### THOMAS J. ALGEO

Professor

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## EMPLOYMENT

Professor, University of Cincinnati, 2008-present

Associate Professor, University of Cincinnati, 1997-2008

Assistant Professor, University of Cincinnati, 1991‑1997

Senior Geologist, Exxon Co. USA, Midland, Texas, 1989-91

Research/Teaching Assistant, University of Michigan, 1985-89

Geologist, Exxon Co. USA, Houston, Texas, 1988 (summer)

Geologist, Amoco Prod. Co., Houston, Texas, 1987 (summer)

Field Geology Assistant, Univ. of Southern Mississippi field camp, Switzerland, 1984 (summer)

Asst. Engineering Geologist, Southern Company, Birmingham, Alabama, 1983 (summer)

## EDUCATION

Ph.D., Geological Sciences, University of Michigan, 1989; GPA = 4.0/4.0

M.S., Geological Sciences, University of Georgia, 1985; GPA = 4.0/4.0

DAAD Scholar, University of Heidelberg, Germany, 1980-81

B.A., Germanic Studies, University of Georgia, 1980; GPA = 4.0/4.0

## AWARDS

University of Cincinnati Dept. of Geology, Bucher Award, 1992, 1994, 1996, 2003, 2005, 2007

University of Michigan, Rackham Graduate School Outstanding Dissertation Award

(1 of 5 awards among 670 dissertations completed in 1989)

National Science Foundation Graduate Fellowship, 1984-87

## GRANTS

# 11) co-PI: “Collaborative Research: Integrated Paleoceanography of the Late Paleozoic Midcontinent Sea.”, National Science Foundation/Sedimentary Geology & Paleobiology, $75,000, 2/1/11-1/31/14.

# 10) PI: “Collaborative Research: Chemostratigraphic analysis of Panthalassic and Tethyan Permian-Triassic boundary sections: Assessment of global paleoceanographic dynamics,” National Science Foundation/Sedimentary Geology & Paleobiology (NSF-EAR-0745574), $337,000, 4/2009-3/2013.

9) PI: “The Permo-Triassic boundary event: Assessment of global paleoceanographic dynamics,” Univ. of Cincinnati Research Council, 11/2006-11/2007, $6,500.

8) PI: “Collaborative Research: Middle and Upper Devonian black shales: Testing the productivity-anoxia feedback and land plant-weathering rate hypotheses,” National Science Foundation/Sedimentary Geology & Paleobiology (NSF-EAR-0618003), $190,000, 8/2006-8/2009.

7) PI: “Testing the land plant-weathering rate hypothesis for Devonian marine anoxia and mass extinction events,” Univ. of Cincinnati Research Council, 5/2005-5/2006, $6,500.

6) co-PI: “Terrestrial carbon sequestration in Devonian-Mississippian anoxic basins: Determining the relative importance of higher plants to organic accumulation in black shales”, National Science Foundation, Geology & Paleontology (NSF-EAR-0310072), $179,000 (UC $14,100), 8/2003-8/2005.

5) PI: “Sequence stratigraphy of Upper Permian Glorieta Formation, Monahans Field, West Texas,” Exxon Research Production Company, 6/1995-9/1995, $7,500.

4) PI: “Microstratigraphic and geochemical analysis of Devono-Mississippian black shales of the Appalachian Basin: A high-resolution record of solar-modulated climatic cyclicity?”, UC University Research Council, 6/1993-6/1994, $4,900.

3) PI: “Estimating Paleozoic eustatic elevations from paleogeographic and hypsometric data,” National Academy of Sciences, Project Development Grant, 2/1993-2/1994, $1,700.

2) PI: “Quantifying stratigraphic completeness: A probabilistic approach using paleomagnetic data,” University Research Council, 6/1992-6/1993, $3,935.

1) University of Cincinnati, Faculty Start-Up Award, $60,000, 1991-1994

## PROFESSIONAL AFFILIATIONS

American Geophysical Union (AGU)

Geological Society of America (GSA)

Society for Sedimentary Geology (SEPM/SSG)

SEPM Great Lakes Section (SEPM-GLS)

**PROFESSIONAL ACTIVITIES**

**Departmental Service**

Host to Exxon-Mobil short course on Seismic Stratigraphy (by Fred Schroeder), Sept. 2009

Geology Department Headship Search Committee, 2008-2009

Geology Department Headship candidate, 2002

Geology Department Long-Range Planning Committee, 2001-2002

Director of Graduate Studies, 2000-2002

Graduate Policy Committee, 1992-96, 1998-2000

Colloquium Coordinator, 1993-2000, 2002-2003

Course Evaluation Committee, 1996-1997

Computer Lab Committee, 1991-2000

Organized visits by recruiters from Exxon-Mobil and Shell to the UC Geology Department (multiple years)

**University Service**

Member, A&S Review Committee for B.A. degree with a Concentration in Org. Leadership (BAOL), 2003

A&S Representative to University Graduate Council, 2001-02

A&S Student Discipline Committee, 1997-98, 2005-2008

A&S Student Appeals Committee, 1997-98

A&S URC Proposal Evaluation Committee, 1997, 1998, 2002

Geology Department Headship Review Committee, 1996-97

**Professional Offices**

Co-Editor, *Palaios* Special Issue on Permian-Triassic boundary, 2012-

Co-Editor, *Earth-Science Reviews* Special Issue on Permian-Triassic boundary, 2012-

Member, Working Group on Early Triassic Marine Biotic Recovery in South China, funded by the National Science Foundation of China; organizer Prof. Jinnan Tong, CUG-Wuhan, 2010-2012

Lead Editor, *Global and Planetary Change* Special Issue on New Developments in Permian-Triassic

Paleoceanography, 2011-2012

Lead Editor, *Chemical Geology* Special Issue on New Applications of Trace Metals in Paleoceanographic

Studies, 2010-2011

Member, NSF/ARI Panel for Major Research Instrumentation (David Lambert, chair), Oct. 2009

Member, International Commission on Stratigraphy, Subcommission on Carboniferous Stratigraphy (SCCS), 2009-present

Lead Editor, *Palaeo-3* Special Issue on Early Triassic Marine Ecosystems Recovery, 2009-2011

Member, National Research Council, Committee on the Importance of Deep-Time Geologic Records

for Understanding Climate Change Impacts (Dick Norris & Isabel Montanez, chairs;

David Feary, coordinator), 2007-2011

Lead Editor, *Palaeo-3* Special Issue on P/Tr Boundary Crisis and Early Triassic Biotic Recovery, 2005-06

Co-Editor, *Palaeo-3* Special Issue on Precambrian and Paleozoic Seawater Chemistry, 2004-06

Vice President, Great Lakes Section, Society for Sedimentary Geology, 1998-1999

Technical Program Committee, AAPG Southwest Section Meeting, Midland, Texas, 1992

Program Chairman, West Texas Geological Society, Midland, Texas, 1990-91

Poster Session Chairman, West Texas Geological Society, 1990 Fall Symposium, Midland, Texas

GSA annual meeting abstract reviewer (several times)

GSA annual & regional meetings poster & oral session judge (several times)

**Invited Speaker**

IGCP Project 572 Final Meeting, Eger, Hungary, June, 2012 (keynote speaker)

U. Leeds, United Kingdom; May, 2012 & June, 2012 (2 talks)

U. Texas Arlington, Arlington, TX; April, 2012

Cincinnati Area Mensa Society, Annual Meeting, Cincinnati, OH, Dec. 2011

Missouri University of Science & Technology, Rolla, MO; Sept. 2011

XVII International Congress on Carboniferous and Permian, Perth, Australia, July 2011 (keynote speaker)

Senckenberg Institute, Frankfurt, Germany; April 2011 (2 talks)

Univ. of Vienna, Vienna, Austria; April 2011

ETH/Univ. of Zürich, Zürich, Switzerland, April 2011

Univ. of Lausanne, Lausanne, Switzerland, March 2011

Univ. of Lille, Lille, France, March 2011

U. of Manitoba, Winnipeg, Canada; Dec. 2010 (2 talks)

U. Texas Arlington, Arlington, TX; Sept. 2010

Southern Methodist University, Dallas, TX; Sept. 2010

NSF Ocean Oxygen Workshop, NASA Ames Research Center, CA; April 2010 (keynote speaker)

Yale University, New Haven, CT; Mar. 2010

IUPUI, Indianapolis, IN; Nov. 2009 & Feb. 2010

Texas A&M University, College Station, TX; Sept. 2009 (2 talks)

University of Texas at Arlington, Arlington, TX; Nov. 2007

Terrestrialization Workshop, Museum of Natural History, Paris, France; Oct. 2007

Georgia Institute of Technology, Atlanta, GA; Sept. 2007

Arkansas State University, Jonesboro, AK; Sept. 2007

Massachusetts Institute of Technology, Boston, MA; Sept. 2007

China University of Geosciences, Wuhan, China; June 2007

China University of Geosciences, Beijing, China; March 2007

NSF Paleoceanographic Proxies Workshop, San Francisco, CA; Dec. 2005

Ohio University, Athens, OH; February 2005

Louisiana State U., Baton Rouge, LA; Nov. 2004

Kansas Geological Survey/U. of Kansas, Lawrence, KS; Sept. 2004

University of Illinois at Chicago, Chicago, IL; April, 2004

Indiana University, Bloomington, IN; Oct. 2003

Kansas Geological Survey, Lawrence, KS, May 2003

University of Kentucky, Lexington, KY; February 2003

Ohio State University, Columbus, OH; May 2002

Ohio Geological Society, Columbus, OH; February 2002

University of Texas at Arlington, Arlington, TX; April 2000

Miami University, Oxford, OH, Nov. 1999

Virginia Polytechnic University, Blacksburg, VA, Nov. 1999

Ohio University, Athens, OH; May 1998

Illinois State University, Normal, IL; April 1998

University of Kentucky, Lexington, KY; April 1998

Hanover College, IN; April 1998

IUPUI, Indianapolis, IN; April 1998

Northwestern University; Chicago, IL; Oct. 1997

IGCP Project 386 Annual Meeting; Delhi, India; Sept. 1997

Royal Philosophical Society, Discussion Meeting; London, England; May 1997

Cornell University; Ithaca, NY; Nov. 1996

5th IOP Conference, Symposium on Early Terrestrial Environments; Santa Barbara, California; June 1996

Ohio University; Athens, OH; Apr. 1996

University of Michigan; Ann Arbor, MI; Mar. 1996

Wright State University; Dayton, OH; Jan. 1996

Univ. of Tennessee; Knoxville, TN; Nov. 1995

SUNY at Stonybrook; Stonybrook, NY; July 1995

Univ. of Kansas & Kansas Geological Survey; Lawrence, KS; June 1995

PBS-SEPM Symposium (in honor of J.L. Wilson); Midland, TX; Apr. 1995

Univ. of Illinois; Urbana, IL; Jan. 1995

Indiana U./Purdue U. at Indianapolis; Indianapolis, IN; Jan. 1995

Purdue University, West Lafayette, IN, Dec. 1994

Dennison University, Dennison, OH, Nov. 1994

University of Kentucky, Lexington, KY, Oct. 1994

Wright State University, Dayton, OH, Apr. 1994

16 invited talks, 1989-93

**Theme Session / Meeting Convener**

Pardee Symposium on “Greenhouse extinctions: Paleontology, geochemistry, and sedimentological implications” (co-conveners: Peter Ward and Richard Twitchett); GSA Annual Meeting, Charlotte, North Carolina, Nov. 2012

Theme Session on “The Big Kill: Paleobiological, Geochemical, and Modeling Studies of the Permian-Triassic Boundary Mass Extinction” (co-conveners: Arne Winguth and David Bottjer); GSA Annual Meeting, Charlotte, North Carolina, Nov. 2012

Theme Session on “Permian-Triassic Changes and Extinction Event” (co-convener: Arne Winguth); GSA Annual Meeting, Minneapolis, Minnesota, Oct. 2011

Theme Session on “Permian-Triassic Boundary” at ICCP 2011 meeting in Perth, Australia, June 2011

Theme Session on “New Developments in Permian-Triassic Paleoceanography” (co-convener: Margaret Fraiser); GSA Annual Meeting, Denver, Colorado, Oct. 2010

Theme Session on “New Developments in Trace Metal Proxies” (co-convener: Anna Cruse); V.M. Goldschmidt International Geochemistry Conference, Knoxville, Tennessee, June 2010

Theme Session on “Data-Model Integration in Paleoclimate Studies” (co-conveners: Lynn Soreghan and Marty Perlmutter); AAPG/SEPM Annual Meeting, New Orleans, April 2010

Co-organizer of International Geosciences Programme (IGCP) project 572: Restoration of marine ecosystems following the Permian-Triassic mass extinction: Lessons for the present. UNESCO, 2008-2012.

