

COMMISSION ON ORE MINERALOGY

International Mineralogical Association

<http://www.gsf.fi/domestic/com/ima-com.htm>

Annual Report, 2nd December 2007

This report covers aspects of IMA-COM activities since the date of the last annual report (November 2006).

COM Officials 2006-2010

The following nominations of officials to serve COM in the period 2006-2010 were accepted at the IMA-COM Business meeting held during the IMA meeting in Kobe, Japan, July 2006:

Chairman: Nigel J. Cook nigelc@nhm.uio.no

Vice-Chairman: Kari K. Kojonen kari.kojonen@gsf.fi

Federica Zaccarini was appointed as COM Secretary during 2007;

Federica.Zaccarini@unileoben.ac.at; fedezac@tsc4.com

Objectives and activities of COM

The Commission on Ore Mineralogy of the International Mineralogical Association was set up in 1962 to serve the interests of ore mineralogists in universities, research institutions, museums, and the minerals industry across the world. Our goals are to promote ore mineralogy within the scientific community, to train fellow members in investigative skills through a series of short courses, and to support the activities of other IMA commissions by providing advice and expert opinion on issues related to our fields of research. Through its regular short courses, regional meetings, scientific sessions, other symposia and field excursions, as well as its website, COM offers a platform to ore mineralogists to share their knowledge with others, exchange information, and to speak with a collective voice on issues that affect our branch of science. As one of the commissions of IMA, the COM supports the goals of international cooperation and collaborative research in pure and applied mineralogy.

Financial support

COM has no direct financial support for its activities. Limited financing for meeting participation has been possible via association with other groups, e.g., Applied Mineralogy Group of the Mineralogical Society (U.K.).

Interface with IMA activities and other international projects

COM participates in all major IMA events and interacts with other commissions, particularly CNMMN and CAM. COM is also enthusiastically involved in International Geoscience Project (IGCP) 486, with which it co-sponsored a session at the 32nd International Geological Congress (IGC). IMA-COM is also working with the organizing committee of the 33rd IGC (2008) in the preparation of three scientific sessions at the conference.

COM activities in 2006

No business meetings of IMA-COM were held during 2007. The next business meeting is scheduled to take place during the 33rd IGC in Oslo.

COM activity in 2007 has focussed on the scientific sessions planned for **33rd IGC-2008**:

1. Metals in the Earth: from vital resource to environmental hazard (organized by CAM, COM and WGEM). Conveners: David Vaughan, Dogan Pactunc, Kari Kojonen
2. Au-Ag telluride-selenide deposits (organised by COM) Conveners: Kari Kojonen, Nigel Cook
3. Platinum group mineralogy organised by IGCP 486 and COM) Conveners: Andy McDonald, Kari Kojonen

IMA-COM has also held discussions about sessions that the working group will organise at the **2010 IMA General Meeting** in Budapest. One suggestion that has received significant interest is: 'Automated Technologies in Ore Mineralogy'.

COM's website is hosted at the Geological Survey of Finland; <http://www.gsf.fi/domestic/com/ima-com.htm>. The website provides a central source of information on COM activities, with a mission statement, a brief history of the commission, list of national representatives, details of past and future activities and publication reports. During 2007, the website has been updated.

Report of COM sub-commission on sulphosalts

The sulphosalt sub-commission of COM (leaders Yves Moëlo and Emil Makovicky) had presented the final draft manuscript of their full-length report during the Business Meeting in Kobe (2006). A final version is currently in press in European Journal of Mineralogy, to appear in December 2007 / January 2008.

Summary of main activities in the period 2003-2007

Business meetings

COM holds a Business Meeting every two years, coinciding with the International Geological congress (2004) and the General Meeting of the International Mineralogical Association (2006).

COM website

COM created an independent website hosted at the Geological Survey of Finland.

Scientific sessions at international meetings and short courses

(A) *VGP 30, EGS-AGU-EUG Joint Assembly, in Nice, France, 7th-11th April 2003.*

Scientific session 'Gold and Platinum Group Minerals: from experimental mineralogy and microanalysis to deposit Modelling'.

