Special Issue

New Directions in the Study of Vertebrate Trace Fossils

Message from the Guest Editors

The study of ichnofossils dates back two centuries. Ichnology has broad significance in many fields of the geosciences, including paleoecology, taphonomy, biochronology, sedimentology, facies analysis, and evolutionary biology. Recently there have been synoptic reviews of all groups of vertebrate trace fossils. Therefore, there are now large databases for synthetic studies. In addition, new methodologies are being developed and are gaining more widespread use (e.g., 3D modelling, micro CT, Al) and changing the nature of the study of traces. Terminology is experiencing some flux, not only because of methodological advances but also because of the increasing interdisciplinarity of the field. Thus, ichnology is at a juncture of consolidated databases and new methodologies that will lead the field in new directions. The purpose of this volume is to discuss opportunities for new avenues of research and to review previous models. This volume will include ichnological case studies, methodological discussions, and critical reviews of models and concepts. Thus, this volume will both highlight new directions of study in ichnology and provide suggestions for future developments in the field.

Guest Editors

Dr. Adrian P. Hunt

Prof. Dr. Spencer G. Lucas

Dr. Lida Xing

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Fossil Studies Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 fossstud@mdpi.com

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Message from the Editor-in-Chief

The aim of *Fossil Studies* is to provide a new outlet for papers on all kinds of fossils, from all periods of Earth's history, whatever approach is used. Online publishing, with no limit on the length of papers or the number of illustrations, should prove to be an advantage for authors wishing to produce long, well-illustrated monographs, which have proven so useful to palaeontological science. However, reliable peer-review and fast open access publishing, the hallmarks of MDPI publications, will also make it easier to rapidly publish reports of new discoveries. We hope that *Fossil Studies* will help palaeontologists, whatever their area of expertise, to disseminate the results of their research in the exciting field of fossils science.

Editor-in-Chief

Dr. Eric Buffetaut

CNRS (UMR 8538), Laboratoire de Géologie de l'Ecole Normale Supérieure, 24 Rue Lhomond, 75231 Paris, CEDEX 05, France

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