MANGANILVAITE, CaFe$_{2+}$Fe$_{3+}$(Mn,Fe$^{2+}$)(Si$_2$O$_7$)O(OH), A NEW MINERAL OF THE ILVAITE GROUP, FROM Pb–Zn SKARN DEPOSITS IN THE RHODOPE MOUNTAINS, BULGARIA: ERRATUM

IVAN K. BONEV§ AND ROSSITSA D. VASSILEVA
Geological Institute, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria

NIKOLAY ZOTOV
Mineralogisch-Petrologisches Institut, Universität Bonn, Poppelsdorfer Schloss, D–53115 Bonn, Germany

KALIN KOUZMANOV
Institute of Isotope Geochemistry and Mineral Resources, ETH, Zürich, CH–8092 Zürich, Switzerland

Owing to an error in typography, Table 6 was inadvertently omitted from the article of Bonev et al. (2005) [Can. Mineral. 43, 1027-1042]. It is reproduced here, with apologies to the authors and readers.

<table>
<thead>
<tr>
<th>Element</th>
<th>Osl</th>
<th>Osl0</th>
<th>Osl</th>
<th>Osl0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sc ppm</td>
<td>0.23</td>
<td>0.16</td>
<td>La ppm</td>
<td>1.29</td>
</tr>
<tr>
<td>Co</td>
<td>5.37</td>
<td>6.84</td>
<td>Ce</td>
<td>0.75</td>
</tr>
<tr>
<td>Ni</td>
<td>1.91</td>
<td>1.12</td>
<td>Pr</td>
<td>0.16</td>
</tr>
<tr>
<td>Cu</td>
<td>1.23</td>
<td>1.61</td>
<td>Nd</td>
<td>0.95</td>
</tr>
<tr>
<td>Ga</td>
<td>4.74</td>
<td>4.95</td>
<td>Sm</td>
<td>0.235</td>
</tr>
<tr>
<td>Ge</td>
<td>7.25</td>
<td>7.55</td>
<td>Eu</td>
<td>0.079</td>
</tr>
<tr>
<td>Rb</td>
<td>0.44</td>
<td>0.61</td>
<td>Gd</td>
<td>0.28</td>
</tr>
<tr>
<td>Sr</td>
<td>4.36</td>
<td>4.09</td>
<td>Tb</td>
<td>0.045</td>
</tr>
<tr>
<td>Y</td>
<td>3.40</td>
<td>2.93</td>
<td>Dy</td>
<td>0.26</td>
</tr>
<tr>
<td>Zr</td>
<td>1.29</td>
<td>1.76</td>
<td>Ho</td>
<td>0.067</td>
</tr>
<tr>
<td>Nb</td>
<td>1.81</td>
<td>0.38</td>
<td>Er</td>
<td>0.20</td>
</tr>
<tr>
<td>Sn</td>
<td>&lt;0.5</td>
<td>&lt;0.5</td>
<td>Tm</td>
<td>0.034</td>
</tr>
<tr>
<td>Cs</td>
<td>0.17</td>
<td>0.16</td>
<td>Yb</td>
<td>0.17</td>
</tr>
<tr>
<td>Ba</td>
<td>4.81</td>
<td>6.32</td>
<td>Lu</td>
<td>0.035</td>
</tr>
<tr>
<td>Hf</td>
<td>0.04</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ta</td>
<td>0.19</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>7.26</td>
<td>1.87</td>
<td>REE</td>
<td>4.555</td>
</tr>
<tr>
<td>Tb</td>
<td>0.07</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>0.31</td>
<td>0.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

§ E-mail address: bonev@geology.bas.bg
ORDER YOUR COPY NOW

Short Course Volume 35

Exploration for Platinum-Group Element Deposits

Platinum-group elements have risen to prominence in recent years both as extremely valuable commodities and as sensitive geochemical tracers of processes in the mantle and crust of the Earth. There is growing recognition that the next giant PGE discovery may well be in a completely different geotectonic setting than currently recognized "conventional" deposits. Designed to bridge the gap between academic research and modern exploration practice, this book is the result of an international collaboration among industry, government, and academic scientists. The book is designed to appeal both to the practising exploration geologist and to the academic, and should be accessible to any reader with a senior undergraduate education in geology.

