



companies in small-scale mining, recognizing that very many of the large mines of the world have been based on local small operations.

13. *Training*. Training will be carried out within each of the compartments, one group being identified to inventory and coordinate training activities. It is felt that this should be a key area for SMI attention and initiative, and that it is an area in which good project support can be generated.

14. *Research*. As with training one group will be asked to take a degree of responsibility for coordinating research. There is a need here for promotion of research since small-scale mining has received limited attention. The possibility of cooperative, inter-group activities should be considered.

## Notes

1. Topics 2-7 cover various aspects of appropriate technology and their lead agencies might be coordinated within the SMI Secretariat.

2. One appropriate task of the consortium would be to prepare a handbook on small-scale mining with chapters to be provided by the lead agencies. ■

## Mining on disc

*World-wide mining on disc*, 1981-1996, published by the Mining Journal (London), tel. +44 171 216 60 60, CD-ROM 275L.

The Mining Journal is the oldest and best known industry journal for the world's mining industries. It is published weekly and is accompanied by the Mining Magazine (monthly) and Metals&Minerals, all valuable documentation, reference and industry intelligence services for the mining industry.

This CD-ROM contains all text of these journals from 1981 to end 1996. It uses an in-built search engine which allows much more sophisticated searches than a pure word-processor would allow. It is very useful for legal research relevant to the mining industry in the following ways: It allows very rapid access (much more rapid than by going through 16 yearly indexes and then looking up the relevant pages) to information that is relevant for mining lawyer by using the effective search/query system. While the mining journal is mainly geared to mining engineers and geologists, it had always had a practice of reporting on legal issues relevant to the industry: New legislation, problems with the existing regulatory and tax framework of the mining business, events associated with significant contracts, corporate intelligence (results take-over, disputes), issues of government policy corporate strategy and, more recently, environmental regulation are regularly reported. It was always a tedious – though for professional legal research essential – business to go through indexes and find the desired references. This is made appreciably easier by the CD-ROM. In addition, one does not need to have volumes of the Mining Journal and its associated magazines physically available.

The search results are rarely sufficient: The mining journal reports very briefly on "legal events", but, not being a lawyers' journal, does not provide detailed legal analysis and access to primary documentation. However, it is an excellent starting point if one needs to find out, for example, about the mining law reform status in Vietnam, mining companies investing in Kazakhstan, take-over battles, relevant subjects (and speakers, i.e. sources of more in-depth intelligence) of recent industry conferences or developments associates with a particular company, country or mineral.

*Professor T. Wälde, director Centre for Petroleum and Mineral Law and Policy, Dundee, Scotland.*



BOOKS

## Books received

Phillip Crowson, *Minerals handbook 1996-97, statistics and analyses of the world's minerals industry*, MacMillan Direct Ltd, Burnel Road, Houndmills, Basingstoke, Hampshire RG21 6XS, UK, ISBN 0-333-64084-5, Stockton ISBN 1-56159-191-6, 455 pp.

Phillip Crowson is former Chief Economist of the RTZ/CRA Corporation PLC, and is editing the Mineral Handbook in this new number containing 52 different minerals. In eleven summary tables, amongst others, the values of annual production, import dependence and the role of secondary production of major non-ferrous metals is provided. For each mineral information is given on world reserves and reserve bases, world production, productive capacity, secondary production, consumption, end-use patterns, annual average prices and other items. All the data have been updated and revised to include annual figures for 1993-1994. The purpose of the handbook is to contain sufficient basic data on all aspects of the minerals and metals include to allow informed debate on mineral policies. Altogether the Minerals Handbook 1996-97 is a very useful reference work.

*World Copper - Metal Bulletin Databook*. Third edition 1996, edited by Ann-Marie Moreno. Metal Bulletin Books Ltd, Park House, Park Terrace, Worcester Park, Surrey KT4 7HY, UK. Fax: +44 181 337 8943, ISBN 0 900663 00 7, 482 pp.

This third edition has attempted to embrace the major structural changes that the industry has seen in the past few years. Many new solvent extraction electrowinning operations are contributing increasingly to the refined metal part of the supply. Mines are listed by both operating entity and by parent company. A major feature of this edition is the expanded China section. The traders and

Producers sections are accompanied by a useful buyers guide. Telephone, faxes and e-mail to many companies provide a useful communication tool.

Peter W Harben and Milos Kuzvart, *Industrial Minerals Global Geology*, Industrial Minerals Information Lth, Metal Bulletin Plc, Park Place, 3 Park Terrace, Worcester Park, Surrey KT4 7HY, UK, Fax: +44 181 337 8943, ISBN 0 900663 074, 462 pp.

The broad field of the industrial minerals covers a highly diverse group of materials that man takes out of the earth's crust except for fuels, metallic ores, water and gemstones. At the one extreme are gravel and crushed stones with a low unit value and at the other are industrial diamonds with a high unit value. More than 50 rocks and minerals are discussed in this book, and each chapter deals with a given mineral or rock and contains information on physical and chemical properties and their industrial significance as well as the most common geological habitats and genesis. Sections on exploration and exploitation cover the main exploration, extraction, and processing techniques used for a particular mineral or rock, and each chapter ends with references and a bibliography for further reading.

Federal Republic of Brazil, Ministry of Mines and Energy, *Mining in Brazil - basic information for the investor*, Directory of Development and Mineral Economics, Setor de Autarquias Norte - Quadra 1 - Bloco B, 70040-200-Brasilia, DF, Brazil, 85 pp. Cadernos IG/Unicamp, Caixa Postal 6152, 13083-970, Campinas, SP, Brazil.

*Sustainable development and the advanced materials: the Brazilian case*, Centro de Tecnologia Mineral-MCT/CNPq International Development Research Centre-IDRC/Canada. ISBN 85-7227074-4, 290 pp, Volume 6, Número 1, 1996. ISSN 0103-6734, 209 pp.

Bryant, D., Nielsen, D., and Tangle, L. *The last frontier forests: Ecosystems & economies on the edge*, World Resources Institute, 1709, New York Avenue NW Washington, DC 20006, USA. ISBN 1-56973-185-5, 42 pp.

Almost half of Earth's original forest cover is gone, much of it destroyed within the past three decades. Today, just one fifth of the world's original forest cover remains in large tracts of relatively undisturbed forest. Three countries, Russia, Canada and Brazil house almost 70 per cent of the world's remaining frontier forest while 76 countries assessed in this study have lost all of their frontier forest.

Luleå University of Technology, *Competitiveness and sustainability in natural resource exploitation*, reprinted from *Resources Policy*, Vol 22, No 1/2, March/June 1996. Guest editor: Marian Radetzki. Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. Fax: +44 1392 425370. ISSN 0301-4207, 140 pp.

Ministry of Mines and Energy, Namibia, *Proterozoic crustal and metallogenic evolution*, the Geological Survey of Namibia, Vol 10, 1995. P.O. Box 2168, Windhoek, Namibia, ISSN 0256-1697, 166 pp.

Most of Namibia is underlain by rocks of mid to late Proterozoic age. The country boasts a few world-class mineral deposits. However, Namibia is underexplored, particularly in the northern and eastern parts which are buried beneath a cover of Mesozoic rocks and unconsolidated Tertiary sediments. Mapping and research by many organisations over the past two decades has vastly improved the understanding of the tectonic setting under which the Proterozoic successions and mineral deposits formed. Namibian geology is not well known to the international geological community and mining industry. Its mineral potential is less well known. ■