Theme Session on “Devono-Carboniferous Climate Change” (co-convener: Peter Isaacson): GSA Annual Meeting, Philadelphia, Pennsylvania, Oct. 2006

Theme Session on “Sequence Stratigraphy of Black Shales” (co-convener: Brad Sageman); GSA Annual Meeting, Toronto, Nov. 1998

**Fieldtrip / Workshop Leader**

“Trace Metal Geochemistry”, 15-hour short course, China University of Geosciences, Wuhan, China, May, 2010

“The Changing World of the Late Paleozoic-Early Mesozoic”, 10-hour short course, China University of Geosciences, Wuhan, China; June 24-28, 2008

U. of Cincinnati Geology Dept. Annual Four-Day Fieldtrip: Geology of the northern Civil War theater: Gettysburg Basin, South Mountain, and the Great Valley, Pennsylvania; Oct. 2004

U. of Cincinnati Geology Dept. Fieldtrip: Regional geology of the southern Rocky Mountains and Colorado Plateau; Sept. 1992, Sept. 2002

U. of Cincinnati Geology Dept. Annual Four-Day Fieldtrip: Foreland clastics of the Acadian and Alleghenian orogenies, eastern Kentucky & central West Virginia; Sept. 2001

SEPM (Great Lakes Section) & KSPG (Kentucky Society of Professional Geologists) Field Conference: Sequence, cycle & event stratigraphy of mid-Paleozoic strata of the Cincinnati Arch; October 1999

AAPG (Eastern Section) & TSOP (The Society for Organic Petrology) Annual Meeting: Fieldtrip and core workshop on Paleozoic black shales, Lexington, Kentucky, Sept. 1997

U. of Cincinnati Geology Dept. Fieldtrip: Modern & ancient carbonate environments in the southern Appalachians and Florida Keys; Mar. 2000, Mar. 1998, Mar. 1997, Sept. 1991

West Texas Geological Society Annual Field Conference: Cyclicity in Pennsylvanian carbonates, Sacramento Mts., New Mexico, Nov. 1992

Keck Consortium-sponsored GSA Fieldtrip: Storm deposits of the Upper Ordovician Cincinnatian Series; Cincinnati, OH, Oct. 1992

Exxon Co. Fieldtrip: Upper Paleozoic stratigraphy of the Sacramento Mountains, New Mexico, Dec. 1990

Exxon Co. Fieldtrip: Stratigraphy of the Franklin and Hueco Mountains, west Texas, Dec. 1989

**Outreach Activities**

Speaker to home-schooled student group visiting UC Geology Department, ages 8-13; teacher Janet Bar; January 2012

Led one-day field excursion for Sedimentology-Stratigraphy class from the Department of Geological Sciences, Indiana University, taught by Prof. Lisa Pratt; route along AA Highway; Nov. 13th, 2010.

Led one-day field excursions for 6th-grade class from Academy of Multilingual Immersion Studies (Cincinnati, Ohio; Ron Wendth, teacher) to Trammel Fossil Park; 2 Oct 2008, 29 Sept 2009, 10 Nov 2009—classes consisted of ~95% minority students

Annual talks in Discovering A&S classes at U. of Cincinnati, Prof. Barbara Bucey, 2005-2011; Prof. Sherry Spokas, 2011-

Fossil-and-rock presentations to classes at Fairview German Elementary School and took part in that school’s Science Day program in 2007-2008.

Annual guest lectures for two Earth-science classes at Princeton High School; fall 2002-2006

Host for visit of Princeton High School Earth Science class to University of Cincinnati Department of Geology; May 1992; March 1996

Presentations to Earth Science classes, Ockerman Middle School; Florence, Kentucky; Feb. 1992

**Student Projects Supervised**

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| --- | --- | --- | --- |
| Adam Woods | M.S. | 1991-93 | A fine-scale geochemical and stratigraphic analysis of the Lower Mississippian Sunbury Shale |
| Steve Lev | M.S. | 1992-94 | Controls on the preservation of organic carbon in the Middle Ordovician Llanvirn/Llandeilo black shales of southwest Wales, U.K. |
| Blaine Watson | M.S. | 1992-97 | Bimineralic ooids in the Missourian Stage, southeastern Kansas |
| Jacek Jaminski | Ph.D. | 1993-97 | Geochemical and petrographic patterns of cyclicity in the Devonian-Mississippian black shales of the Central Appalachian Basin |
| Mikhail Cherny | M.S. | 1995-98 | Reconstruction of paleo-oxygen variation in "core" shale members of Upper Pennsylvanian Kansas-type cyclothems using a combination of geochemical and ichnological data |
| William Hartwell | M.S. | 1996-98 | Geochemical and petrographic analysis of the Upper Devonian-Lower Mississippian Bakken black shales from the Williston Basin, North Dakota |
| Patrick Mickler | M.S. | 1993-98 | Origin of Lower Paleozoic black shales: A consequence of anoxic oceanic deepwaters or an underdeveloped burrowing infauna? |
| Thomas Kuhn\* | M.S. | 1998-99 | Decimeter-scale cyclic patterns in the system C-S-Fe and of δ34Spyrite in Upper Devonian-Lower Mississippian black shales of the Central Appalachian Basin (U.S.A.): A record of millennium-scale variations in depositional, early diagenetic, and biogeochemical conditions |
| David Hoffman | M.S. | 1995-2000 | Origin of fluctuating bottomwater anoxia in offshore core black shales of Upper Pennsylvanian cyclothems from the Midcontinent Shelf (eastern Kansas), U.S.A. |
| Eric Winhusen | M.S. | 1999-2001 | Precambrian seawater temperature analysis using oxygen isotopes from Hamersley carbonates, Western Australia |
| Christina Smith | W-R scholar† | 2007 | Geochemical events at the Permian/Triassic boundary in the Blind Fiord section of the Canadian Arctic |
| Wan Zhenzhu | Ph.D. | 2007-12 | C-isotopic composition of Early Devonian to Early Carboniferous land plants as a proxy for paleoatmospheric CO2 and water-use efficiency |
| Jessa Moser | W-R scholar† | 2008 | Geochemical events at the Permian/Triassic boundary in the Itadori and Ubara sections of central Japan |
| Jessi Dinan | W-R scholar† | 2010 | Geochemical events at the Permian/Triassic boundary in South China |
| Jun Shen  Huyue Song  Fred Santistevan  Kerstin Ahrens | Visitingscholarx  Visiting scholar  M.S.  Senior project | 2010-12  2011-12  2011-13  2011-12 | Volcanism in Permian/Triassic boundary sections, South China  S-isotope studies of Chinese Permian/Triassic boundary sections  REE variation across the Permian/Triassic boundary  Origin of small-scale cyclicity in Pennsylvanian core black shales |

\*Degree completed at University of Erlangen, Germany.

†WISE-REWU scholarship: for exceptional undergraduate female science and pre-med majors

xTwo visits from CUG-Wuhan: Nov 2010-Feb 2011 and Sept 2011-Feb 2012

**Undergraduate Students Employed as Lab Assistants**

Michael O'Connor 1994-95

Preston Pattison 1994-95

Daniel Matevia 1994-95

Eric Winhusen 1998-99

Becky Witherow 2000-01

Erik Wysong 2002-03

Deirdre McCartney 2003-05

Jon Wesselman 2003-06

Jayme Csonka 2005-06

Cherie Hill 2006

Paul Arndts 2006-07

James Milawski 2006-07

Ryan Wilson 2006-09

Nick Bose 2007-11

Valerie Owens 2007-08

Emily Wendler 2008-10

Aron Asher 2008-09

Joel Hecker 2009-10

Jeff Hannon 2009-10

Jason May 2009

Mike Lees 2010-2011

Adam Leu 2010-2011

Spencer Young 2011

Kerstin Liederbach-Ahrens 2011-2012

Patrick Cullen 2011-

Stormy Milewski (Slade) 2011-

Blake Nagel 2012

Eric Baumann 2012-

**Peer Review Service for Journals and Funding Agencies**

Journals

*Science*

*Nature*

*Nature Geoscience*

*Geology*

*Journal of Geology*

*Geological Society of America Bulletin*

*Sedimentology*

*Sedimentary Geology*

*Journal of Sedimentary Research*

*Tectonics*

*Palaios*

*Terra Nova*

*Geochimica et Cosmochimica Acta*

*Chemical Geology*

*Earth and Planetary Science Letters*

*Earth Science Reviews*

*Annual Review of Earth and Planetary Sciences*

*Palaeogeography Palaeoclimatology Palaeoecology*

*International Journal of Earth Sciences*

*International Journal of Coal Geology*

*Geochemistry International*

*Clay and Clay Minerals*

*Transactions of the Royal Society of London*

*European Journal of Mineralogy*

*Eclogae Geologicae Helvetiae*

*Journal of Asian Earth Sciences*

*Australian Journal of Earth Sciences*

*Biogeosciences* (online journal)

*Geosphere* (online journal)

*Bulletin de la Société Géologique de France*

*Chinese Journal of Oceanography and Limnology*

*Paleoworld*

*Environmental & Science Technology*

Norton Textbooks

Cambridge University Press

New York State Geological Survey; New Mexico Geological Society

Funding Agencies

U.S. National Science Foundation (several divisions)

American Chemical Society—Petroleum Research Fund

Dutch National Funding Agency

Israel Science Foundation

Estonian Science Foundation

National Environment Research Council (U.K.)

Academic Institutions

Promotion dossier for the U. of New Mexico Department of Earth & Planetary Sciences, Oct. 2009

Promotion dossier for the Pennsylvania State University Earth & Env. Systems Institute, Nov. 2009

Promotion dossier for Georgia State University, June 2010

**Number of documents reviewed annually**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Manuscripts** | **Grant Proposals** | **Academic Files** |
|  |  |  |  |
| 2012 | 25 | 4 |  |
| 2011 | 55 | 14 |  |
| 2010 | 32 | 2 | 1 |
| 2009 | 25 | 7 | 2 |
| 2008 | 21 | 5 |  |
| 2007 | 20 | 3 |  |
| 2006\* | 5 | 2 |  |
| 2005\* | 4 | 3 |  |
| 2004\* | 5 | 2 |  |

\*Note—records prior to 2007 not complete.

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**Peer-Reviewed Publications**

In review or revision:

Song, H.Y., Tong, J.N., Algeo, T.J., Horacek, M., Qiu, H.O., Song, H.J., Tian, L., and Chen, Z.Q., in revision. Large vertical δ13C gradients in Early Triassic seas of the South China craton: Implications for oceanographic changes related to Siberian Traps volcanism. *Global and Planetary Change*, submitted October 2011.

Luo, G., Wang, Y., Grice, K., Kershaw, S., Ruan, X., Algeo, T.J., Yang, H., Jia, C., and Xie, S., in revision. Microbial composition in microbialites during the Late Permian ecological crisis at the Cili section, South China: Evidence from lipid biomarkers. *Global and Planetary Change*, submitted Oct. 2011.

Xiong, Z., Li, T., Algeo, T., Nan, Q., Zhai, B., and Lu, B. Major and trace metals and biogenic components of diatom mats from tropical West Pacific: Implications for redox conditions and paleoproductivity. *Marine Geology*, in review; submitted April 2012.

