

# American Journal of Science

*An international earth science journal  
Established in 1818 by Benjamin Silliman*

## Editorial Board

### Editors

**Mark T. Brandon**  
Yale University

**C. Page Chamberlain**  
Stanford University

**Noah J. Planavsky**  
Yale University

### Associate Editors

**Jay J. Ague**  
Yale University

**Ethan F. Baxter**  
Boston College

**Edward W. Bolton**  
Yale University

**Claire E. Bucholz**  
California Institute of Technology

**Donald E. Canfield**  
University of Southern Denmark

**William H Casey**  
University of California, Davis

**Peter A. Cawood**  
Monash University

**Darrel S. Cowan**  
University of Washington

**Nadja Drabon**  
Harvard University

**Barb Dutrow**  
Louisiana State University

**Grant Garven**  
Tufts University

**John I. Garver**  
Union College

**Philip D. Gingerich**  
University of Michigan

**Michael T. Hren**  
University of Connecticut

**Daniel E. Ibarra**  
Brown University

**Kimberly Lau**  
Pennsylvania State University

**Cin-Ty Lee**  
Rice University

**Xian-Hua Li**  
Institute of Geology and Geophysics,  
Chinese Academy of Sciences

**Andreas Luttge**  
University of Bremen

**Timothy W. Lyons**  
University of California, Riverside

**Francis Macdonald**  
University of California, Santa  
Barbara

**Kate Maher**  
Stanford University

**Ryan McKenzie**  
University of Hong Kong

**Evangelos Moulas**  
Johannes Gutenberg University

**Andreas Mulch**  
Senckenberg Biodiversity and  
Climate Research Centre

**Amanda M. Oehlert**  
University of Miami, RSMAS

**Jeffrey Park**  
Yale University

**Jonathan L. Payne**  
Stanford University

**Ann Pearson**  
Harvard University

**Christopher Poulsen**  
University of Michigan

**Brad Sageman**  
Northwestern University

**Zachary Sharp**  
University of New Mexico

**Andrew Smye**  
Pennsylvania State University

**Lucie Tajcmanova**  
Heidelberg University

**Lidya Tarhan**  
Yale University

**Mark Albert Torres**  
Rice University

**John W. Valley**  
University of Wisconsin-Madison

**Michael Anthony Velbel**  
Michigan State University

**Richard J. Walker**  
University of Maryland

**A. Joshua West**  
University of Southern California

**Simon A. Wilde**  
Curtin University

**Matthew J. Winnick**  
University of Massachusetts Amherst

**Robert Wintsch**  
Wesleyan University

**Guochun Zhao**  
University of Hong Kong

### Advisory Board

**Jay J. Ague**  
Yale University

**David A. D. Evans**  
Yale University

**Peter Raymond**  
Yale University