

# Book Reviews

Susan B. Johnson & Jana E. Miyahira-Smith, Editors

## ROCK CRYSTAL TREASURES FROM ANTIQUITY TO TODAY

By Sylvie Raulet, 240 pp., illus., publ. by Vendome Press, New York, 1999. US\$75.00

Journalist and historian Sylvie Raulet has graced our jewelry literature with several fine works, among them her sumptuous *Art Deco Jewelry* (1990). Here is another splendid book from her pen, this time a unique study of ornamental applications of rock crystal quartz. From this material, artisans have fashioned an array of beautiful objects ranging from small gems to impressively large vessels and figure carvings. Only a brief scan of this book is needed to convince one that it is of permanent reference value. In scope it covers objects produced in the Mediterranean countries and Europe from Roman times up to the present (the considerable production of similar objects in India and China is not considered).

Ms. Raulet provides an introductory chapter on the scientific and technological aspects of rock crystal, and another on the symbolic and medicinal lore. These are followed by chapters that describe many types of objects, with meticulous histories furnished for the major examples as preserved in museum and private collections. They cover the period from ancient Roman times to Fatimid Egypt (roughly 100 BC to 1170 AD); then, in the Western world, from Merovingian times to the Renaissance (about 1400 to 1600 AD); and, last, the 19th and 20th centuries. One of the most intriguing chapters is devoted to the formation of "curiosity cabinets" in the courts of Europe from about 1400 to 1600 AD, which notes especially that of Rudolph II in Prague.

Rudolph's curator of gems and royal physician was Boetius De Boodt, the author of one of the greatest gemological books, the *Gemmarum et Lapidum Historia* (1609). This chapter is especially rich in sharp color photographs of rock crystal vases, most of which are embellished with precious-metal fittings studded with gems.

In contrast to earlier forms of ornament that used rock crystal, modern applications seem extremely simple and dependent more on form than on detail to fulfill the artist's conception. Ms. Raulet describes numerous objects here: a great chandelier with rock crystal "lights;" various boxes and other containers; cigarette cases; abstract sculptures; jewelry; and small figurines, some of exquisite beauty that are marvels of the lapidary/jeweler's arts.

On the negative side, it is evident from the errors in the chapter dealing with the technical aspects of quartz that it could have used a careful reading by a qualified mineralogist. A grievous error appears in the caption to the quartz crystal drawings on page 13, which are claimed to be "diagrams showing techniques for cutting rock crystal." In fact, these are crystal drawings apparently copied from those on pages 54–55 of C. Frondel's *Silica Minerals*, volume 3 of *Dana's Seventh System of Mineralogy* (1962). Other errors include the claim that rock crystal quartz shows "distinct dichroism," is "extremely resistant to oxidation," and contains inclusions of "titanium" (presumably meaning rutile). A particularly annoying lapse is the failure to give dimensions or magnification factors for most of the objects. While the bibliography is helpful, it could have been enhanced by incorporating the many works mentioned

in the text but absent from either footnote or bibliography.

Nevertheless, the book is a satisfying intellectual as well as visual treat. It is strongly recommended reading.

JOHN SINKANKAS  
*Peri Lithon Books*  
San Diego, California

## BEYOND PRICE—PEARLS AND PEARL-FISHING: ORIGINS TO THE AGE OF DISCOVERIES

By R.A. Donkin, 448 pp., illus., publ. by the American Philosophical Society, Philadelphia, PA, 1998. US\$45.00

One cannot help but admire the expertise and dedication that R. A. Donkin, Fellow of Jesus College, Cambridge University, demonstrates in this treatise, which was published as part of the *Memoirs* series of the American Philosophical Society. The book was widely acclaimed as an outstanding scholarly achievement, one that will remain the standard for the future. Regrettably, this review can give only a brief summary of the vast amount of information contained in *Beyond Price*.

Over the course of the book's 10 chapters, the author documents the origins and historical geography of pearls up to the Age of Discoveries (18th century), chronologically and by region, with extensive archaeological and philological perspectives. Notes and references supplement each chapter.

Starting with folklore and leading to the advent of scientific inquiry, the first chapter chronicles the vast literature on the origins of pearls. It includes indigenous writings and historical atlases, which have been translated by various linguists worldwide.

The next chapter deals with the biology, distribution, and ecology of freshwater and marine [saltwater] pearls. Mr. Donkin also elaborates on existing nomenclature and taxonomy problems of the marine pearl-bearing mollusks. Nine maps show the world distribution of the principal sources of freshwater and marine pearls, following G. Ranson's widely accepted nomenclature and classification system of *Pinctada* species.

