



## Mesozoic: Inaugural editorial

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I am pleased to be invited to be the honorary editor-in-chief of the new, free, and open access journal *Mesozoic* published by Magnolia Press.

The inaugural Editor-in-Chief Diying Huang and his editorial team launched the new journal with the assistance of experts from 15 countries; most of them are young scientists—active in various areas of Mesozoic research. The journal is dedicated to publishing interdisciplinary studies on the Mesozoic, including palaeontology, stratigraphy, palaeoclimatology, palaeogeography, palaeoenvironment, palaeoecology, sedimentology, geochronology, geochemistry, tectonic, palaeomagnetism, etc. It promises to promote comprehensive studies of the Mesozoic and encourages interdisciplinary collaboration, in order to deepen our understanding of the evolution of the Earth in the Mesozoic, which is in response to the trend of Earth system science.

The Mesozoic is an era comprising the Triassic, Jurassic and Cretaceous periods, ranging from 252 to 66 million years ago. The Mesozoic literally means ‘middle life’, as compared to the Paleozoic and Cenozoic. It is bounded by two of the greatest mass extinction events in geological history. It is also generally known as the age of reptiles. Although dinosaurs are best known to the public, other notable reptiles include the pterosaurs and various marine reptiles such as ichthyosaurs. The Mesozoic also witnessed the first appearance of mammals, birds, flowering plants and teleost fishes, as well as many of the

extant groups of insects and other invertebrate groups that dominate modern terrestrial ecosystems.

The Mesozoic was also a time of significant tectonic activity and climatic change. The supercontinent Pangaea began separating and moving the modern continents into their near present-day configurations. The Atlantic and Indian oceans started their opening and expanding. The subduction of the Pacific Ocean plate has controlled and laid the foundation of the geology and geography of both the American and Asian continents. The Mesozoic was generally warm, and the Cretaceous ‘greenhouse’ world helps us understand current global warming. It was estimated that 70% of oil deposits were formed in the Mesozoic. The Mesozoic is also notable for having produced other sizeable coal and metal ore deposits.

The consensus is that global changes have resulted in an environmental crisis, which threatens biodiversity on a global scale. The present is the key to the past, yet the past also holds clues to deciphering complex mechanisms that relate directly to life and the environment, which includes how humans and nature are intrinsically linked.

In the digital age, opportunities and challenges exist regarding the publication of academic literature. However, the mission of recording, communicating, and disseminating knowledge will not change, and peer review remains the most effective way to guarantee the merit of scientific research. I trust that this new journal will succeed in both the scientific community’s eye, and that the public will also find value in it.