give a balanced overview. The literature coverage is complete through 1976 and includes many 1977 references.

One criticism is that the discussion of some topics is bibliographic rather than critical or incisive. The conditions for carrying out specific reactions or isolating certain molecular structures are sometimes lost in the wealth of detail. Greater use of tabular data for similar compounds and more attention to the scope and limitations of reactions would have strengthened the book.

The failure to include a chapter on gold biochemistry is unfortunate. Heavy metal biochemistry is important as a stimulus to developing new inorganic chemistry and as a scientific basis for pharmacological and medical research. Although a brief discussion of the subject is included in the section on the biological applications of gold, it is inadequate and somewhat naive. For example, the numerous recent studies of the interactions of gold with the immune system are not discussed. The only serious error noted was in this section. The inhibition of lysosomal enzymes by gold(I) thiolates clearly occurs in vivo and in vitro and is a useful working hypothesis concerning the mechanism of chrysotherapy (gold treatment for rheumatoid arthritis). However, no evidence establishes it as the mechanism of action, as is suggested on pp. 250–252. In fact, the inhibition of certain immunochemical reactions has given rise to an alternative hypothesis, that gold acts as an immunosuppressive reagent.

The flaws, however, are minor. The book fills a gap in the literature. Its main assets are clear organization and balanced coverage of research on gold chemistry. I recommend it highly.

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Seismology

Earthquakes. A Primer. BRUCE A. BOLT. Freeman, San Francisco, 1978. xii, 272 pp., illus. Cloth, $12; paper, $7. A Series of Books in Geology.

Bolt states in the preface to this book that his aim is "to provide a short, simple, and up-to-date account of our present knowledge of earthquakes that will be of general interest." He has done exactly that. The book is a nonmathematical summary of the state of the art in earthquake seismology. It is written in a simple, clear style that will make it attractive to the average reader, and it will have extensive use as a starting point for students, journalists, and others who want to learn something about earthquakes.

"The God-Superior from the Kashima shrine, Japan, tells the daimyojin to drive down the pivot stone hard on the Edo (Tokyo) earthquake namazu (catfish) to warn other earthquakes. Each of the onlooking namazu is a historical earthquake. From left, Kwanto, Osaka, Koshu, Echigo, Odawara, and Sado earthquakes." [From *Earthquakes*]

The book starts with a discussion of seismic geography, relating it to modern theories of plate tectonics. Chapter 2, "What we feel in an earthquake," discusses several earthquakes and includes a transcript of a tape recording, made during the 1964 Alaskan earthquake, which is more an illustration of the emotional response of individuals to such an event than a scientific description of an earthquake. The relations of earthquakes to faults, volcanoes, and seismic sea waves are developed. Several chapters are devoted to modern ideas about physical processes that are involved in earthquake generation, including a chapter on earthquakes generated by humans and one on earthquake prediction. The last chapters are concerned with earthquake-resistant building design and self-protection in an earthquake.

The book includes a very brief but well-selected bibliography of reference works that lead the reader to more thorough treatment of various aspects of seismology, a glossary of seismological terms, and an earthquake quiz.

The book is easily read and contains many illustrations. Scientists and others interested in natural phenomena will find it enjoyable as well as informative. Geoscientists who have not kept up with recent developments in seismology will find sections such as the one on earthquake prediction particularly useful. The book emphasizes recent advances in knowledge. Because of its elementary nature, seismologists will find little that is new to them in the book. Those looking for books to recommend to students may want to read it. The useful appendixes include two listing important earthquakes in the United States and elsewhere, one on seismic instrumentation, and one on how to calculate the magnitude and energy of an earthquake.

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Arithmetic and Calculators. How to Deal with Arithmetic in the Calculator Age. William G. Chinn, Richard A. Dean, and Theodore N. Tracewell. Freeman, San Francisco, 1977. viii, 488 pp., illus. Cloth, $17; paper, $9.95.

(Continued on page 550)