## An opulent physician's "knick-knackatory"





SIR Hans Sloane, the subject of this terracotta bust by Rysbrack, was president both of the Royal College of Physicians and of the Royal Society. His collection of more than 80,000 curiosities and antiques, along with a magnificent library, formed the nucleus of the British Museum after his death in 1753. In Sir Hans Sloane: Collector, Scientist, Antiquary, Founding Father of the British Museum, Arthur MacGregor gathers together essays by current and former staff of the British and Natural History Museums. They use the 30 surviving manuscript catalogues of Sloane's original collection to document its contents (which include a latesixteenth-century watercolour of English Sailors in a Skirmish with an Eskimo (left) and a drawer of beetles in small glass-topped bottles (below)) and to consider his interests and aims. Published by British Museum Press in association with Alistair McAlpine, £50.



## **Highs and lows**

Steven W. Van Sciver

Introduction to High-Temperature Superconductivity. By Thomas P. Sheahen. Plenum: 1994. Pp. 580. \$59.50, £47.

THE discovery in 1986 of high-temperature superconductors has led to a rapid growth in research and development in this class of materials, and with it an expansion in the associated literature. Attendance at conferences has greatly increased, new journals have been launched and a variety of monographs have been published. This book is a typical example of the last category. According to the author, it evolved from a series of reports produced by Argonne National Laboratory in Illinois under contract from the Electric Power Research Institute. Its stated purpose is to educate engineers and scientists about the topics that fall under the broad heading of 'high-temperature superconductivity'.

This is not a textbook; it contains few examples and no problems. Rather, it summarizes a wide range of topics from the engineering, physics and materials science of superconductivity to its applications. Each chapter is designed to be self-contained and the text is generally accessible.

Unfortunately, the book falls short of its ambitious goal. In an effort to cover the entire field, the author either presents the subject matter at too elementary a level or resorts to a chronological narrative style more valuable for its historical perspective than as an educational tool. Although the sections on the properties and processing of high-temperature superconductivity provide good overviews of the current state of development, the more fundamental material on the physics of high-temperature superconductivity is not presented in enough depth. Sections on applications, which fill just under a third of the book, are fairly superficial, often referring to specific projects of interest to the author, and will soon be out of date. Furthermore, the title of the book is misleading. Its emphasis is in fact on applications in the electric-power industry; fundamental properties of high-temperature superconductivity are only briefly mentioned and superconducting electronics is all but ignored.

Nevertheless, the book is relatively easy to read and well referenced. It should be a useful source for all workers in the field as well as for nonexperts who want to learn more about this fascinating branch of science and technology.

Steven W. Van Sciver is at the National High Magnetic Field Laboratory, FAMU/FSU College of Engineering, 1800 E. Paul Dirac Drive, Tallahassee, Florida 32306-4005, USA.