Xiong, Z., Li, T., Crosta, X., Algeo, T., Chang, F., and Zhai, B. Potential role of giant marine diatoms in the sequestration of atmospheric CO2 during the Last Glacial Maximum: evidence from Ethmodiscus rex δ13C of laminated diatom mats in tropical West Pacific. *Palaeogeography Palaeoclimatology Palaeoecology*, in review; submitted Dec. 2011.

Brookfield, M.E., Algeo, T.J., Hannigan, R., Williams, J., Bhat, G.M., in review. Shaken *and* stirred: Seismites and tsunamites at the Permian-Triassic boundary, Guryul Ravine (Kashmir, India). *Palaeo-3*, submitted March 2012.

Song, H., Tong, J., Algeo, T.J., Song, H., Luo, G., Kump, L. Concurrent changes in the marine sulfur and carbon cycles during the Early Triassic: Evidence for ocean stagnation and subsequent overturn. *Nature Geoscience*, in revision.

Shen, J., Algeo, T.J., Xia, W., Zhang, N., Zhou, L., Xia, W., and Feng, Q., in review. Volcanically induced environmental change at the Permian-Triassic boundary (Xiakou, Hubei, South China). *Chemical Geology*, submitted Aug. 2012.

Sano, H., Onoue, T., Orchard, M.J., Algeo, T.J., Rowe, H., Ellwood, B., and Martini, R. Sedimentary facies and paleoceanographic events in the Panthalassa Ocean at the Smithian/Spathian boundary (late Early Triassic): Jesmond succession carbonates of Cache Creek Terrane, southern British Colombia, Canada. *Journal of Sedimentary Research*, submitted Jan. 2010, in revision.

Algeo, T.J., Meyers, P.A., Rowe, H., Jiang, G. Tectonic and climatic controls on the Phanerozoic marine nitrogen cycle. *Nature Geoscience*, submitted Sept. 2012.

Luo, G., Wang, Y., Algeo, T.J., Wignall, P., Yang, H., Huang, J., and Xie, S., 2012. Reduced isotopic gradient of organic carbon from shallow to deepwater during the end-Permian mass extinction. *GEOLOGY*, in review; submitted July 2012.

Zhou, L., Algeo, T.J., Gao, S., Gong, H., Wu, Y., Feng, L., Zhao, L., T.J., 2012. Acidification as a mechanism for catastrophic mass mortality within the Early Cretaceous Jehol Group (northeast China)—molybdenum isotope evidence, submitted June 2012, *Cretaceous Research*.

Feng, Q., Algeo, T.J., 2012. Permo-Triassic anoxic marine evolution: evidence from deep-water sections. *Earth-Science Reviews*, in review; submitted June 2012.

Wan, Z., Algeo, T.J., Gensel, P.G., Scheckler, S.E., Stein, W., Cressler, W., Berry, C., Xu, H., Rowe, H., and Sauer, P.E., 2012. Carbon isotopic evidence for late Middle Devonian warming: linked to the advent of forests? Geology, submitted, Sept. 2012.

Wan, Z., Algeo, T.J., Gensel, P.G., Scheckler, S.E., Stein, W., Cressler, W., Berry, C., Xu, H., Rowe, H., and Sauer, P.E., 2012. Secular and environmental influences on the stable carbon isotopic composition of Devonian land plants. Palaeo-3, submitted Sept. 2012.

Published:

**2012**

Zhao, L., Chen, Z.Q., Algeo, T.J., Chen, J.P., Chen, Y.L., Tong, J.N., Gao, S., Zhou, L., Hu, Z., and Liu, Y.S., 2012. Rare-earth element patterns in conodont albid crowns: evidence for massive inputs of volcanic ash following the latest Permian mass extinction? *Global and Planetary Change*, in press.

Yin, H.F., Xie, S.C., Luo, G.M., Algeo, T.J., 2012. Episodic environmental changes at the Permian-Triassic boundary of Meishan. *Episodes*, in press.

Schoepfer, S.D., Henderson, C.M., Garrison, G.H., Ward, P.D., Foriel, J., Selby, D., Shen, Y., Hower, J.C., Algeo, T.J., 2012. Termination of a continent-margin upwelling system at the Permian-Triassic boundary (Opal Creek, Alberta, Canada). *Global and Planetary Change*, in press, doi:10.1016/j.gloplacha.2012.07.005.

Algeo, T.J., Henderson, C.M., Tong, J., Feng, Q., Yin, H., Tyson, R., 2012. Plankton and productivity during the Permian-Triassic boundary crisis: An analysis of organic carbon fluxes. *Global and Planetary Change*, in press. doi:10.1016/j.gloplacha.2012.02.008.

Algeo, T.J., Morford, J., Cruse, A., 2012. Editorial: New applications of trace metals as proxies in marine paleoenvironments. *Chemical Geology*, v. 306-307, p. 160-164. doi:10.1016/j.chemgeo.2012.03.009. (Reprinted v. 324-325, p. 1-5, doi:10.1016/j.chemgeo.2012.07.012)

Shen, J., Algeo, T.J., Hu, Q., Zhang, N., Zhou, L., Xia, W., Feng, Q., 2012. Negative C-isotope excursions at the Permian-Triassic boundary linked to volcanism. *Geology*, in press (will appear in Nov. 2012 issue).

Herrmann, A., Kendall, B., Algeo, T.J., Gordon, G.W., Wasylenski, L., Anbar, A.D., 2012. Anomalous molybdenum isotope trends in Upper Pennsylvanian euxinic facies: Significance for use of 98Mo as a global marine redox proxy. *Chemical Geology*, in press. doi:10.1016/j.chemgeol.2012.05.013.

Xiong, Z., Li, T., Algeo, T.J., Chang, F., Yin, X., Xu, Z., 2012. Rare earth element geochemistry of diatom mats from tropical West Pacific. *Chemical Geology*, v. 296-297, p. 103-118. doi:10.1016/j.chemgeo.2011.12.012.

Algeo, T., Henderson, C., Ellwood, B., Rowe, H., Elswick, E., Bates, S., Lyons, T., Hower, J.C., Smith, C., Maynard, J.B., Hays, L., Summons, R., Fulton, J., Freeman, K., 2012. Evidence for a diachronous Late Permian marine crisis from the Canadian Arctic region. *Geological Society of America Bulletin*, v. 124 (9/10), p. 1424-1448. doi:10.1130/B30505.1.

Shen, J., Algeo, T.J., Hu, Q., Xu, G., Zhou, L., Feng, Q., 2012. Volcanism in South China during the Late Permian and its relationship to marine ecosystem and environmental changes. *Global and Planetary Change*, in press. doi:10.1016/j.gloplacha.2012.02.011.

Tribovillard, N., Algeo, T.J., Baudin, F., Riboulleau, A., 2012. Analysis of marine environmental conditions based on molybdenum-uranium covariation—Applications to Mesozoic paleoceanography. *Chemical Geology*, v. 324-325, p. 46-58. doi:10.1016/j.chemgeo.2011.09.009.

Algeo, T.J., Rowe, H., 2012. Paleoceanographic applications of trace-metal concentration data. *Chemical Geology*, v. 324-325, p. 6-18. doi:10.1016/j.chemgeo.2011.09.002.

Shen, J., Algeo, T.J., Zhou, L., Feng, Q., Yu, J., Ellwood, B.B., 2012. Volcanic perturbations of the marine environment in South China preceding the latest Permian extinction event and their biotic effects. *Geobiology*, v. 10, p. 82-103. doi: 10.1111/j.1472-4669.2011.00306.x.

2011

Falkowski, P.G., Algeo, T., Codispoti, L., Deutsch, C., Emerson, S., Hales, B., Huey, R.B., Jenkins, W.J., Kump, L.R., Levin, L.A., Lyons, T.W., Nelson, N.B., Schofield, O.S., Summons, R., Talley, L.D., Thomas, E., Whitney, F., Pilcher, C.B., 2011. Ocean deoxygenation: Past, present, and future. *EOS (Transactions of the American Geophysical Union)*, v. 92 (46), p. 409-410.

Li, F., Yan, J., Algeo, T., and Wang, X., 2011. Palaeooceanographic conditions following the end-Permian mass extinction recorded by giant ooids (Moyang, South China). *Global and Planetary Change*, in press. doi:10.1016/j.gloplacha.2011.09.009.

Brennecka, G.A., Herrmann, A.D., Algeo, T.J., Anbar, A.D., 2011. Rapid expansion of oceanic anoxia immediately before the end-Permian mass extinction. *Proceedings of the National Academy of Sciences (USA)*, v. 108, p. 17631-17634, doi/10.1073/pnas.1106039108.

Algeo, T.J., Chen, Z.Q., Fraiser, M.L., Twitchett, R.J., 2011. Terrestrial-marine teleconnections in the collapse and rebuilding of Early Triassic marine ecosystems. *Palaeogeography Palaeoclimatology Palaeoecology,* v. 308, p. 1-11. doi:10.1016/j.palaeo.2011.01.011.

Luo, G., Wang, Y., Kump, L.R., Bai, X., Algeo, T.J., Yang, H., Xie, S., 2011. Nitrogen fixation prevailed simultaneously with the end-Permian marine mass extinction and its implications. *Geology*, v. 39, p. 647-650. doi:10.1130/G32024.1.

Chen, L., Wang, Y., Xie, S., Kershaw, S., Dong, M., Yang, H., Liu, H., and Algeo, T.J., 2011. Molecular records of microbialites following the end-Permian mass extinction in Chongyang, Hubei Province, South China. *Palaeogeography Palaeoclimatology Palaeoecology*, v. 308, p. 151-159. doi:10.1016/j.palaeo.2010.09.010.

Algeo, T.J., Kuwahara, K., Sano, H., Bates, S., Lyons, T., Elswick, E., Hinnov, L., Ellwood, B.B., Moser, J., and Maynard, J.B., 2011. Spatial variation in sediment fluxes, redox conditions, and productivity in the Permian-Triassic Panthalassic Ocean. *Palaeogeography Palaeoclimatology Palaeoecology*, v. 308, p. 65-83. doi:10.1016/j.palaeo.2010.07.007.

Ellwood, B.B., Algeo, T.J., El Hassani, A., Tomkind, J.H., and Rowe, H.D., 2011. Defining the timing and duration of the Kačák Interval within the Eifelian/Givetian boundary GSSP, Mech Irdane, Morocco, using geochemical and magnetic susceptibility patterns. *Palaeogeography Palaeoclimatology Palaeoecology*, v. 304, p. 74-84. doi:10.1016/j.palaeo.2010.10.012.

Luo, G., Wang, Y., Yang, H., Algeo, T.J., Kump, L.R., Huang, J., and Xie, S., 2011. Stepwise and large-magnitude negative shift in δ13Ccarb preceded the main marine mass extinction of the Permian-Triassic crisis interval. *Palaeogeography Palaeoclimatology Palaeoecology*, v. 299, p. 70-82. doi:10.1016/j.palaeo.2010.10.035.

2010

Algeo, T., and Twitchett, R., 2010. Anomalous Early Triassic sediment fluxes due to due to elevated weathering rates and their biological consequences. *Geology*, v. 38, p. 1023-1026. doi: 10.1130/G31203.1.

Algeo, T.J., and Scheckler, S.E., 2010. Land plant evolution and weathering rates changes in the Devonian. *Journal of Earth Science*, v. 21, Supplement 1, p. 75-78.

Algeo, T.J., Hinnov, L., Moser, J., Maynard, J.B., Elswick, E., Kuwahara, K., and Sano, H., 2010. Changes in productivity and redox conditions in the Panthalassic Ocean during the latest Permian. *Geology*, v. 38, p. 187-190. doi:10.1130/G30483.1.

Zhang, T.G., Shen, Y., and Algeo, T.J., 2010. High-resolution carbon isotopic records from south China: implications for atmospheric CO2 changes during the Ordovician. *Palaeogeography Palaeoclimatology Palaeoecology*, v. 289, p. 102-112. doi:10.1016/j.palaeo.2010.02.020.