The volume begins with reviews of the magmatic (Mungall) and hydrothermal (Hasley) geochemistry of the platinum-group elements, and progresses through descriptive ore deposit models for stratiform deposits in layered intrusions (Cawthorn), marginal contact-type deposits (Iljin & Lee), supergene effects (Oberthur & Melcher), placer deposits (Tolstyk et al.), hydrothermal deposits (Wilde), Sudbury footwall deposits (Farrow et al.), conduit-hosted deposits (Arndt), and porphyry deposits (Economou-Ellopoulos). The next section is devoted to exploration methods, beginning with a discussion of economic and geological considerations in planning exploration programs, followed by chapters outlining the use of geophysical (Batch), geochemical (Cameron & Hatton) and lithogeochemical (Maier and Barnes) techniques to detect PGE deposits. The book ends with a series of case histories detailing the methods and data used to discover or bring into production several major PGE deposits including Fedorov-Pana (Mitrofanov et al.), Nickel Rim (McLean et al.), Luc Des Iles (Lavigne et al.), the J-M Reef (Zientek et al.), the Hartley Mine, Great Dyke (Wilson and Brown), the Platino Nova Reef (Nielsen et al.) and Sukhoi Log (Dietz & Yudovskaya).

Edited by James E. Mungall

SC 35, 526 pages, 2005

US$55 (outside Canada) CAN$55 (in Canada)
(Member Price US$44/CAN$44)

Please send _____ copy(ies) of Exploration for Platinum-Group Element Deposits. $55* each

* CAN$ in Canada. Other Countries US$ 20% discount for members

<table>
<thead>
<tr>
<th>Method of payment</th>
<th>Prices include shipping by surface mail and handling</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Cheque</td>
<td>☐ Money order ☐ Credit card</td>
</tr>
<tr>
<td></td>
<td>I authorize the Mineralogical Association of Canada to charge the TOTAL AMOUNT DUE to my: ☐ Visa ☐ MasterCard ☐ EuroCard</td>
</tr>
<tr>
<td>Number</td>
<td>Expiry Date</td>
</tr>
<tr>
<td>Name</td>
<td>Institution</td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Prov./State</td>
</tr>
<tr>
<td>Postal/Zip Code</td>
<td>Tel. ( ) Fax ( )</td>
</tr>
<tr>
<td>E-mail:</td>
<td></td>
</tr>
</tbody>
</table>

Order online www.mineralogicalassociation.ca
From the Geological Society Publishing House

• Special Publication 250

Sustainable Minerals Operations in the Developing World

Edited by B. R. Marker, M. G. Petterson, F. McEvoy and M. H. Stephenson

The sustainable development of minerals, that are non-renewable resources, is a major challenge in today’s world. In this regard the true definition of ‘sustainability’ is a debating point in itself: can such a concept exist with respect to non-renewable resources? Perhaps the ideal sustainability model is one that minimizes negative environmental impact and maximizes benefits to society, the economy and regional/national development. Developed and near-developed economies rely for commodity supplies on developing countries where major mining operations are often a mainstay of the domestic economy. Limited environmental regulation and low wages lead to charges of exploitation. This gives examples from developing countries from all scales of mineral extraction. The volume reviews environmental, economic, health and social problems, and highlights the need to solve these before sustainability can be achieved. The better solutions require mutual understanding, through full involvement of all stakeholders, education, training and investment so that small-scale and artisanal mines can grow into well-managed operations. At larger scales, most major international mining companies have now improved their practices and are monitoring their progress, although there is no room for complacency in this rapidly changing area.

• Special Publication 248

Mineral Deposits and Earth Evolution

Edited by I. McDonald, A. J. Boyce, I. B. Butler, R. J. Herrington and D. A. Polya

Mineral deposits are not only primary sources of wealth generation, but also act as windows through which to view the evolution and interrelationships of the Earth system. Deposits formed throughout the last 3.8 billion years of the Earth’s history preserve key evidence with which to test fundamental questions about the evolution of the Earth. These include: the nature of early magmatic and tectonic processes, supercontinent reconstructions, the state of the atmosphere and hydrosphere with time, and the emergence and development of life. The interlinking processes that form mineral deposits have always sat at the heart of the Earth system and the potential for using deposits as tools to understand that evolving system over geological time is increasingly recognized. This volume contains research aimed both at understanding the origins of mineral deposits and at using mineral deposits as tools to explore different long-term Earth processes.

