

# A Stratigraphical Basis for the Anthropocene

Edited by

**C. N. Waters, J. A. Zalasiewicz, M. Williams,  
M. A. Ellis and A. M. Snelling**



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## Dedication



We take pleasure as editors in dedicating this volume to Paul Crutzen of The Max Planck Institute for Chemistry, Germany. Professor Crutzen played a pivotal role in the creation of the Anthropocene concept in its modern sense, publishing initially with Eugene Stoermer in the *IGBP Newsletter* of 2000, and then in a brief, but vivid paper in *Nature* in 2002. These papers provided the springboard for the subsequent extraordinary spread of this concept through both the sciences and the humanities. Regardless of whether this term will eventually be formalized to become part of the Geological Time Scale (with the papers in this volume being devoted to examining the stratigraphic evidence) the Anthropocene has already proved extraordinarily fruitful in placing both human history and recent environmental changes within the deep time context of Earth history.

Paul Crutzen is among the most respected of living scientists: he was the most cited scientist in the 1990s, received a Nobel Prize in 1995 for his work on the mechanisms behind ozone destruction in the stratosphere,

and was also a lead figure in the ‘nuclear winter’ hypothesis. Having essentially conceived, and driven, the Anthropocene concept in its present form, he remains deeply interested in, and supportive of, the analysis of the Anthropocene in geological terms. Without him, it is unlikely that this new scientific field would exist in anything like its current form, and it certainly would not have the scientific and public profile that, not least, have taken the whole of the science of stratigraphy to significantly greater levels of public recognition and significance. As he recently wrote, among the key attributes of the Anthropocene are its ‘interdisciplinary, intensity and internationality’: qualities that we think will prove to be of durable value.

*Colin Waters  
Jan Zalasiewicz  
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March 2014*