Algeo, T.J., 2010. Anomalous Early Triassic sediment fluxes due to elevated weathering rates. *Journal of Earth Science*, v. 21, Supplement 1, p. 107-110.

2009

Algeo, T.J., and Tribovillard, N. 2009. Environmental analysis of paleoceanographic systems based on molybdenum-uranium covariation. *Chemical Geology,* v. 268, p. 211-225, doi:10.1016/j.chemgeo.2009.09.001.

2008

McArthur, J.M., Algeo, T.J., van de Schootbrugge, B., Li, Q., and Howarth, R.J., 2008, Basinal restriction, black shales, and the Early Toarcian (Jurassic) oceanic anoxic event. *Paleoceanography*, v. 23, PA4217, doi:10.1029/2008PA001607.

Algeo, T.J., Rowe, H., Hower, J.C., Schwark, L., Hermann, A., and Heckel, P.H., 2008, Oceanic denitrification during Late Carboniferous glacial-interglacial cycles. *Nature Geoscience*, v. 1, p. 709-714, doi:10.1038/ngeo307.

Algeo, T.J., and Maynard, J.B., 2008, Trace metal covariation as a guide to water-mass conditions in ancient anoxic marine environments. *Geosphere*. v. 4; no. 5; p. 872-887; doi: 10.1130/GES00174.1.

Tribovillard, N., Bout-Roumazeilles, V., Algeo, T.J., Lyons, T.W., Sionneau, T., Montero-Serrano, J.-C., Riboulleau, A., and Baudin, F., 2008. Paleodepositional conditions in the Orca Basin as inferred from organic matter and trace metal contents. *Marine Geology*, v. 254, p. 62-72, [doi:10.1016/j.margeo.2008.04.016](http://dx.doi.org/10.1016/j.margeo.2008.04.016).

Weyer, S., Anbar, A.D., Gerdes, A., Gordon, G., Algeo, T.J., Boyle, E.A., 2008. Natural fractionation of 238U/235U, *Geochimica et Cosmochimica Acta*, v. 72, p. 345-359. doi:10.1016/j.gca.2007.11.012.

Algeo, T.J., Shen, Y., Zhang, T., Lyons, T.W., Bates, S.M., Rowe, H., and Nguyen, T.K.T., 2008, Association of 34S-depleted pyrite layers with negative carbonate δ13C excursions at the Permian/Triassic boundary: Evidence for upwelling of sulfidic deep-ocean watermasses. *Geochemistry Geophysics Geosystems*, v. 9, Q04025, 10 pp., doi:10.1029/2007GC001823.

Algeo, T.J., and Heckel, P.H., 2008, The Late Pennsylvanian Midcontinent Sea of North America: A review. *Palaeogeography Palaeoclimatology Palaeoecology*, v. 268, p. 205-221, [doi:10.1016/j.palaeo.2008.03.049](http://dx.doi.org/10.1016/j.palaeo.2008.03.049).

Algeo, T.J., Heckel, P.H., Maynard, J.B., Blakey, R., and Rowe, H., 2008. Modern and ancient epicratonic seas and the superestuarine circulation model of marine anoxia. In: Holmden, C., Pratt, B.R. (Eds.), *Dynamics of Epeiric Seas: Sedimentological, Paleontological and Geochemical Perspectives*. Geological Association of Canada Special Publication, v. 48, p. 7-38.

**2007**

Pope, M.C., Algeo, T.J., Saltzman, M., and Bartley, J.K., 2007, Special issue on Neoproterozoic-Paleozoic ocean chemistry: *Palaeogeography Palaeoclimatology Palaeoecology*, v. 256, p. 1-4.

Algeo, T.J., and Ingall, E.D., 2007, Sedimentary Corg:P ratios, paleocean ventilation, and Phanerozoic atmospheric pO2: *Palaeogeography Palaeoclimatology Palaeoecology*, v. 256, p. 130-155, doi:10.1016/j.palaeo.2007.02.029.

Algeo, T.J., Lyons, T.W., Blakey, R.C., and Over, D.J., 2007, Hydrographic conditions of the Devono-Carboniferous North American Seaway inferred from sedimentary Mo-TOC relationships: *Palaeogeography Palaeoclimatology Palaeoecology*, v. 256, p. 204-230, doi:10.1016/j.palaeo.2007.02.035.

Turgeon, S., Creaser, R., and Algeo, T.J., 2007. Re-Os depositional ages and seawater Os estimates for the Frasnian-Fammenian Boundary. *Earth and Planetary Science Letters*, v. 261, p. 649-661. doi:10.1016/j.epsl.2007.07.031.

Algeo, T., Lehrmann, D., Orchard, M., Tong, J., 2007. The Permian-Triassic boundary crisis and Early Triassic biotic recovery. *Palaeogeography Palaeoclimatology Palaeoecology*, v. 252, p. 1-3, doi:10.1016/j.palaeo.2006.11.030.

Algeo, T.J., Ellwood, B.B., Nguyen, T.K.T., Rowe, H., and Maynard, J.B., 2007, The Permian-Triassic boundary at Nhi Tao, Vietnam: Evidence for recurrent influx of sulfidic watermasses to a shallow-marine carbonate platform: *Palaeogeography Palaeoclimatology Palaeoecology*, v. 252, p. 304-327, doi:10.1016/j.palaeo.2006.11.055.

Algeo, T.J., Hannigan, R., Rowe, H., Brookfield, M., Baud, A., Krystyn, L., and Ellwood, B.B., 2007. Sequencing events across the Permian-Triassic boundary, Guryul Ravine (Kashmir, India): *Palaeogeography Palaeoclimatology Palaeoecology*, v. 252, p. 328-346, doi:10.1016/j.palaeo.2006.11.050.

2006

Tribovillard, N., Algeo, T.J., Lyons, T.W., and Riboulleau, A., 2006, Application of trace metals as paleoredox and paleoproductivity proxies: *Chemical Geology*, v. 232, p. 12-32. doi:10.1016/j.chemgeo.2006.02.012.

Algeo, T.J., and Lyons, T.W., 2006, Mo–total organic carbon covariation in modern anoxic marine environments: Implications for analysis of paleoredox and paleohydrographic conditions, *Paleoceanography*, 21, PA1016, doi:10.1029/2004PA001112, 25 pp.

**2004**

Algeo, T.J., 2004, Can marine anoxic events draw down the trace-element inventory of seawater? *Geology*, v. 32, p. 1057-1060. doi:10.1130/G20896.1.

Algeo, T.J., Schwark, L., and Hower, J.C., 2004, High-resolution geochemistry and sequence stratigraphy of the Hushpuckney Shale (Swope Formation, eastern Kansas): Implications for climato-environmental dynamics of the Late Pennsylvanian Midcontinent Seaway. *Chemical Geology*, v. 206, p. 259-288. doi:10.1016/j.chemgeo.2003.12.028.

Algeo, T.J., and Maynard, J.B., 2004, Trace element behavior and redox facies in core shales of Upper Pennsylvanian Kansas-type cyclothems. *Chemical Geology*, v. 206, p. 289-318. doi:10.1016/j.chemgeo.2003.12.028.

2003

Brett, C.E., Algeo, T.J., and McLaughlin, P.I., 2003, Use of event beds and sedimentary cycles in high-resolution stratigraphic correlation of lithologically repetitive successions: The Upper Ordovician Kope Formation of northern Kentucky and southern Ohio. In: Harries, P.J., ed., *Approaches in High-Resolution Stratigraphic Paleontology:* Kluwer, Amsterdam, p. 315-350.

**2001**

Algeo, T.J., Scheckler, S.E., and Maynard, J.B., 2001, Effects of early vascular land plants on weathering processes and global chemical fluxes during the Middle and Late Devonian. In: Gensel, P., and Edwards, D., eds., *Plants Invade the Land: Evolutionary and Environmental Perspectives*: Columbia University Press, p. 213-236.

Brett, C.E., and Algeo, T.J., 2001c, Sequence stratigraphy of Upper Ordovician and Lower Silurian strata of the Cincinnati Arch Region. In: Algeo, T.J., and Brett, C.E. (Eds.), *Sequence, Cycle & Event Stratigraphy of Upper Ordovician & Silurian Strata of the Cincinnati Arch Region*, Field Trip Guidebook, 1999 Field Conference of the Great Lakes Section of the Society for Sedimentary Geology (SEPM-SSG) and the Kentucky Society of Professional Geologists, October 8th-10th, 1999; p. 34-46.

Brett, C.E., and Algeo, T.J., 2001b, Stratigraphy of the Upper Ordovician Kope Formation in its type area, northern Kentucky, including a revised nomenclature. In: Algeo, T.J., and Brett, C.E. (Eds.), *Sequence, Cycle & Event Stratigraphy of Upper Ordovician & Silurian Strata of the Cincinnati Arch Region*, Field Trip Guidebook, 1999 Field Conference of the Great Lakes Section of the Society for Sedimentary Geology (SEPM-SSG) and the Kentucky Society of Professional Geologists, October 8th-10th, 1999; p. 47-64.

Brett, C.E., and Algeo, T.J., 2001a, Event beds and small-scale cycles in Edenian to lower Maysvillian strata (Upper Ordovician) of northern Kentucky: Identification, origin, and temporal constraints. In: Algeo, T.J., and Brett, C.E. (Eds.), *Sequence, Cycle & Event Stratigraphy of Upper Ordovician & Silurian Strata of the Cincinnati Arch Region*, Field Trip Guidebook, 1999 Field Conference of the Great Lakes Section of the Society for Sedimentary Geology (SEPM-SSG) and the Kentucky Society of Professional Geologists, October 8th-10th, 1999; p. 65-86.

Algeo, T.J., and Brett, C.E. (Eds.), 2001. *Sequence, Cycle & Event Stratigraphy of Upper Ordovician & Silurian Strata of the Cincinnati Arch Region*, Field Trip Guidebook, 1999 Field Conference of the Great Lakes Section of the Society for Sedimentary Geology (SEPM-SSG) and the Kentucky Society of Professional Geologists, October 8th-10th, 1999; Lexington, Kentucky, Kentucky Geological Survey, 150 pp.

**1998**

Algeo, T.J., and Scheckler, S.E., 1998, Terrestrial-marine teleconnections in the Devonian: Links between the evolution of land plants, weathering processes, and marine anoxic events: *Royal Society of London Philosophical Transactions (B): Biological Sciences*, v. 353, p. 113-130.

Jaminski, J., Algeo, T.J., Maynard, J.B., and Hower, J.C., 1998, Climatic origin of dm-scale compositional cyclicity in the Cleveland Member of the Ohio Shale (Upper Devonian), Central Appalachian Basin, USA. In: Schieber, J., Zimmerle, W., and Sethi, P.S., eds., *Shales and Mudstones, v. 1:* Stuttgart, Schweizerbart'sche, p. 217-242.

Hoffman, D.L., Algeo, T.J., Maynard, J.B., Joachimski, M.M., Hower, J.C., and Jaminski, J., 1998, Regional and stratigraphic variation in bottomwater anoxia in offshore core shales of Upper Pennsylvanian cyclothems from the Eastern Midcontinent Shelf (Kansas), USA. In: Schieber, J., Zimmerle, W., and Sethi, P.S., eds., *Shales and Mudstones, v. 1*: Stuttgart, Schweizerbart'sche, p. 243-269.

**1997**

Jaminski, J., Algeo, T.J., Maynard, J.B., and Hower, J.C., 1997. Climatic origin of dm-scale compositional cyclicity in the Upper Devonian Cleveland Member of the Ohio Shale, central Appalachian Basin. In: Algeo, T.J., and Maynard, J.B. (Eds.), 1997. *Cyclic Sedimentation of Appalachian Devonian and Midcontinent Pennsylvanian Black Shales: Analysis of Ancient Anoxic Marine Systems—A Combined Core and Field Workshop*: Joint Meeting of Eastern Section AAPG and The Society for Organic Petrography (TSOP), Lexington, Kentucky, Sept. 27-28, 1997, p. 26-62.

