

# Book Reviews

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

## THE COMPLETE HANDBOOK FOR GEMSTONE WEIGHT ESTIMATION

By Charles I. Carmona, 427 pp., illus., publ. by Gemania Publishing, Los Angeles, CA, 1998. US\$59.95\* (softbound)

*The Complete Handbook for Gemstone Weight Estimation* is a compendium of formulas, tables, and other pertinent data for estimating the weight of mounted gemstones of all sizes, shapes, and types—from the mundane to the arcane.

The author has devised a clever methodology for organizing and presenting his approach to weight estimation. He first assigned gemstones into eight categories based on specific gravity. This premise allowed for the presentation of voluminous information in a relatively compact set of tables that are conveniently indexed by the 24 most common shapes encountered in the trade today. Weight calculation formulas for an additional 48 less-common shapes are also provided. These formulas, combined with the author's explanation of applicable correction factors, allow the reader to estimate weights for even the most esoteric gemstone shapes. Because diamond cutting criteria and pearl shapes are unique among gem materials, separate sections detail weight estimation information for diamonds and pearls.

The value of this handbook, however, extends far beyond a rote system of tables, charts, and formulas, as the author provides special insight into the effect of gemstone shape on weight variations. His premise is that gemstone shape is not limited to a

simple finite set of profiles; rather, it is a continuum, which he illustrates by showing how weight correction factors vary as a gem's shape transitions from round to oval to square and so on.

Whether you appraise, buy, or sell mounted gems, this handbook is a valuable resource. Tabular data are presented in a concise and easy-to-access format. Ancillary discussions are straightforward and well illustrated. An expansive list of formulas and an extensive glossary of gemstone cuts (which includes more than 200 trade and proprietary names) complete this repository of weight estimation information. In short, the *Complete Handbook for Gemstone Weight Estimation* delivers on the author's stated promise "to guide both novice and professional in estimating the weight of mounted gemstones with a high degree of accuracy."

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## GEMMOLOGISTS' COMPENDIUM, 7th Edition

By Robert Webster, revised by E. Alan Jobbins, 240 pp., illus., publ. by N.A.G. Press, London, US\$35.00\*

The seventh edition of the *Gemmologists' Compendium* continues the excellent tradition of earlier editions by enabling quick and easy access to a vast amount of valuable gemstone data and information that even the most experienced gemologist will appreciate.

The first part of the *Compendium* is an extensive alphabetical glossary

of names and terms that covers several subject areas rarely offered in other compilations, such as testing liquids and plastic gem simulants. Minor problems include the fact that some minor, past, or non-gem localities are listed, while other very important current localities (e.g., Afghanistan for spodumene and tourmaline) are conspicuously absent. Also, the book describes tourmaline species according to their color: Brown tourmaline must be dravite, and green, blue, yellow-green, "honey" yellow, or pale-colored tourmaline must be elbaite. What about liddicoatite with its palette of colors, or uvite in red and green?

In addition to standard tables such as refractive index and specific gravity, the second part of the *Compendium* contains information on such subjects as transparency of gemstones to X-rays, liquids for refractive index determination, and the important current topics of gemstone treatment and disclosure. One page covers country name changes. The 32 color plates show microscopic features of various gems, as well as timely illustrations of Russian hydrothermal synthetic emerald, heat-treated Mong Hsu ruby, diffusion-treated sapphire, heat-treated Thai ruby, and fracture-filled diamonds. These are complimented by old favorites such as "byssolite" in demantoid and "lily-pad" inclusions in peridot. Mr. Jobbins took many of these excellent photos specifically for this edition.

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\*This book is available for purchase through the GIA Bookstore, 5345 Armada Drive, Carlsbad, CA 92008. Telephone: (800) 421-7250, ext. 4200; outside the U.S. (760) 603-4200. Fax: (760) 603-4266.

Despite some discrepancies and omissions, the *Gemmologists' Compendium* is highly useful for gemologists, bench jewelers, and lapidaries. For gemologists trained in North America, it provides valuable exposure to British gemology at a reasonable price.

