

Books

A Brief History of Geology by Kieran D. O'Hara, Cambridge University Press, 2018, x+262pp., hardcover, ISBN 9781107176188, US\$32.99

Rasoul Sorkhabi (University of Utah) writes When Sir Charles Lyell published the first volume of *Principles of Geology* in 1830 (the most celebrated geology textbook of the nineteenth century), he began with a long chapter on the history of geology dating back to the Greeks and Romans. Today, the history of geology is usually absent from the curriculum in geology departments. That is why many geology graduates enter their professional careers with only anecdotal understanding of the history of their science: James Hutton was *the* founding father of geology (he was *one* of the founding fathers); the first geological map was produced by William Smith in England and Wales in 1815 (William Maclure had done it six years before in the eastern USA); Alfred Wegener discovered the continental drift theory in 1915, but it was accepted only in the 1960s (yes, but the 1920s–1950s interval was not a dead silence), and so forth. This new book *A Brief History of Geology* by Kieran D. O'Hara (Professor Emeritus at the University of Kentucky, and originally from Ireland) is a welcome publication to educate geologists as well as the public about one of the most interesting adventures in humankind's intellectual and cultural life—to discover Earth's evolution, age, internal structure, rock record, dynamic processes, and climate changes.

The book consists of 12 chapters: major nineteenth-century players; toward a geologic timescale; the age of the Earth; the origin of igneous rocks; tectonics in crisis; continental drift; plate tectonics; isotope and trace-element geology; ice ages and ice cores; geology and evolution of the Moon; welcome to the Anthropocene; and, the structure of geologic revolutions.

The book offers standard geological and historical knowledge summarized intelligently for an easy read. O'Hara is a geoscientist, not a historian of science; the strength of his book thus lies in explaining geoscience through a historical lens rather than presenting new historical research on the subject.

Books on the history of geology usually fall into three categories: 1, biographical, for example, Archibald Geikie's *Founders of Geology* (1905), or *Giants of Geology* by Carroll Lane Fenton & Mildred Fenton (1956); 2, chronological, for example, *It Began with a Stone* by Henry Faul & Carol Faul (1983), or *A History of Geology* by Gabriel Gohau (1991); and,

(3) topical (thematic), for example, *The Birth and Development of the Geological Science* by Franks Adams (1938), or *Thinking About the Earth: A History of Ideas in Geology* by David Oldryod (1996) (some of these previous works are not cited by O'Hara). *A Brief History of Geology* falls into the third category: each chapter briefly reviews the history of a certain geological topic, and references are also given at the end of the chapter. In this way, the reader gains a basic knowledge of various geological topics but also learns their evolution of thought and discovery.

This brief book, despite its title, should not be expected to cover the entire field of geology. For instance, palaeontology, sedimentology, geomorphology or applied (economic) geology are little presented. The focus of the book is on geochronology, isotope geology, plate tectonics, and climate history—areas that O'Hara has also studied during his long research career. Moreover, O'Hara discusses certain topics (geology of the Moon and the Anthropocene) which are absent in previous histories of geology. Overall, *A Brief History of Geology* is an informative work and deserves to be read by geologists and non-geologists alike.

Minerals of the English Midlands by Roy E. Starkey, 2018 British Mineralogy Publications, UK. ISBN 978-0993018237 (paperback) £45.00 (including postage), 432pp.

Ian Skilling (University of South Wales) writes This book really deserves the epithet a 'labour of love'! It's a huge tome (426 pages)—but a beautiful and meticulous tome—with hundreds of superbly produced colour images of mineral specimens, mines, location maps etc. I wish I had this book when, as a young lad, I used to comb the tips of mines in the English Peak District. The area covered in this wonderful volume ranges from the mines and quarries of Cheshire to the north of the English Midlands to those of Oxfordshire and Gloucestershire in the south. Yet this book is not simply just an exhaustive photographic atlas, as it includes accounts of the mining and quarrying history in each of these areas, a history of mineral collectors and collections and a review of decorative stones from the Midlands (including the much prized 'Blue John'). Throw in a comprehensive reference list and an excellent index of mineral species, localities and personalities, and this book is unlikely to be bettered for decades.

Minerals of the English Midlands is a unique

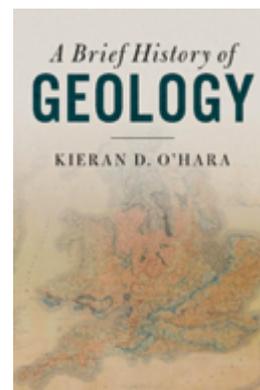


Fig. 1. *A Brief History of Geology*.

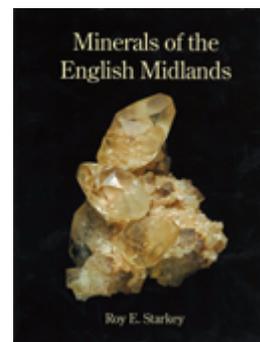


Fig. 2. *Minerals of the English Midlands*.