Jaminski, J., Algeo, T.J., Maynard, J.B., Kuhn, T., and Hower, J.C., 1997. Tectono-climatic controls on broad-scale patterns of compositional variation in the Upper Devonian Cleveland Member of the Ohio Shale, central Appalachian Basin. In: Algeo, T.J., and Maynard, J.B. (Eds.), 1997. *Cyclic Sedimentation of Appalachian Devonian and Midcontinent Pennsylvanian Black Shales: Analysis of Ancient Anoxic Marine Systems—A Combined Core and Field Workshop*: Joint Meeting of Eastern Section AAPG and The Society for Organic Petrography (TSOP), Lexington, Kentucky, Sept. 27-28, 1997, p. 63-77.

Algeo, T.J., Hoffman, D.L., Maynard, J.B., Joachimski, M.M., Hower, J.C., and Watney, W.L., 1997. The utility of X-radiography for generation of high-resolution paleoclimatic proxy records from black shales, with examples from core shale members of Upper Pennsylvanian Midcontinent cyclothems. In: Algeo, T.J., and Maynard, J.B. (Eds.), 1997. *Cyclic Sedimentation of Appalachian Devonian and Midcontinent Pennsylvanian Black Shales: Analysis of Ancient Anoxic Marine Systems—A Combined Core and Field Workshop*: Joint Meeting of Eastern Section AAPG and The Society for Organic Petrography (TSOP), Lexington, Kentucky, Sept. 27-28, 1997, p. 78-102.

Algeo, T.J., Hoffman, D.L., Maynard, J.B., Joachimski, M.M., Hower, J.C., and Watney, W.L., 1997. Environmental reconstruction of anoxic marine systems: Core black shales of Upper Pennsylvanian Midcontinent cyclothems. In: Algeo, T.J., and Maynard, J.B. (Eds.), 1997. *Cyclic Sedimentation of Appalachian Devonian and Midcontinent Pennsylvanian Black Shales: Analysis of Ancient Anoxic Marine Systems—A Combined Core and Field Workshop*: Joint Meeting of Eastern Section AAPG and The Society for Organic Petrography (TSOP), Lexington, Kentucky, Sept. 27-28, 1997, p. 103-147.

Algeo, T.J., and Maynard, J.B. (Eds.), 1997. *Cyclic Sedimentation of Appalachian Devonian and Midcontinent Pennsylvanian Black Shales: Analysis of Ancient Anoxic Marine Systems—A Combined Core and Field Workshop*: Joint Meeting of Eastern Section AAPG and The Society for Organic Petrography (TSOP), Lexington, Kentucky, Sept. 27-28, 1997, 147 pp.

**1996**

Algeo, T.J., 1996, Geomagnetic polarity bias patterns through the Phanerozoic: *Journal of Geophysical Research*, v. 101, p. 2785-2814.

Algeo, T.J., 1996, Meteoric water/rock ratios and the significance of sequence and parasequence boundaries in the Gobbler Formation (Middle Pennsylvanian) of south-central New Mexico. In: Witzke, B.J., Ludvigson, G.A., and Day, J., eds., *Paleozoic Sequence Stratigraphy: Views from the North American Craton*: Boulder, Colorado, Geological Society of America Special Paper 306, p. 359-371.

**1995**

Algeo, T.J., and Seslavinsky, K.B., 1995b, Reconstructing epeirogenic and eustatic trends from paleo-continental flooding data. In: Haq, B.U., ed., *Sequence Stratigraphy and Depositional Response to Eustatic, Tectonic and Climatic Forcing*: Dordrecht, Kluwer, p. 209-246.

Algeo, T.J., and Seslavinsky, K.B., 1995a, The Paleozoic world: Continental flooding, hypsometry, and sea level: *American Journal of Science*, v. 295, p. 787-822.

Algeo, T.J., Berner, R.A., Maynard, J.B., and Scheckler, S.E., 1995, Late Devonian oceanic anoxic events and biotic crises: "Rooted" in the evolution of vascular land plants?: *GSA Today*, v. 5, p. 45, 64‑66.

Algeo, T.J., and Watson, B.A., 1995, Calcite, aragonite, and bimineralic ooids in Missourian (Upper Pennsylvanian) strata of Kansas: Stratigraphic and geographic patterns of variation. In: Pausé, P.H., and Candelaria, M.P., eds., *Carbonate Facies and Sequence Stratigraphy: Practical Applications of Carbonate Models*: Permian Basin Section SEPM, Publ. 95-36, p. 141-173.

**1994**

Algeo, T.J., and Woods, A.D., 1994, Microstratigraphy of the Lower Mississippian Sunbury Shale: A record of solar-modulated climatic cyclicity: *Geology*, v. 22, p. 795-798.

Algeo, T.J., Phillips, M., Jaminski, J., and Fenwick, M., 1994, High-resolution X‑radiography of laminated sediment cores: *Journal of Sedimentary Petrology*, v. A64, p. 665-668.

**1993**

Algeo, T.J., 1993, Quantifying stratigraphic completeness: A probabilistic approach using paleomagnetic data: *Journal of Geology*, v. 101, p. 421‑433.

Algeo, T.J., and Woods, A.D., 1993, Microstratigraphy of the Lower Mississippian Sunbury Shale: A record of solar-modulated climatic cyclicity. In: Robl, T.L., ed., *Proceedings of the 1993 Eastern Oil Shale Symposium*: Lexington, Kentucky, Institute of Mining and Mineral Resources, p. 364-375.

**1992**

Algeo, T.J., Wilkinson, B.H., and Lohmann, K.C, 1992, Meteoric-burial diagenesis of Pennsylvanian carbonate: water/rock interactions and basin geothermics: *Journal of Sedimentary Petrology*, v. 62, p. 652-670.

Algeo, T.J., and Rich, M., 1992, Bangor Limestone: depositional environments and cyclicity on a Late Mississippian carbonate shelf: *Southeastern Geology*, v. 32, p. 143-162.

Algeo, T.J., and Dattilo, B.F., 1992, Upper Ordovician (Cincinnatian Series) Kope, Fairview and Bellevue formations; storm-dominated carbonate-ramp deposits. Keck Foundation Fieldtrip Guidebook, Beloit, WI, Beloit Coll., 114 p.

Algeo, T.J., 1992, Continent-scale wrenching of southwestern Laurussia during the Ouachita-Marathon Orogeny and tectonic escape of the Llano Block. In: Lindsay, R.F., and Reed, C.L., eds., *Sequence Stratigraphy Applied to Permian Basin Reservoirs*, West Texas Geological Society Publ. 92-92, p. 115-131.

**1991**

Algeo, T.J., Wilson, J.L., and Lohmann, K.C, 1991, Eustatic and tectonic controls on cyclic sediment accumulation patterns in Lower-Middle Pennsylvanian strata of the Orogrande Basin, New Mexico. In: Barker, J.M., Kues, B.S., Austin, G.S., and Lucas, S.G., eds., *Geology of the Sierra Blanca, Sacramento and Capitan Ranges, New Mexico*: Albuquerque, New Mexico Geological Society, 42nd Annual Field Conf. Guidebook, p. 203‑212.

Algeo, T.J., and Wilkinson, B.H., 1991, Modern and ancient continental hypsometries: *Journal of the Geological Society of London*, v. 148, p. 643‑653.

Wilkinson, B.H., Opdyke, B.N., and Algeo, T.J., 1991, Time partitioning in cratonic carbonates: *Geology*, v. 19, p. 1093-1096.

**1989**

Wilkinson, B.H., and Algeo, T.J., 1989, Sedimentary carbonate record of calcium-magnesium cycling: *American Journal of Science*, v. 289, p. 1158‑1194.

**1988**

Algeo, T.J., and Wilkinson, B.H., 1988, Periodicity of mesoscale Phanerozoic sedimentary cycles and the role of Milankovitch orbital modulation: *Journal of Geology*, v. 96, p. 313‑322.

**Scientific Reports**

Co-author of *Understanding Earth’s Deep Past: Lessons for Our Climate Future*. 2011. National Academy of Sciences, Washington, D.C., 212 p. Report of the National Research Council Committee on “The Importance of Deep-Time Geologic Records for Understanding Climate Change Impacts.

**Popular Science Magazines / News Stories**

### “Cincinnati's Algeo Tracks Evidence of 'The Great Dying'”, University of Cincinnati News, 22 Oct 2010.

### <http://www.uc.edu/news/NR.aspx?id=12619>

### “UC Strongly Represented At National Geology Meeting”, University of Cincinnati News, 22 Oct 2010.

### <http://www.uc.edu/news/NR.aspx?id=12617>

"Murderous trees": K. Fox, Science Report, American Institute of Physics, Aug. 1995 (radio interview).

"Mass murderers of the Devonian": R. Flanagan, Earth, Aug. 1995, p. 22-23, 62.

"Massentod im Morast" ("Mass Death in the Morass"): J. Grolle, Der Spiegel, May 8th, 1995, p. 184-187.

"Getting to the root of mass extinction": K. Chilton, BBC World News Service (Science Division), May 22nd, 1995 (radio interview).

Land plants and the Devonian extinction event: A. Barry, Daily Telegraph (London), April 23rd, 1995.

"Killer trees choked ocean life": R. Flanagan, New Scientist, April 22nd, 1995, p. 17.

"Trees as mass murderers": T. Folger, Discover, Feb. 1994, p. 20-21.

"Killer trees": Anonymous, News and Views: Nature, 1993, v. 366, p. 115.

"Did prehistoric trees cause extinctions at sea?": Anonymous, Down to Earth (Newsletter of the Geol. Society of America, 1993 Annual Meeting, Boston), p. 6.

**Abstracts / Presentations—Professional Meetings**

**2012**

Herrmann, A.D., Gordon, G.W., Romaniello, A., Algeo, T.J., Anbar, A.D., 2012. Spatial heterogeneity of uranium isotope variations in a Phanerozoic epicontinental black shale (Hushpuckney Shale, Swope Formation). GSA Annual Meeting, Charlotte, NC, November 2012.

Sedlacek, A., Saltzman, M., Algeo, T., Horacek, M., Richoz, S., Brandner, R., and Foland, K., 2012. Coupled C and Sr isotope stratigraphy of the Early Triassic of Zal, Iran: a record of increased weathering. GSA Annual Meeting, Charlotte, NC, November 2012.

Schoepfer, S.D., Algeo, T.J., Henderson, C.M., Ward, P.D., 2012. Gradients in nutrient distribution and productivity in northeast Panthalassa across the PTB. GSA Annual Meeting, Charlotte, NC, November 2012.

Algeo, T.J., Meyers, P.A., Rowe, H., 2012. Tectonic and climatic controls on the Phanerozoic marine nitrogen cycle. GSA Annual Meeting, Charlotte, NC, November 2012.

Song, H., Tong, J., Algeo, T.J., 2012. Large shallow-to-deep δ13C gradients in Early Triassic seas of the South China craton. GSA Annual Meeting, Charlotte, NC, November 2012.

Wan, Z., Algeo, T.J., Gensel, P., Scheckler, S., Rowe, H., and Sauer, P., 2012. Stable carbon isotopic composition of fossil land plants: an indicator of Devonian paleoclimate change. GSA Annual Meeting, Charlotte, NC, November 2012.

Tribovillard, N., Algeo, T.J., Baudin, F., Riboulleau, A., 2012. Analysis of marine environmental conditions based onmolybdenum–uranium covariation—Applications to Mesozoic paleoceanography. 4th International Geologica Belgica Meeting 2012, September 11-14, 2012 - Brussels, Belgium.

Ahrens, K., Algeo, T., Herrmann, A., 2012. Origin of small-scale cyclicity in Upper Pennsylvanian cyclothemic core shales of the Midcontinent region. North-central GSA Meeting, Dayton, Ohio, April 2012.

Algeo, T.J., 2012. Significance of spatial variation in ocean redox conditions at the Permian-Triassic boundary. IGCP Project 572, Final Meeting, Eger, Hungary, June 2012 (Keynote talk).