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## CHRISTMAS JEWELRY

*By Mary Morrison, 158 pp., illus.,  
publ. by Schiffer Books for  
Collectors, Atglen, PA, 1998.  
US\$18.95.*

Ms. Morrison provides an intimate journey into the pleasure of small details that only a dedicated collector of Christmas jewelry would notice. Page after page of crisp photos cover an unbelievable array of holiday themes. On the surface it looks like jumbled kitsch, but nine orderly chapters soon dispel that apprehension.

A chronicle of costume jewelry's little-known history, which started in the 1940s, provides unexpected depth. The chapter on signed Christmas tree jewelry is particularly helpful, as it places these pieces in the context of the early years, when costume jewelry was in its heyday. The thumbnail biographical sketches of major and minor manufacturers, however, leave you wanting more.

The conversational tone, personal notations, and observations within the body of the explanatory paragraphs introduce the reader to characteristics that make these pieces collectible. Small details are given to help differentiate a piece's time period and manufacturer. Unfortunately, jewelry items in the photos are not numbered to coordinate with the text, which created minor frustration. A glossary of costume jewelry terminology would be immensely helpful—I still don't know what "japanned" means.

The prices cited are, in the words

of the author, "a reflection of real prices paid for these pieces in the mid-1990s in the United States." As a gemologist I was aghast, but independent research and interviews revealed that even though we are talking about rhinestones and non-precious metals, Christmas jewelry is highly sought after: It is a viable market that fully supports the prices and ranges given.

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## GLOSSARY OF MINERAL SYNONYMS

*By Jeffrey de Fourestier, 442 pp.,  
illus., Special Publication 2 of The  
Canadian Mineralogist, publ. by the  
Mineralogical Association of  
Canada, Ottawa, Canada, 1999.  
US\$50.00*

With this book, the author has succeeded in compiling a glossary of undeniable utility for his intended audience of "private collectors, museum curators, researchers, and those in the gem trade." The more than 35,000 entries include an eclectic mix of synonyms, variety names, names of discredited minerals, names for synthetics, trade names, and more—a much-appreciated resource for those of us who have had to deal with cryptic mineral or gem names that eluded all of our deciphering efforts.

Entries are organized in alphabetical order. In most cases, the synonym is linked to the currently accepted mineral species name, occasionally with brief modifying or explanatory information. The author has made a conscientious effort to follow the nomenclature guidelines of the Commission on New Minerals and Mineral Names (CNMMN) of the International Mineralogical Association (IMA). The book is well printed and bound, and nicely (though sparingly) decorated with attractive black-and-white drawings of miner-

als. It is evident that the text has been carefully screened for typographical errors.

The compilation is surprisingly inclusive. The bibliography lists many of the publications that the author scoured for names, which date from 1260 to 1998 AD; besides English, it also includes texts in German, French, Spanish, and Latin, among other languages. When a name has been applied to several different materials, all are listed, and virtually every variation in spelling of a name is provided.

Overall, this book is a marvelous resource, but it does have a few shortcomings. The conciseness of each entry makes it an excellent quick reference, but it often leaves the reader in want of more information. In particular, the significance and full meaning of some terms is not provided. *Amethyst*, for example, is equated with quartz, but with no mention of color. *Amethyst* is also noted as being a synonym for corundum and beryl, but there is no mention of the fact that this usage is old and obsolete. Although I wanted to learn more about this, unfortunately no bibliographic references are provided for specific entries. It would also have been useful to include *all* accepted mineral species names as separate entries, regardless of whether they have synonyms. Thus, there is no entry for "painite," an accepted name for a mineral species (and rare gem material) without a synonym.

In reviewing this book, I was reminded of a joke I heard many years ago. A young man, asked about the last book he read, responds, "There wasn't much plot, but the cast of characters was tremendous." Although he was actually talking about a telephone directory, he might just as well have been referring to the *Glossary of Mineral Synonyms*. However, you can probably get by without a telephone directory—there is always directory assistance—but anyone interested in gems and min-

erals will quickly come to rely on this book as an essential reference.

