Book Review


When I saw my first meteorites in the late 1950s—a dusty display at the Field Museum of Natural History in Chicago—there were few meteorite books available to answer a precocious child’s questions. I was not this child, but had I been, the only up-to-date meteorite book I could have read (assuming I was fluent in German) was Fritz Heide’s Kleine Meteoritenkunde (2nd edition, 1957). The English translation of this book, Meteorites, by Ed Anders and Eugene DuFresne did not come out until 1964. Since that time, many things have changed. The Field Museum’s display has been revamped; gone is the wall painting of the Chamberlin-Moulton hypothesis of planetary origin sparked by the close passage of a star near the Sun. There has also been a spate of non-technical meteorite books published in recent years. These include Hap McSween’s Meteorites and their parent planets and Brigitte Zanda’s and Monica Rotaru’s Meteorites: Their impact on science and history, written by meteorite researchers, and Richard Norton’s Rocks from space and The Cambridge encyclopedia of meteorites and Mike Reynolds’ Falling stars: A guide to meteors & meteorites, written by knowledgeable amateurs and dilettantes.

This mini-glut of meteorite books raises the question: Is there room on the shelf for one more? There is. Alex Bevan, curator of minerals and meteorites at the Western Australian Museum, and John de Laeter, emeritus professor of physics at Curtin University, have written a fine book. The style is straightforward, the science is accurate, and beautiful color photographs and diagrams grace every page. It is a coffeetable book that deserves to be read.

Meteorites is divided into 15 chapters covering such topics as fall phenomena and meteorite recovery, elementary geochemistry, meteorite classification, nebular processes, asteroidal melting, interstellar grains and refractory inclusions, age-dating, the origin of chondrules, astrobiology, tektites, impact cratering, and the demise of the dinosaurs. Consensus views on controversial topics are highlighted, but minority opinions are also included. There is a focus on Australian meteorites and craters, but considering the abundance and importance of each (e.g., the Mundrabilla, Bencubbin, and Camel Donga meteorites; the Henbury, Dalgaranga, and Wolfe Creek craters), this emphasis is certainly justified.

The book is virtually free of typos (I found only four). The only scientific mistake I noticed was that Gujba, a recent fall from Nigeria, is called a probable CH chondrite, when it is really a bencubbinite. But since CH chondrites and bencubbinites seem to be related, the error does not seem egregious.

Meteorite researchers could get along without the book; in fact, the first line of the preface states that the book was “written for people who are not scientists.” Nevertheless, the diagrams and photos are terrific, and I may scan some of them for use in future presentations. It is also fun to identify colleagues by the backs of their heads in some of the photos. (I would know Clark Chapman anywhere.) The book is perfect for amateurs and educated adults. It would make a fine present for high-school and college students interested in science. I hope they offer it for sale at the Field Museum bookstore.

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