Song, H., Tong, J., Algeo, T.J., Qiu, H., Song, H., Tian, L., Chen, Z.Q., 2012. Large shallow-to-deep δ13C gradients in Early Triassic seas of the South China craton. IGCP Project 572, Final Meeting, Eger, Hungary, June 2012.

Richoz, S., Krystyn, L., Algeo, T.J., Bagharva, O.N., Horacek, M., Spotl, C., 2012. Early Triassic changes in water oxidation conditions and pelagic faunal recovery: An interplay evidences from the Indian Himalaya. IGCP Project 572, Final Meeting, Eger, Hungary, June 2012.

Brennecka, G.A., Herrmann, A.D., Algeo, T.J., Anbar, A.D., 2012. Rapid expansion of oceanic anoxia immediately before the end-Permian mass extinction. AbSciCon, January 2012.

**2011**

Sedlacek, A., Saltzman, M., Algeo, T., Horacek, M., Foland, K., Linder, J., Howard, A., Sedlak, C., Walters, A., 2011. Strontium isotope stratigraphy from the late Permian to Early Triassic of Zal, Iran. Geological Society of America Annual Meeting, Minneapolis, MN, Oct. 9-13, 2011.

Herrmann, A.D., Algeo, T.J., 2011. Tracing sequence stratigraphic surfaces of cyclothemic black shales using nitrogen isotopes. Geological Society of America Annual Meeting, Minneapolis, MN, Oct. 9-13, 2011.

Schoepfer, S.D., Algeo, T.J., Griggs, G., Henderson, C., Ward, P.D., 2011. Increasing nitrogen limitation at the P-Tr boundary: A pan-oceanic phenomenon? Society of America Annual Meeting, Minneapolis, MN, Oct. 9-13, 2011.

Algeo, T.J., 2011. The Early Triassic cesspool: Marine conditions following the end-Permian mass extinction. Geological Society of America Annual Meeting, Minneapolis, MN, Oct. 9-13, 2011.

Brookfield, M.E., Hannigan, R., Algeo, T., Williams, J., 2011. Sedimentology and geochemistry of the Permo-Triassic boundary section at Guryul ravine, Kashmir, India; and a comparison with the Texas Cretaceous-Tertiary boundary section. XVII International Congress on the Carboniferous and Permian, Perth, Australia, July 3-8, 2011.

Algeo, T.J., 2011. The Early Triassic cesspool: Marine conditions following the end-Permian mass extinction. XVII International Congress on the Carboniferous and Permian, Perth, Australia, July 3-8, 2011 (Plenary Keynote Lecture; invited by Zhong Chen).

Song, H.Y., Tong, J., Song, H.-J., Algeo, T.J., 2011. Large seawater sulfur isotope perturbations during the Early Mesozoic. XVII Intern. Congress on the Carboniferous & Permian, Perth, Australia, July 3-8, 2011.

Algeo, T.J., 2011. Circulation in the Late Pennsylvanian Midcontinent Sea of North America. XVII International Congress on the Carboniferous and Permian, Perth, Australia, July 3-8, 2011 (Keynote Lecture for S8; invited by Ethan Grossman).

Algeo, T.J., 2011. Enhanced continental weathering in the latest Permian to Early Triassic: Effects on shallow-marine biotas. XVII International Congress on the Carboniferous and Permian, Perth, Australia, July 3-8, 2011 (volunteered, S3).

**2010**

Algeo, T.J., Meyers, P.A., Rowe, H., 2010. Icehouse-greenhouse climate impacts on the Phanerozoic marine nitrogen cycle. GSA Annual Meeting, Denver, CO; Oct. 20-Nov 3 (invited keynote talk, T123; convener Maya Elrick).

Herrmann, A.D., Algeo, T.J., Anbar, A.D., 2010. Do uranium isotopes of epicontinental black shales reflect global oceanic conditions? GSA Annual Meeting, Denver, CO; Oct. 20-Nov 3 (T120; conveners Thomas Algeo and Margaret Fraiser).

Shen, J., Algeo, T.J., Zhou, L., Feng, Q., Yu, J., 2010. Evolution of the primary productivity across deep water PTB in South China. GSA Annual Meeting, Denver, CO; Oct. 20-Nov 3 (T120; conveners Thomas Algeo and Margaret Fraiser).

Algeo, T.J., Tyson, R., Tong, J., Feng, Q., Yin, H., Henderson, C.M., 2010. Anomalies in organic carbon concentrations and accumulation rates during the Permian-Triassic boundary crisis: Implications for sediment flux and marine productivity changes. GSA Annual Meeting, Denver, CO; Oct. 20-Nov 3 (T120; conveners Thomas Algeo and Margaret Fraiser).

Algeo, T.J., 2010. Redox conditions in Late Permian-Early Triassic oceans: The role of elevated continental weathering fluxes. GSA Annual Meeting, Denver, CO; Oct. 20-Nov 3 (invited keynote talk, T75; conveners Brad Sageman and Tim Lyons).

Twitchett, R.J., Algeo, T.J., 2010. High sedimentation rates in Early Triassic shelf settings: a control on post-Permian biotic recovery? International Paleobiology Conference, London, June 24-26, 2010.

Algeo, T., and Lyons, T., 2010. Use of sedimentary trace-metal concentration data to constrain hydrographic conditions in ancient marine systems. 20th Annual V.M. Goldschmidt Conference, Knoxville, Tennessee; “New Applications of Trace Metals in Siliciclastic Sediments as Proxies for Marine Paleoenvironments” (S12b, organizers: Thomas Algeo and Anna Cruse).

Algeo, T.J., and Twitchett, R.J., 2010. Deoxygenation of Permo-Triassic oceans: The role of elevated continental weathering fluxes. 20th Annual V.M. Goldschmidt Conference, Knoxville, Tennessee; “Biogeochemical Cycling in Low Oxygen Marine Environments of the Past and Present” (S12c, organizers: Caroline Slomp and Tom Jilbert).

Algeo, T.J., and Scheckler, S.E., 2010. Land plant evolution and weathering rate changes in the Devonian. International Geobiology Conference, Wuhan, China, June 3-6, 2010.

Algeo, T.J., 2010. Anomalous Early Triassic sediment fluxes due to elevated weathering rates. International Geobiology Conference, Wuhan, China, June 3-6, 2010.

Algeo, T.J., Herrmann, A., and Haupt, B., 2010. Gradients in sediment geochemistry as a constraint on modeling epeiric sea circulation. AAPG-SEPM Annual Meeting New Orleans, April 14-18.

Algeo, T.J., and Rowe, H., 2010. Anoxia in ancient epeiric seas: The limits of modern analogs. AAPG-SEPM Annual Meeting New Orleans, April 14-18.

Haupt, B.J., Herrmann, A., and Algeo, T.J., 2010. Modeling the Middle-Late Pennsylvanian North American Midcontinent Sea. AAPG-SEPM Annual Meeting New Orleans, April 14-18.

**2009**

Algeo, T.J., Tong, J., and Feng, Q., 2009. Permian/Triassic boundary clay beds in South China—related to the Emeishan Large Igneous Province? GSA Annual Meeting, Portland Oregon, October 18-21.

Algeo, T.J., and Meyers, P.A., 2009. Icehouse-greenhouse climate impacts on the Phanerozoic marine nitrogen cycle. GSA Annual Meeting, Portland Oregon, October 18-21.

Algeo, T.J., Tong, J., Feng, Q., and Henderson, C., 2009. A marine primary productivity crash in the eastern Tethyan region at the Permian/Triassic boundary? Session 28, North American Paleontological Congress, Cincinnati, Ohio, June 22-26.

Algeo, T., Gordon, G., Sauer, P., and Grice, K., 2009. New insights on the Frasnian/Famennian mass extinction: a role for soil erosion? Session 6, North American Paleontological Congress, Cincinnati, Ohio, June 22-26.

Wan, Z., Algeo, T., 2009.  Stomatal parameters of Middle Devonian-Early Carboniferous land plants. Session 6, North American Paleontological Congress, Cincinnati, Ohio, June 22-26.

Algeo, T.J., and Hinnov, L.A., 2009. Refinement of the Late Paleozoic Time Scale: The Potential of Astronomical Tuning. AAPG-SEPM Annual Convention, Denver, Colorado, June 7-10.

Algeo, T.J., and Lyons, T.W., 2009. The Future of Trace-Metal Proxies for Paleoceanographic Analysis. AAPG-SEPM Annual Convention, Denver, Colorado, June 7-10.

Negrini, R., Miller, T., Stephenson, R., Ramirez, R., Leiran, J., Wigand, P., Rhodes, D., and Algeo, T., 2009. A 200,000-yr record of lake-level change from the Carrizo Plain, Central Coastal California. Pacific Climate Workshop (PACLIM), Asilomar, California, April, 2009.

**2008**

Algeo, T.J., Gordon, G., Anbar, A., Sauer, P., Schwark, L., Bates, S., Lyons, T., Turgeon, S., Creaser, R., Nabbefeld, B., Grice, K., 2008. New insights on the Frasnian/Famennian mass extinction: a role for soil erosion? AGU Fall Meeting, San Francisco, Dec. 15-19.

Algeo, T.J., Ellwood, B.B., Rowe, H., Krystyn, L., Richoz, S., 2008. Chemostratigraphy and Sequence Stratigraphy of the Induan/Olenekian Boundary in the Mud-4 Section, Spiti Valley, India. 13th International Gondwana Conference, Dali, China, Sept. 14-17, 2008; Session 5: Gondwana Paleogeography and Paleoclimate (conveners: Shuzhong Shen and Guang R. Shi).

**2007**

Grice, K., Nabbefeld, B., Maslen, E., Summons, R.E., Hays, L., Twitchett, R.L., Turgeon, S., Algeo, T., Bottcher, M.E., 2007. Significance of biomarkers for P/Tr and F/F mass extinctions. 17th Annual V.M. Goldschmidt Conference, Cologne, Germany.

Algeo, T.J., Scheckler, S.E., and Gensel, P.G., 2007. Land plant evolution and weathering rate changes in the Devonian. Workshop on “Terrestrialization Influences On The Palaeozoic Geosphere-Biosphere”, October 8-9, 2007, Muséum National d’Histoire Naturelle, Paris (convener: Gael Clement).

Algeo, T.J., 2007, Pangea: The effect of supercontinent formation and breakup on global hypsometry and eustasy. 16th International Congress on the Carboniferous and Permian (ICCP), Nanjing China, June 21-24; Session 5: Evolutionary Palaeogeography and Palaeoclimatology; Pangea formation and breakup (conveners: Richard Lane and Guang Shi).

Algeo, T.J., Heckel, P.H., Rowe, H., Hower, J.C., and Schwark, L., 2007, Advection of denitrified (15N-enriched) Panthalassic intermediate waters to the Late Paleozoic Midcontinent Sea of North America. 16th International Congress on the Carboniferous and Permian (ICCP), Nanjing China, June 21-24; Session 6: Isotopic Geochemistry and Geobiology in the Permo-Carboniferous (conveners: Ethan Grossman, Roger Summons, and Horng-Sheng Mii).

Algeo, T.J., Shen, Y., Zhang, T., Lyons, T.W., Rowe, H., and Nguyen, T.K.T., 2007, Recurrent upwelling of sulfidic deep watermasses at the Permian-Triassic boundary. 16th International Congress on the Carboniferous and Permian (ICCP), Nanjing China, June 21-24; Session 9: End-Permian Biotic Mass Extinction and Early-Triassic Recovery (conveners: Douglas Erwin and Shuzhong Shen).

Algeo, T.J., 2007, High-frequency paleoclimate variation: analysis, interpretation, and significance. AAPG/SEPM Annual Meeting, Long Beach, California, April 3-6.

Herrmann, A., Wasylenki, L., Algeo, T., and Anbar, A.D., 2007. Sequence stratigraphic control on the molybdenum isotope record of the Hushpuckney Shale: Implications for regional paleoceanographic conditions. Geol. Soc. Am. North-Central Meeting, April, Lawrence, Kansas.

