

Grand Patrons

RICHARD K. BAMBACH
ARTHUR J. BOUCOT
RODNEY M. FELDMAN AND CARRIE SCHWEITZER
ROBERT AND ELVIRA GASTALDO
THE FAMILY OF N. GARY LANE
A. R. (PETE) PALMER
J. WILLIAM SCHOPF
RAMAN J. SINGH
STEVEN M. STANLEY

Patrons

EDWARD J. ANDREW, JR.
WILLIAM I. AUSICH
BRUCE M. BELL
STIG M. BERGSTROM
DAVID J. BOTTJER
DONALD W. BOYD
DEREK E. G. BRIGGS
JAMES C. BROWER
JOHN L. CARTER
PETER R. CRANE
THE CUSHMAN FOUNDATION
J. ROBERT DODD
MARY L. DROSER
LUCY E. EDWARDS
ROBERT J. ELIAS
J. MARK ERICKSON
DOUGLAS H. ERWIN
HOWARD R. FELDMAN
ROBERT M. FINKS
KARL W. FLESSA
TERRENCE J. FREST
PHILIP D. GINGERICH
BRIAN F. GLENISTER
F. D. (BUD) HOLLAND, JR.
J. STEWART HOLLINGSWORTH
NIGEL C. HUGHES
THOMAS W. KAMMER
ERLE G. KAUFFMAN
PATRICIA H. KELLEY
SUSAN M. KIDWELL

ANDREW H. KNOLL
CHARLES LANE
ALLAN R. LARSON
CECILIA LENK AND PAUL K. STROTHER
JERE H. LIPPS
ALAN R. LORD
CHRIS MAPLES AND SARA MARCUS
JANET WOOD MCGREGOR
CHERYL L. METZ
MOLLY F. AND CALVIN MILLER
RONALD W. MORIN
OSBORNE B. NYE, JR.
TERESA O'NEILL
RONALD L. PARSLEY
MARK E. PATZKOWSKY
JOHN POJETA, JR.
MARY LOU POJETA
JOHN K. POPE
ANNE RAYMOND
MARGARET N. REES
FRANK H. T. RHODES
RICHARD A. ROBISON
JUNE R. P. AND CHARLES A. ROSS
CHRISTOPHER A. SHAW
FREDERICK C. SHAW
LAWRENCE M. SMALL
GEORGE D. STANLEY, JR.
ROBERT J. STANTON, JR.
CARL W. STOCK
ROGER D. K. THOMAS
BRUCE H. TIFFNEY
SALLY E. WALKER
RON F. WASZCZAK
JOHNNY A. WATERS
GARY D. WEBSTER
MARK A. WILSON
SCOTT L. WING
ABBY YOCHELSON
CHARLES YOCHELSON
JEFFERY B. YOCHELSON
LOUIS G. ZACHOS

The *Journal of Paleontology* publishes manuscripts on all aspects of paleontology, including systematics, phylogeny, paleoecology, paleobiogeography, biostratigraphy, taphonomy, and evolution. It emphasizes specimen-based research and features illustrations of the highest quality possible. Manuscript treating all fossil organism groups are welcome, including invertebrates, vertebrates, plants, algae, and microorganisms of all sorts, as well as ichnofossils (trace fossils).

The *Journal of Paleontology* accepts only online manuscript submissions through the website:

<https://mc.manuscriptcentral.com/paleo>

Author guidelines can be downloaded at:

<https://www.cambridge.org/core/journals/journal-of-paleontology/information/instructions-contributors>

For questions regarding online submissions, please contact the editorial offices at:

journalofpaleontology@cambridge.org

Membership Information

Members of the Paleontological Society automatically receive electronic subscriptions to *Paleobiology* and the *Journal of Paleontology* as a benefit of membership. To apply for individual membership, please go to the Paleontological Society's homepage at <http://paleosoc.org/> where links to an electronic application, a printable paper application form, and a complete list of membership benefits are provided under the Membership heading.

Visit The Paleontological Society website at www.paleosoc.org.

JOURNAL of PALEONTOLOGY

VOL 93 | NO 5 | SEPTEMBER 2019

- 827 **Lucas D. Mouro, Rodrigo S. Horodyski, Antonio. C.S. Fernandes, Marcelo A. Carvalho, Mateus. S. Silva, Breno L. Waichel, and João P. Saldanha**
Pennsylvanian sponge from the Mecca Quarry Shale, Carbondale Group (Indiana, USA) and the paleobiogeographic distribution of *Teganiella* in the paleoequatorial region of Laurentia
- 839 **Ning Sun, Robert J. Elias, and Dong-Jin Lee**
Corallite increase in the Late Ordovician coral *Agetolites*, and its taxonomic implication
- 856 **Xiaojuan Wang, Xiangdong Wang, Yichun Zhang, Changqun Cao, and Dongjin Lee**
Late Permian rugose corals from Gyanyima of Drhada, Tibet (Xizang), Southwest China
- 876 **Hai-peng Xu, Yi-chun Zhang, Feng Qiao, and Shu-zhong Shen**
A new Changhsingian brachiopod fauna from the Xiala Formation at Tsochen in the central Lhasa Block and its paleogeographical implications
- 899 **Kalyan Halder and Shrestha Das**
New subfamily Indovolutinae and other volutids (Volutidae, Gastropoda) from the Eocene of Kutch, western India and their paleobiogeographic implications
- 916 **Guido Pastorino and Miguel Griffin**
Gastropods of the genus *Antistreptus* as examples of persistent molluscan lineages in the Neogene of the southwestern Atlantic
- 925 **Susana E. Damborenea and María Alejandra Pagani**
Early Jurassic protobranch bivalves from Chubut, Argentina
- 945 **Abouchouaib Belahmira, Joerg W. Schneider, Frank Scholze, and Hafid Saber**
Phyloblattidae and Compsoblattidae (Insecta, Blattodea) from the late Carboniferous Souss basin, Morocco
- 966 **William I. Ausich, Yingyan Mao, and Yue Li**
Fusion or hypertrophy?: the unusual arms of the Petalocrinidae (Ordovician-Devonian: Crinoidea)
- 971 **Carlo Romano, Adriana López-Arbarello, David Ware, James F. Jenks, and Winand Brinkmann**
Marine Early Triassic Actinopterygii from the Candelaria Hills (Esmeralda County, Nevada, USA)
- 1001 **Giuseppe Marramà, Giorgio Carnevale, Pavel V. Smirnov, Yaroslav S. Trubin, and Jürgen Kriwet**
First report of Eocene gadiform fishes from the Trans-Urals (Sverdlovsk and Tyumen regions, Russia)
- 1010 **Christopher T. Griffin**
Large neotheropods from the Upper Triassic of North America and the early evolution of large theropod body sizes
- 1031 **Brenda R. Hunda, Glenn W. Storrs, and David L. Fox**
Notice of transfer of the University of Minnesota paleontology collections to Cincinnati Museum Center
- 1033 **2018 Awards and Citations**

Cambridge Core

For further information about this journal please
go to the journal website at:
[cambridge.org/jpa](https://doi.org/10.1017/jpa)

CAMBRIDGE
UNIVERSITY PRESS