Postage: UK: +15% (£3.50 minimum) Europe: +15% (£8.00 minimum) Rest of World: +15% £12.50 minimum

Please allow up to 28 days for delivery of in stock items in the UK. Parcels to Europe and Rest of World are sent by surface mail and can take 6 to 12 weeks to arrive. (Air or courier rates available on request)

All prices and postage valid until 31 December 2005

Please order from: Geological Society Publishing House, Unit 7 Brassmill Enterprise Centre, Brassmill Lane, Bath BA1 3JN, UK Fax: +44 (0)1225 442836

Enquiries: Tel: +44 (0)1225 445046 Email: sales@geolsoc.org.uk

Society Web site: www.geolsoc.org.uk

For full details see the Online Bookshop: www.geolsoc.org.uk/bookshop
RUSSIAN ACADEMY OF SCIENCES

Volume 134 Number 1 2005

On Fedorov’s parallelohedra

Abiogenic and biogenic decomposition of minerals: differences, mechanisms

and practical applications

Mineralogical-geochemical indices of the super-large endogenous
deposits of phosphorus

History of the Science

“Mineral contiguity” and “paragenesis”: did V.M. Severgin forestall A. Breithaupt?

Russian mineralogists “lost” in the Australia bush

Minerals and Mineral Parageneses

Minerals of the continuous series rammelsbergite–löllingite

and rammelsbergite–safflorite in metamorphic-hydrothermal veins

Pentlandite from black smokers in the Rainbow and Logachev hydrothermal fields (isomorphism

and non-stoichiometry)

The garnet group of minerals in rocks of the banded iron-ore formation

of the Kola Peninsula

Unusual ditrigonal optical anomalies in crystals of muscovite

Mineralogical Crystallography

The real rhombododecahedra: theory and application to garnets from the Makzapakh Mountain,

West Kevy, Kola Peninsula

Thermal behavior of laderellite,

NH₄[B₂O₇(OH)₂]•H₂O

On the crystal structure of diversilite-(Ce)

Techniques of Investigation for Minerals, Rocks and Ores

Microprobe analysis to study types of chemical bonding between
copper atoms in minerals. II. Minerals

of complicated composition

Chronicles

The Tenth Congress of the Russian Mineralogical Society

Sixth EMU School on “Spectroscopic Methods in Mineralogy”, August 30 – September 8, 2004;

and Fifth European Conference on Mineralogy and Spectroscopy (ECMS-2004),

September 4 – 8, 2004; Vienna, Austria

This page presents the table of contents of a recent issue of


Except where indicated, the articles are published in Russian. Subscription: vmo@mineral.ras.spb.ru

ISSN 0869-6055
ORIGINAL ARTICLES

43 Chloritoid-bearing basic schists from the Sanbagawa metamorphic belt, central Shikoku: their petrologic significance and tectonic implications. Zaw Win Ko, M. ENAMI and M. AOYA

55 X-ray, DTA and Raman studies of monoclinic tridymite and its higher temperature orthorhombic modification with varying temperature. T. HIROSE, K. KIHARA, M. OKUNO, S. FUJINAMI and K. SHINODA

70 The coexistence of jadeite and omphacite in an eclogite–facies meta-quartz diorite from the southern Sesia Zone, Western Alps, Italy. K. MATSUMOTO and T. HIRAJIMA

85 Mineralogical abstracts from scientific papers published in Japan (100027-100051)
ORIGINAL ARTICLES

91 Raman spectra, normal modes and disorder in monoclinic tridymite and its higher temperature orthorhombic modification. K. KIHARA, T. HIROSE and K. SHINODA

104 Garnet-clinopyroxene amphibolite from the Takahama metamorphic rocks, western Kyushu, SW Japan: evidence for high-pressure granulite facies metamorphism. T. IKEDA, H. YOSHIDA, K. ARIMA, T. NISHIYAMA, T. YANAGI and K. MIYAZAKI

116 The Kobe CK carbonaceous chondrite: Petrography, mineralogy and metamorphism. K. TOMEOKA, T. KOJIMA, I. OHNISHI, Y. ISHII and N. NAKAMURA

126 Mineralogical abstracts from scientific papers published in Japan (100052-100080)

The Mineralogical Society of Japan, Nogizaka Building 6-41, Akasaka 9-chome, Minato-ku, Tokyo 107-0052, Japan
E-mail: srg@kt.rim.or.jp http://wwwsoc.nii.ac.jp/msj3

The Japanese Association of Mineralogists, Petrologists and Economic Geologists
C/o Graduate School of Science, Tohoku University, Aoba, Sendai 980-8578, Japan
E-mail: KYL04223@nifty.ne.jp http://wwwsoc.nii.ac.jp/jampeg/index.html

We acknowledge the financial support of the Government of Canada, through the Publications Assistance Program (PAP), toward our mailing costs.