**2006**

Algeo, T.J., Shen, Y., Lyons, T.W., Ellwood, B.B., Rowe, H., and Zhang, T., 2006, The Permian-Triassic boundary at Nhi Tao, Vietnam: Evidence for recurrent influx of sulfidic watermasses to a shallow-marine carbonate platform. Geol. Soc. Am. Annual Meeting, Philadelphia, Oct. 22-25 (T109, organizers: David Bottjer and Peter Ward).

Algeo, T.J., Rowe, H., and Maynard, J.B., 2006, Elemental proxies for hydrographic conditions in restricted marine systems. Geol. Soc. Am. Annual Meeting, Philadelphia, Oct. 22-25 (keynote talk, T137, organizers: Peter Allison, Martin Wells, and Brian Pratt).

Algeo, T.J., Hinnov, L.A., and Over, D.J., 2006, Milankovitch cyclicity in the Ohio and Sunbury shales: Astronomical calibration of the Late Devonian-Early Carboniferous timescale Geol. Soc. Am. Annual Meeting, Philadelphia, Oct. 22-25 (T106: organizers: Peter Isaacson and Thomas Algeo).

Herrmann, A., Wasylenki, L., Algeo, T., and Anbar, A.D., 2006, Molybdenum isotope record of the Hushpuckney Shale (Missourian Stage, Eastern Kansas): implications for regional and global anoxia. Geol. Soc. Am. Annual Meeting, Philadelphia, Oct. 22-25 (T106, organizers: Peter Isaacson and Thomas Algeo).

Turgeon, S.C., Creaser, R.A., and Algeo, T.J., 2006, Re-Os depositional ages and seawater Os estimates for the Frasnian-Fammenian Boundary: 16th Annual V. M. Goldschmidt Conference, Sydney, Australia, August 2006. *Geochimica et Cosmochimica Acta*, Volume 70, Issue 18, Supplement 1, August-September 2006, Page A660.

McArthur, J.M., Algeo, T.J., Wignall, P., and van de Schootbrugge, 2006, Evaluating causes for the Toarcian Oceanic Anoxic Event using trace elements, 187Os/188Os, 87Sr/86Sr, and δ13C of belemnite calcite. Internat. Assoc. Sedimentologists Annual Meeting, Fukuoka, Japan, August 2006.

Lyons, T., Anbar, A., Scott, C., Bekker, A., Severmann, S., and Algeo, T., 2006, In search of anoxia in the Proterozoic ocean. Agouron-sponsored. Date of meeting?

Algeo, T.J., Ellwood, B., Thoa, N.T.K., Rowe, H., and Maynard, J.B., 2006, The Permo-Triassic boundary at Nhi Tao, Vietnam: Evidence for recurrent influx of sulfidic watermasses to a shallow-marine carbonate platform: Interrad XI, Circum-Pacific Triassic Stratigraphy & Correlation Conference: The International Association Of Radiolarian Paleontologists, Wellington, New Zealand, March 2006.

**2005**

Algeo, T.J., and Lyons, T.W., 2005, Mo-TOC covariation in modern anoxic marine environments: Implications for analysis of paleoredox and –hydrographic conditions (Keynote talk, 40 min.): Earth Systems Processes 2, Calgary, Alberta, Canada, Aug. 2005.

Algeo, T.J., Lyons, T.W., Blakey, R.C., and Over, D.J., 2005, Estimating the residence time of epeiric sea watermasses from sedimentary elemental proxies (invited talk): Earth Systems Processes 2, Calgary, Alberta, Canada, Aug. 2005.

Algeo, T.J., and Ellwood, B., 2005, Preliminary geochemical analysis of the Cao Bang Permian-Triassic boundary section in northeastern Vietnam: Triassic Chronostratigraphy and Biotic Recovery conference, Chaohu, China, May, 2005.

Algeo, T.J., 2004, Phanerozoic sedimentary Corg:P ratios and paleocean ventilation. AGU Fall Meeting, San Francisco, CA (P0001, organizers: Isabel Montanez and Gerilyn Soreghan).

**2004**

Algeo, T.J., and Heckel, P.H., 2004, Cyclothemic offshore “core” shales as records of climate dynamics and interglacial durations of the Permo-Carboniferous Ice Age. GSA Annual Meeting, Denver, CO (T59, organizers: Chris Fielding and Tracy Frank).

Algeo, T.J., 2004, Can marine anoxic events draw down the trace-element inventory of seawater? (invited talk). GSA Annual Meeting, Denver, CO (T47: organizers: Matt Saltzman and Michael Pope).

**2003**

Algeo, T.J., and Scheckler, S.E., 2003, The role of soils as an interface between terrestrial and marine ecosystems: The Middle to Late Devonian (invited talk). GSA Annual Meeting, Seattle, WA (T89, organizers: Wolfgang Kiessling and Allister Rees).

Algeo, T.J., 2003, The Late Devonian marine P cycle and the origin of widespread black shales: Enhanced rates of upwelling or chemical weathering? (invited talk): GSA Annual Meeting, Seattle, WA (T91, organizers: Jared Morrow, Paul Wignall, and Jeffrey Over).

Algeo, T.J., Hower, J.C., and Schwark, L., 2003, Climato-environmental dynamics of the Late Pennsylvanian Midcontinent Seaway: Implications from high-resolution geochemical and sequence stratigraphic analysis of core shales. GSA Annual Meeting, Seattle, WA (T119, organizers: Rich Schultz and Timothy Lyons).

Algeo, T.J., and Maynard, J.B., 2003, Trace element behavior and redox facies in core shales of Upper Pennsylvanian Kansas-type cyclothems (invited talk): GSA Annual Meeting, Seattle, WA (T119, organizers: Rich Schultz and Timothy Lyons).

Algeo, T.J., and Maynard, J.B., 2003, Trace element behavior and redox facies analysis of core shales of Upper Pennsylvanian Kansas-type cyclothems (invited talk): 13th Annual V.M. Goldschmidt Conference, Kurashiki, Japan; “Biogeochemistry and paleoenvironmental implications of metals in marine sediments” (S17, organizers: Timothy Lyons and Ariel Anbar).

**2002**

Algeo, T.J., Schwark, L., and Maynard, J.B., 2002, Estimating paleo-bottomwater degree-of-anoxia (DOA) using faunal, ichnofabric, and geochemical data: Examples from core shales of Upper Pennsylvanian cyclothems of the Eastern Midcontinent Shelf (Kansas), U.S.A. (invited talk): GSA Annual Meeting, Denver, Colorado (TXX, organizers: Rich Schultz and Susan Rimmer).

**1999**

Bambach, R.K., Algeo, T.J., Thorez, J., and Witzke, B.G., 1999, Dynamics of Devonian paleogeography and paleoclimatic implications for expanding Archaeopteris forests: XVI International Botanical Congress, Abstracts, p. 13.

**1998**

Algeo, T.J., Cherny, M.V., and Hoffman, D.L., 1998, Variation in bottomwater anoxia within transgressive, highstand, and regressive systems tracts of Upper Pennsylvanian cyclothems from the Eastern Midcontinent Shelf (Kansas): GSA Annual Meeting, Toronto, Abstracts with Programs, v. 30(7), p. A397.

Watson, B.A., and Algeo, T.J., 1998, Porosity patterns in Upper Pennsylvanian limestones of Kansas: Prediction of oil- and gas-leg thickness in subsurface reservoirs on the basis of outcrop samples: AAPG Eastern Section Meeting, Columbus, Ohio; Am. Asoc. Petrol. Geol. Bull., v. 82(9), p. 1775-1776.

Algeo, T.J., and Watson, B.A., 1998, Calcitic, aragonitic, and bimineralic ooids in Missourian Stage (Upper Pennsylvanian) limestones of eastern Kansas: Control of mineralogic variation by third-order sea-level fluctuations, GSA North-Central Meeting, Columbus, Ohio; Abstracts with Programs, v. 30(2), p. 2.

Jaminski, J., Algeo, T.J., Maynard, J.B., and Hower J.C., 1998, Climatic origin of dm-scale compositional cyclicity in the Upper Devonian Cleveland Member of the Ohio Shale, central Appalachian basin: GSA North-Central Meeting, Columbus, Ohio, Abstracts with Programs, v. 30(2), p. 25.

**1997**

Algeo, T.J., 1997, Possible effects of vascular land plant evolution on weathering processes and marine anoxic events in the Devonian: IGCP Project 386 Annual Meeting, Delhi, India, Sept. 17, 1997.

Algeo, T.J., and Jaminski, J., 1997, Stratigraphic and geographic patterns of compositional variation in Devonian-Mississippian black shales of the central Appalachian Basin: IUGS Devonian Subcommission Meeting, Rochester, N.Y., July 21-22, 1997.

Jaminski, J., and Algeo, T.J., 1997, Cyclic dm-scale patterns of compositional variation in Devonian-Mississippian black shales of the central Appalachian Basin: IUGS Devonian Subcommission Meeting, Rochester, N.Y., July 21-22, 1997.

Algeo, T.J., 1997, Effects of vascular land plant evolution on global geochemical cycles: The Devonian record: Royal Society Discussion Meeting, London, May 21‑22, 1997.

**1996**

Algeo, T.J., and Scheckler, S.E., 1996, Effects of increased rooting by Middle-Late Devonian vascular land plants on seawater chemistry and marine ecosystems: Fifth Quadrennial Conference, International Organization of Palaeobotany, Santa Barbara, California, Abstracts with Programs.

Jaminski, J., and Algeo, T.J., 1996, Geochemical and petrographic patterns of cyclicity in the Cleveland Member of the Ohio Shale (Upper Devonian) and the Sunbury Shale (Lower Mississippian) in the central Appalachian Basin: Geol. Soc. Am., Northeast Section Meeting, Abstracts with Programs, v. 28(3), p. 68.

**1995**

Algeo, T.J., Jaminski, J., Mickler, P., Hoffman, D.L., Hower, J.C., and Taulbee, D.N., 1995, Microstratigraphic analysis of black shales in core using X-radiography, organic petrography, and trace element geochemistry: Geological Society of America Annual Meeting, New Orleans, Abstracts with Programs, v. 27(6), p. A401.

Jaminski, J., Algeo, T.J., and Hower, J.C., 1995, Decimeter-scale cyclicity in the Upper Devonian Ohio Shale (Cleveland Member) and Lower Mississippian Sunbury Shale: solar- or orbitally-modulated climatic forcing?: Geological Society of America Annual Meeting, New Orleans, Abstracts with Programs, v. 27(6), p. A401.

Mickler, P., Algeo, T.J., and Hower, J.C., 1995, Origin of Lower Paleozoic black shales: A consequence of anoxic oceanic deepwaters or an underdeveloped burrowing infauna?: Geological Society of America Annual Meeting, New Orleans, Abstracts with Programs, v. 27(6), p. 326.

Hoffman, D.L., Algeo, T.J., and Hower, J.C., 1995, Fine-scale cyclicity in core black shales of Midcontinent cyclothems: Potential utility in temporal analysis of Carboniferous glacial cycles: Geological Society of America Annual Meeting, New Orleans, Abstracts with Programs, v. 27(6), p. A401.

Lev, S.M., Algeo, T.J., McLennan, S.M., and Niemitz, J., 1995, Paleo-productivity within the southern Welsh Basin: Constraints on the deposition of an organic-rich facies: Geological Society of America Annual Meeting, New Orleans, Abstracts with Programs, v. 27(6), p. A422.

Algeo, T.J., and Seslavinsky, K.B., 1995, Paleozoic eustasy and continental hypsometry: reconstruction from paleocontinental flooding records: AGU Spring Meeting, Baltimore, Maryland, May 29-June 2, Eos, v. 76(17), p. 52.

Algeo, T.J., 1995, Were Late Devonian and mid-Cretaceous oceanic anoxic events precipitated by evolutionary radiations of gymnosperms and angiosperms?: Goldschmidt Conference, Penn. State Univ., May 24-26.

