BOOK REVIEWS

MINERAL DEPOSITS OF EUROPE, VOLUME 3: CENTRAL EUROPE. Edited by F. W. Dunning and A. M. Evans. The Institution of Mining and Metallurgy and the Mineralogical Society, London, 1986. xv + 355 pages, 159 figures, numerous tables. \$150.00.

This volume is the third of five covering the mineral deposits of Europe (including Iceland, Turkey, and the USSR to the Urals). Volume 1, Northwest Europe, was published in 1978, and volume 2, Southeast Europe, in 1982; volumes 4 and 5 are planned for 1987. The present volume maintains the high quality of the preceding ones and provides a comprehensive, up-to-date, and extensively documented account of the mineral deposits of Central Europe, large and small, both metallic and nonmetallic (fossile fuels excluded).

An introductory chapter by K. Schmidt and B. Kölbel (14 p., 3 figs., 53 references) describes the geotectonic framework; it is followed by national chapters, as follows: Austria, by H. F. Holzer (27 p., 12 figs., 147 references); Switzerland, by F. C. Jaffé (14 p., 1 fig., 114 references); Poland, by R. Osika (44 p., 34 figs., 50 references); Belgium, by L. Dejonghe (13 p., 4 figs., 74 references); the Netherlands, by H. M. Harsveldt (4 p., 1 fig., 5 references); Czechoslovakia, by Z. Pouba and J. Ilavsky (59 p., 16 figs., 100 references); Germany (West), by H. W. Walther (128 p., 66 figs., 300 references); Germany (East), by L. Baumann et al. (29 p., 20 figs., 80 references). Name and subject indexes for the whole volume are included.

This book will be particularly valuable in providing excellent descriptions in English for many European deposits for which little or no information has been available in other than the national language. The space devoted to each country corresponds well with the variety and economic significance of the mining industry therein. It is certainly an essential source for any economic geologist concerned with the region and should be available in all geological libraries.

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PHOTOATLAS OF INCLUSIONS IN GEMSTONES. By Edward J. Gübelin and John I. Koivula. ABC Editions, Rüdigerstrasse 12, CH-8021 Zürich, Switzerland. Distributed in the U.S.A. by the bookstore of the Gemmological Institute of America, P.O. Box 2110, Santa Monica, California 90406. Published in 1986, with 532 pages (format 10 in. by 8¼ in.) and 1400 color photomicrographs; priced at \$175.00.

Gemologists, jewelers, and mineralogists are more and more frequently confronted with synthetic gemstones, with treated and color-enhanced stones, and with natural gems whose original locale is unknown. In many of these situations, microscopic study of the stone in question, and of its inclusions, can be extremely helpful. Many gemologists have established 35-mm slide collections of the appearance (e.g., color zonations and twinning) of gemstones under high-power magnification (in transmitted light), as well as of their inclusions, and inclusion patterns. However, most jewelers, or even gemologists, will be unable to establish a slide collection of such features for all the natural and synthetic gems that may present a problem. Such a color slide library has been converted to book form by Edward J. Gübelin and John I. Koivula.

Their *Photoatlas of Inclusions in Gemstones* is not only a compilation of very high quality and beautiful illustrations, but also provides a lucid introduction to microscopic and photomicrographic techniques that are most useful to the study of gemstones in high-powered optical microscopy (19 pages). This introduction is followed by a 20-page section on "The genesis of mineral inclusions," which in turn, is succeeded by three guest contributions. These are "The origin of fluid inclusions in gemstones" by Edwin Roedder (16 pages), "The inclusions in diamonds and the genesis of diamond" by Henry O. A. Meyer (10 pages), and "The formation of quartz and its inclusions" by H. A. Stalder (10 pages).

Approximately 300 pages of the book are devoted to very high quality color photomicrographs of solid and fluid inclusions in gemstones. The inclusion photographs and accompanying text are systematically arranged according to the included mineral (e.g., apatite inclusions) and according to the host (e.g., peridot and its inclusions). The captions accompanying each colored photograph are self-explanatory and as such can stand alone from the accompanying text.

The next 80 pages deal with the inclusions in man-made stones, such as glass imitations, plastic imitations, and composite stones, in artificial products, and various synthetic gems. The last 10 pages provide concluding remarks, listings of quoted and recommended literature, a glossary of scientific expressions, and an index.

This book provides a wealth of valuable information that is of vital importance to those who deal with gems, their origin, their imitations, and synthetic analogues. When the financial stakes are high, as is most common in the fields of fine gems and jewelry, this book with its informative collection of color illustrations and captions is worth the price of \$175.00. In addition to its important scientific value, it is generally so well executed that it provides the reader with a great deal of aesthetic pleasure.

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ERRATA

- New mineral names. The following new minerals were approved before publication by the Commission on New Minerals and Mineral Names, International Mineralogical Association: chenite (v. 72, p. 222, 1987), kolarite (v. 71, p. 1545, 1986), radhakrishnaite (v. 71, p. 1545, 1986), and yecoraite (v. 71, p. 1547, 1986). The correct formula for sobolevite is Na₂Ca₂-MnTi₃Si₄O₁₈·4Na₃PO₄ (v. 69, p. 813, 1984).
- Proceedings of the Sixty-seventh Annual Meeting of the Mineralogical Society of America in San Antonio, Texas. Under the heading Necrology, it should have been noted that D. S. Korzhinskii, Honorary Fellow, was also recipient of the Roebling Medal in 1980.