Mr. Donkin, a Reader (ret.) in Historical Geography, uses the majority of the book to recount the history of pearl fishing in different geographic regions, beginning with the "Ancient East" (Egypt, Mesopotamia, eastern Arabia, present-day Iran, the Mediterranean, India, and China). The chapter "Classical World: Greeks and Romans and Their Eastern Neighbors" follows. Next we learn about the "Arabo-Persian World" (7th–15th centuries), India, and China. The "Medieval World" is discussed separately. The final chapters deal with the Age of Discoveries in both the New World (the Americas) and the Old World (all other areas).

The book is further enhanced by over 100 black-and-white illustrations and maps. The bibliography encompasses 59 pages, arguably the most extensive compilation of publications on the subject. Anyone interested in pearls will find this book not only compelling to read, but also essential as an encyclopedic reference.

Historically, pearls have been regarded as a good omen, as symbols of wisdom, truth, and beauty. With *Beyond Price*, distinguished scholar R. A. Donkin offers one of the greatest tributes to this truly unique gem.

KARIN N. HURWIT  
GIA Gem Trade Laboratory  
Carlsbad, California

## AMBER

By Andrew Ross, 73 pp., illus., publ. by the Harvard University Press, Cambridge, MA, 1998. US\$12.95

Amber is the only gem material that traditionally has been appreciated and

valued for its inclusions. This fascination has resulted in a number of interesting and well-written books on the subject. Until I received a copy of *Amber*, my favorite small introductory book on the subject was the German *Bernstein-Raritäten*, by Dieter Schlee (Staatlichen Museum für Naturkunde, Stuttgart, 1980). Although Schlee's beautifully illustrated book is still a personal favorite, it is hard to imagine how so much useful information could be contained in one small volume, as Andrew Ross has done with this new book.

The photomicrographs on the covers, which depict winged insects in amber, are interesting enough to tempt even a casual observer to open this book. Once inside, it becomes immediately apparent that virtually every page is wonderfully illustrated with photomicrographs, macrophotographs, or highly educational line drawings. The text is easy to read and understand, flowing in a logical fashion from one topic to the next.

After a few introductory pages on the nature of amber, its properties, substitutes, uses, and localities, the book focuses on descriptions and interpretations of various inclusions. Although excellent, the photographic images alone do not make this book so useful to jewelers and gemologists who need to examine amber from time to time. Rather, it is the detailed series of easy-to-follow line drawings, referred to as "Keys to Identification," that make this book special. For example, if one sees an arthropod as an inclusion, he or she can simply follow the numbered diagrams in sequence to learn, in most instances, a more precise identification beyond the initial phylum *Arthropoda*.

For anyone who has ever looked at an inclusion in amber and wondered what it was, this book will be very helpful. It may not make an entomologist out of a gemologist, but it serves as a major step in the right direction.

JOHN I. KOIVULA  
GIA Gem Trade Laboratory  
Carlsbad, California

## GEM MINERALS OF VICTORIA

By William D. Birch and Dermot A. Henry, 120 pp., illus., Special Publication No. 4 of the Mineralogical Society of Victoria, Melbourne, 1997. Aus\$34.95

Although overshadowed by the diamonds of Western Australia (Argyle), the opals of Queensland, and the sapphires of Queensland and New South Wales, the gem deposits of the Australian territory of Victoria cover a wide range, from diamonds to ornamental rocks. The first chapter of this profusely illustrated book describes early gem discoveries and the historical figures who pioneered gem collecting in Victoria. The next describes Victoria's diamonds, which were found mainly in alluvial deposits connected with gold mining. These are thought to be related to diamonds found in the Copeton (New South Wales) region; the largest of the 30 or so rough diamonds still extant weighs 8.2 ct.

Seven other chapters describe ruby and sapphire, zircon, olivine, anorthoclase, topaz, tourmaline, beryl, garnets, crystalline quartz varieties, cryptocrystalline quartz varieties, and opal. The last chapter describes other gems and ornamental rocks: calcite-ankerite concretions that resemble warm-toned agates; facetable cassiterite; massive purple corundum ("barklyite"); massive dumortierite; turquoise; and a chromian diaspore-muscovite rock called "selwynite." Chrysoberyl and moonstone have also been reported from Victoria, although no verified specimens are known.

This book appears to be intended mainly for Australian gem collectors, and it contains several geologic maps, recent photographs of gem deposits, and a table of gem properties to aid the fossicker. However, it deserves the notice of a much broader audience.

MARY L. JOHNSON  
GIA Gem Trade Laboratory  
Carlsbad, California