Algeo, T.J., and Watson, B.A., 1995, Calcite, aragonite, and bimineralic ooids in the Missourian Series of Kansas: stratigraphic and geographic patterns of variation: SEPM Permian Basin Section Symposium in honor of J. L. Wilson, Midland, Texas, April 27-28.

**1994**

Algeo, T.J., Maynard, J.B., 1994, Late Devonian black shales and extinction events: "Rooted" in the evolu-tion of vascular land plants?: IGCP Project 293, Final Meeting, Erlangen, Germany, Sept. 26-28.

Watson, B.A., and Algeo, T.J., 1994, Bimineralic ooids as a record of Late Paleozoic changes in atmospheric and oceanic chemistry: Geological Society of America Southeast Section Meeting, Raleigh, North Carolina, Abstracts with Programs, v. 26(4), p. 68.

Algeo, T.J., and Woods, A.D., 1994, Microstratigraphic analysis of laminated Lower Mississippian black shales from the Central Appalachian Basin: A record of solar-modulated climatic cyclicity: Abstracts with Programs, Geological Society of America North-East Section Meeting, Binghamton, New York, Abstracts with Programs, v. 26(3), p. 2.

**1993**

Algeo, T.J., 1993, Sea level, spreading rates, and the long-term record of geomagnetic reversals: AGU Fall Meeting, San Francisco.

Lev, S.M., Algeo, T.J., Niemitz, J., and Harrison, T., 1993, Geochemistry of Llanvirn-Llandeilo black shales: Tectonic evolution of the eastern margin of the Iapetus Ocean: Geological Society of America Annual Meeting, Boston, Abstracts with Programs, v. 25(6), p. A318.

Algeo, T.J., and Maynard, J.B., 1993, The Late Devonian increase in vascular plant "rootedness": Source of coeval shifts in seawater chemistry: Geological Society of America Annual Meeting, Boston, Abstracts with Programs, v. 25(6), p. A83.

Algeo, T.J., 1993, The Middle-Late Devonian increase of land plant biomass: Source of a global biogeochemical crisis: SEPM Annual Meeting, Pennsylvania State University.

Algeo, T.J., and Seslavinsky, K.B., 1993, The Paleozoic world: Continental flooding, hypsometry, and sea level: SEPM Annual Meeting, Pennsylvania State University.

Woods, A.D., and Algeo, T.J., 1993, Geochemical analysis of the microstratigraphy of a Lower Mississippian black shale: A view towards fine-scale climatic change: Geological Society of America North-Central Section Meeting, Rolla, Missouri, Abstracts with Programs, v. 25(3), p. 90.

Woods, A.D., and Algeo, T.J., 1993, Fine-scale stratigraphy of the Lower Mississippian Sunbury Shale: A record of solar-modulated climatic cyclicity: Abstracts, Eastern Oil Shale Symposium, Lexington, Kentucky.

Thompson, J.A., Woods, A.D., Algeo, T.J., and Rimmer, S.M., 1993, Rhythmic sedimentation in the Upper Devonian Ohio Shale: Further investigations of climatic cyclicity: Abstracts, Eastern Oil Shale Symposium, Lexington, Kentucky.

**1992**

Algeo, T.J., Seslavinsky, K.B., and Wilkinson, B.H., 1992, The Paleozoic world: Continental flooding, hypsometry, and sea level: Geological Society of America Annual Meeting, Cincinnati, Abstracts with Programs, v. 24(7), p. A107-108.

Algeo, T.J., 1992, Middle Pennsylvanian Gobbler Formation: Modelling water/rock ratios in the meteoric and burial diagenetic environments: Abstracts with Programs, Geol. Soc. Am. North-Central Section Meeting, Iowa City, Abstracts with Programs, v. 24(4), p. 1.

Algeo, T.J., 1992, Using paleo-hypsometry to estimate first and second-order Phanerozoic eustasy: Abstracts with Programs, Geological Society of America Northeast Section Meeting, Harrisburg, Abstracts with Programs, v. 24(2), p. 1.

**1991**

Algeo, T.J., and Wilkinson, B.H., 1991, Quantifying stratigraphic completeness: A probabilistic approach using paleomagnetic data: Geological Society of America Annual Meeting, San Diego, Abstracts with Programs, v. 23(7), p. A294.

Wilkinson, B.H., Opdyke, B.N., and Algeo, T.J., 1991, Time partitioning in cratonic carbonates: Geological Society of America Annual Meeting, San Diego, Abstracts with Programs, v. 23(7), p. A113.

Algeo, T.J., and Wilson, J.L., 1991, Lower-Middle Pennsylvanian Gobbler Formation: Eustatic and tectonic controls on carbonate shelf cyclicity: Geological Society of America, Southwest-Rocky Mountain Section Meeting, Albuquerque, Abstracts with Programs, v. 23(4), p. 2.

**1990**

Albertzart, L.S., Wilkinson, B.H., Opdyke, B.N., Algeo, T.J., and Boss, S.K., 1990, Global volumes, areas, and cycling rates of Phanerozoic cratonic sediment: Geological Society of America Annual Meeting, Dallas, Abstracts with Programs, v. 22(7), p. A131.

**1989**

Algeo, T.J., and Wilson, J.L., 1989, Lower and Middle Pennsylvanian Gobbler Formation: Using carbonate shelf cyclicity to unravel basin history in a transtensional regime: American Association of Petroleum Geologists Annual Meeting, San Antonio, AAPG Bulletin, v. 73, p. 327.

Algeo, T.J., and Wilkinson, B.H., 1989, Modern and ancient continental hypsometries: Chapman Conference on Causes and Consequences of Long‑Term Sea Level Change (Amer. Geophys. Union), Snowbird, Utah, p. 19.

Algeo, T.J., and Wilkinson, B.H., 1989, Lower‑Middle Pennsylvanian Gobbler Formation: Isotopic constraints on temperature, water/rock ratio, and timing of burial diagenesis: American Association of Petroleum Geologists Rocky Mountain Section Meeting, Albuquerque, AAPG Bulletin, v. 73, p. 1146.

Algeo, T.J., and Wilson, J.L., 1989, Lower-Middle Pennsylvanian Gobbler Formation: Using cyclicity in shelf carbonates to unravel basin history, in Flis, J.E., Price, R.C., and Sarg, J.F., eds., Search for the Subtle Trap: Hydrocarbon Exploration in Mature Basins: Midland, West Texas Geological Society, p. 87.

**1986**

Algeo, T.J., and Wilkinson, B.H., 1986, Periodicity and correlatability of mesoscale sedimentary cycles: Geological Society of America Annual Meeting, San Antonio, Abstracts with Programs, v. 18, p. 524.

Algeo, T.J., 1986, Variations in carbonate shelf cycles in response to Appalachian tectonism: American Association of Petroleum Geologists Annual Meeting, Atlanta, AAPG Bulletin, v. 70, p. 559.

**Book Reviews**

• Algeo, T.J., 1997, David Oldroyd's Thinking About the Earth: A History of Ideas in Geology: Quest magazine.

**Fieldtrip Guidebooks and Roadlogs**

• Brett, C.E., Algeo, T.J., Holland, S.M., and McLaughlin, P.I., 2008, Road Log 2: Upper Mohawkian to Maysvillian in northern Kentucky—Point Pleasant-Kope-Fairview outcrops, Ohio River area from Fort Thomas to Maysville. In: McLaughlin, P.I., Brett, C.E., Holland, S.M., and Storrs, G.W., eds., Stratigraphic Renaissance in the Cincinnati Arch: Implications for Upper Ordovician Paleontology and Paleoecology, Cincinnati Museum Center Scientific Contributions, no. 2, pp. 227-258.

• Algeo, T.J., and Maynard, J.B., 1997, Cyclic Sedimentation of Appalachian Devonian and Midcontinent Pennsylvanian Black Shales: Analysis of Ancient Anoxic Marine Systems--A Combined Core and Field Workshop; sponsored by The Society for Organic Petrography (TSOP) in association with the 1997 Joint Meeting of the AAPG--Eastern Section and TSOP; Lexington, Kentucky, Sept. 27-28, 1997.

• Algeo, T.J., 1992, Alamogordo to Cloudcroft: Roadlog--Day 3 (Part I), in Lindsay, R.F., and Reed, C.L., eds., Sequence Stratigraphy Applied to Permian Basin Reservoirs: Outcrop Analogs in the Caballo and Sacramento Mountains of New Mexico: Midland, West Texas Geological Society, 1992 Field Conference Guidebook, p. 83‑97.

• Algeo, T.J., 1992, Upper Ordovician (Cincinnatian Series) Kope, Fairview, and Bellevue formations: Storm-Dominated Carbonate-Ramp Deposits: Keck Consortium Fieldtrip in association with 1992 GSA Annual Meeting in Cincinnati, Oct. 26th.

• Algeo, T.J., 1992, Geology of the Colorado Plateau: Demonstration Fieldtrip, University of Cincinnati, Department of Geology, Sept. 2nd-18th.

• Algeo, T.J., 1991, Modern and Ancient Carbonate Depositional Environments: Fieldtrip to the Florida Keys and Southern Appalachians, University of Cincinnati, Department of Geology, Sept. 2nd-11th. (Reissued for Mar. 21-30, 1997 fieldtrip)

**Research Impact**

Table 1. Science Citation Index (SCI) citation statistics for Thomas J. Algeo (1 May 2012)

**citations algeo 2012.TIF**

Table 2. Number of citations by article (from Google Scholar, 1 August 2012)

|  |  |  |  |
| --- | --- | --- | --- |
| **Authorship** | **Year** | **Journal or Book** | **No. citations** |
| Tribovillard et al. | 2006 | Chemical Geology | 191 |
| Algeo et al. | 1998 | Phil. Trans. Royal Soc. London | 180 |
| Algeo et al. | 1995 | GSA Today | 156 |
| Wilkinson-Algeo | 1989 | Amer. J. Science | 135 |
| Algeo-Maynard | 2004 | Chemical Geology | 134 |
| Algeo-Wilkinson | 1988 | Journal of Geology | 133 |
| Algeo-Lyons | 2006 | Paleoceanography | 100 |
| Algeo et al. | 2001 | Plants Invade the Land, Columbia Univ. Press | 67 |
| Weyer et al. | 2008 | Geochimica et Cosmochimica Acta | 60 |
| Algeo | 2004 | Geology | 46 |
| Algeo-Seslavinsky | 1995 | Amer. J. Science | 44 |
| Algeo et al. | 1992 | J. Sedimentary Research | 37 |
| Algeo-Ingall | 2007 | Palaeogeogr. Palaeoclimatol. Palaeoecol. | 45 |
| Wilkinson et al. | 1991 | Geology | 34 |
| Algeo et al. | 2004 | Chemical Geology | 35 |
| Algeo et al. | 2007a | Palaeogeogr. Palaeoclimatol. Palaeoecol. (NT) | 34 |
| Algeo | 1996 | J. Geophysical Research | 28 |
| Hoffman et al. | 1998 | Shales-Mudstones book; Schweizerbartsche | 28 |
| McArthur et al. | 2008 | Paleoceanography | 29 |
| Algeo et al. | 2007b | Palaeogeogr. Palaeoclimatol. Palaeoecol. (GR) | 22 |
| Brett and Algeo | 2000 | Kentucky Geological Survey Guidebook | 22 |
| Algeo et al. | 2008 | Geochemistry Geophysics Geosystems | 21 |
| Algeo et al. | 1994 | J. Sedimentary Research | 21 |
| Brett-Algeo | 2001 | Kentucky Geol. Survey paper-A | 20 |
| Brett-Algeo | 2001 | Kentucky Geol. Survey paper-B | 19 |
| Algeo et al. | 2010 | Geology | 16 |
| Algeo-Tribovillard | 2009 | Chemical Geology | 16 |
| Jaminski et al. | 1998 | Shales-Mudstones book; Schweizerbartsche | 16 |
| Algeo et al. | 2007c | Palaeogeogr. Palaeoclimatol. Palaeoecol. (Dev) | 15 |