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## THE PHOTO-ATLAS OF MINERALS [CD-ROM]

*Developed by Anthony R. Kampf and George Gerhold, produced by The Gem & Mineral Council, Los Angeles County Museum of Natural History, Los Angeles, 1998. US\$49.95.\**

*The Photo-Atlas of Minerals* is a thoughtful, sophisticated product, in CD-ROM format, that uses the capabilities of computer technology to provide exciting features. To put the *Photo-Atlas* in perspective, I spent \$40 on the *Encyclopedia of Minerals* by W. L. Roberts, G. R. Rapp, Jr., and J. Weber (Van Nostrand Reinhold, New York) when it was first published in 1974. It was an extravagance for a struggling graduate student, but I bought it for two reasons: First, it had entries for 2,200 mineral species, the most comprehensive reference then available. More importantly, the *Encyclopedia* was the first standard reference in mineralogy to be extensively illustrated in color, with almost 1,000 color photographs of an unusually wide variety of species. Now, a generation later, *The Photo-Atlas of Minerals* serves the same purpose even better, and at a much cheaper price.

The *Photo-Atlas* is easy and fun to use. Clear instructions are provided, but they really are not needed. The core of the product is 6,500 color images of more than 800 mineral species. Most of these are the work of Wendell E. Wilson and Louis Perloff, two of the very best mineral photographers. Some species, especially the gem minerals, are represented by dozens of illustrations. There are occasional images of gemstones, as

well as inclusions. These are all linked to a database of mineral properties that covers 3,600 species and an extensive glossary. The user can search and view minerals by name, chemistry, locality, crystal class, or physical properties. For users who are wired for sound, click on the name of a mineral and it is pronounced! The CD also can be used to play an identification game or create a slide show. *The Photo-Atlas of Minerals* provides an unparalleled collection of excellent mineral images with supporting text, and a search capability that can be used and enjoyed by a wide audience.

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## OTHER BOOKS RECEIVED

**Mani-Mala, or A Treatise on Gems**, by Sourindro Mohun Tagore, reprinted by Nandishkor R. Barot, 1,046 pp., illus., publ. by Mehul Barot, Philadelphia, PA, 1996, US\$200. It is always a cause for celebration whenever a much-esteemed historical gemological book, hitherto inaccessible to most persons because of rarity, is reprinted. The basic worth of Tagore's treatise, first published in 1879, remains unchanged from my evaluation in *Gemology: An Annotated Bibliography* (Scarecrow Press, Metuchen, New Jersey, 1993), entry no. 6475: "On all counts one of the most remarkable and important works on gems ever published, particularly so because its Indian author stresses the knowledge of gems and their cultural significance in the Indian lands. For information on Indian gems, one must ultimately seek out and consult this splendid work. It is the product of many years research in locating and extracting the ancient literature of India. . . [Readers are given] the opportunity to com-

pare directly this translation to the originals in native languages which are conveniently placed in parallel [Bengali, Hindi, and Sanskrit]."

In this reprint, a number of original lithographic illustrations are poorly reproduced, but the text is sharp and easily legible. Although the binding leaves much to be desired, nevertheless the volumes should hold together and wear well. It is interesting to note the meteoric rise in price of an original *Mani-Mala*, beginning with an auction sale at \$85 in 1971, to \$4,000 at Christie's in 1987, and an astonishing \$8,625 paid in the Swann auction of 1994. Given those astronomical sums, perhaps \$200 isn't too much after all.

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**Edelsteine: Symbole der Schönheit und der Macht (Gemstones: Symbols of Beauty and Power)**, by Edward J. Gübelin and Franz-Xaver Erni, 240 pp., illus., publ. by Verlag Hans Schöner GmbH, Königsbach-Stein, 1999 [in German], US\$43.00. Forming the core of this large (30.5 × 24.5 cm), richly illustrated volume are more than 110 pages devoted to 26 different gemstones. Discussions of each gemstone are accompanied by the photographs of Harold and Erica Van Pelt, among others. Remaining chapters contain general overviews of origins and characteristics, symbolism, production, processing, inclusions, and synthesis of gemstones. Tables, charts, and other graphics supplement the text throughout. *Edelsteine* closes with a glossary and a bibliography. An English version is forthcoming.

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