraphic Oil and Gas Fields, R. E. King, ed., American Association of Petroleum Geologists Memoir 16: Economic Geology, v. 68, p. 417.
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- Thomas, W. A.**, and Drahovzal, J. A., editors, 1974, The Coosa deformed belt in the Alabama Appalachians: Alabama Geological Society, Twelfth Annual Field Trip Guidebook, 98 p.
- Thomas, W. A.**, and Drahovzal, J. A., 1974, A field guide to the Coosa deformed belt: Alabama Geological Society, Twelfth Annual Field Trip Guidebook, p. 1-43.

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- Thomas, W. A.**, and Drahovzal, J. A., 1974, Geologic map of Coosa deformed belt: Alabama Geological Society, Twelfth Annual Field Trip Guidebook, Plate 1.
- Thomas, W. A.**, 1974, Converging clastic wedges in the Mississippian of Alabama: Geological Society of America Special Paper 148, p. 187-207.
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- Thomas, W. A.**, 1976, Evolution of Ouachita-Appalachian continental margin: Journal of Geology, v. 84, p. 323-342.
- Thomas, W. A.**, 1977, Structural and stratigraphic continuity of the Ouachita and Appalachian Mountains: Arkansas Geological Commission, Symposium on the Geology of the Ouachita Mountains, v. 1, p. 9-24.
- Drahovzal, J. A., and **Thomas, W. A.**, 1977, Pre-Mississippian sandstones in the interior structures of the Appalachian fold and thrust belt of eastern Alabama: Alabama Geological Society, Fifteenth Annual Field Trip Guidebook, p. 29-36.
- Bearce, D. N., **Thomas, W. A.**, and Drahovzal, J. A., 1977, Bedrock geology of parts of Cherokee, Calhoun and Cleburne Counties, Alabama: Alabama Geological Society, Fifteenth Annual Field Trip Guidebook, Plate 1.
- Thomas, W. A.**, and Drahovzal, J. A., 1977, Large-scale recumbent folding in the Valley and Ridge province of Alabama: Discussion: Geological Society of America Bulletin, v. 88, p. 1368-1371.
- Thomas, W. A.**, 1977, Evolution of Appalachian-Ouachita salients and recesses from reentrants and promontories in the continental margin: American Journal of Science, v. 277, p. 1233-1278.
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- Thomas, W. A.**, and Cramer, H. R., 1979, The Mississippian and Pennsylvanian (Carboniferous) Systems in the United States - Georgia: U. S. Geological Survey Professional Paper 1110-H, 37 p.

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- Thomas, W. A.**, Mack, G. H., and Waters, J. A., 1980, Depositional setting of the Mississippian Hartselle Sandstone and lower Bangor Limestone in northwest Alabama (Field trip number 2), *in* Tull, J. F., ed., *Field trips for the Southeastern Section of the Geological Society of America*, Birmingham, Alabama: Tuscaloosa, Alabama Geological Society, p. 29-44.
- Thomas, W. A.**, and Mack, G. H., 1980, Barrier-island and shelf-bar sedimentation, Mississippian Hartselle Sandstone, northern Alabama, *in* Tull, J. F., ed., *Field trips for the Southeastern Section of the Geological Society of America*, Birmingham, Alabama: Tuscaloosa, Alabama Geological Society, p. 45-55.
- Thomas, W. A.**, and Neathery, T. L., 1980, Tectonic framework of the Appalachian orogen in Alabama, *in* Frey, R. W., ed., *Excursions in southeastern geology*, v. 2, Geological Society of America 1980 Annual Meeting, Atlanta, Georgia: American Geological Institute, p. 465-526.
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