(B) *Scientific sessions at the 32nd International Geological Congress, Florence, August 2004*

COM organised three scientific sessions for the 32nd IGC, Florence, Italy, 20-28 August 2004.

'Gold deposits in diverse geological environments' (co-proposed by COM and IAGOD). This symposium session received 108 contributions and was held as an all-day session on Saturday 21st August.

'Telluride and selenide minerals related to gold and platinum group element deposits', co-sponsored by IGCP project 486. The session received 52 contributions and was held as an all-day session on Sunday 22nd August.

'Mineral Deposits' session on 'Conventional and unconventional platinum group mineral deposits'. The session was held on Friday 27th August.

(C) *Joint meeting of IMA-COM and the Applied Mineralogy Group of the Mineralogical Society (U.K.), 7th January 2005*

A session "Platinum metals in the urban environment - should we worry?" formed part of the larger meeting of the Mineralogical Society of Great Britain and Ireland (6-7th January 2005, Bath, U.K.) with the title "Environmental Mineralogy, Geochemistry and Human Health". COM Chairman Roland K.W. Merkle gave a keynote lecture 'Large scale PGE anomalies in South Africa and possible mechanisms for the release of PGE to the environment'.

(D) *Short Course during the 10th International Platinum Symposium, Oulu, Finland, August 2005*

A Short course 'Current methods in applied mineralogy of platinum-group element ores and products' was co-sponsored by COM and held during the International Platinum Symposium, Oulu, Finland (August 6th 2005), organized by Prof. Louis J. Cabri. Five invited speakers delivered the lectures.

(E) *Scientific session at 19th General Meeting of the International Mineralogical Association, Kobe, Japan, July 23-28th 2006*

Session 16: 'Mineralogy of Ore Deposits'.

Short courses

During the 1990's, IMA-COM held several short courses in advanced ore mineralogy. The last such course was held in Finland in 2000. The difficulty of ensuring appropriate funding for future short courses has led to several attempts in the past few years to be abandoned. Two COM short course venues were proposed in 2006 (Nanjing, Peoples Republic of China; Kharagpur, India) for 2008/2009, but there has, regrettably, been little progress during 2007 to develop business plans for these events.

Reports of COM sub-commissions

The sulphosalt sub-commission of COM presented their full-length report.

Involvement in IGCP project

A number of COM 'members' joined the vice-chairman and secretary in proposing the IGCP project "*Au-Ag-telluride-selenide deposits in Europe and in developing countries*" (IGCP 486; 2003-2008).

Other activities/initiatives

IMA-COM has attempted to take a more active role in ensuring quality control of reported ore mineralogical data. The IMA-COM President Roland Merkle (2002-2006) made a call for COM 'members' to become involved in international initiatives of the International Standards Organisation (ISO) aimed at establishing guidelines for standardisation of microbeam data acquisition routines.

IMA-COM has called for valuable – and often irreplaceable collections of polished ore mineral specimens to be deposited in museums and mineralogical institutions to be preserved, and catalogued for future researchers. Discussion among various institutions has been initiated on the optimal way to ensure a systematic and common approach.

A discussion document containing a list of standardized abbreviations of ore minerals was prepared and circulated.

COM has also continued to promote 'Virtual Ore Mineralogy', in which a series of descriptions of ore minerals with optical images will be available free of charge on the IMA-COM website.

Workplan for 2007, with perspectives for 2008-2010

In the next term (2008-2012), COM will continue to organize scientific sessions within large international scientific meetings, such as the IGC, Goldschmidt meeting and IMA General Meetings. COM will redouble its efforts to organise short courses where they have not been held previously (particularly in developing countries).

COM Scientific sessions

IMA-COM will co-organize three sessions at the 33rd International Geological Congress (Oslo, August 2008); see above

COM Short courses

Two COM short courses are currently in the early planning stage.

- Short Course in Advanced Ore Mineralogy, Nanjing, Peoples Republic of China (2008)
- Short Course in Advanced Ore Mineralogy in Kharagpur, India (2009?)

Other projected activities

(1) Reporting by the COM sub-commission on 'selenide and telluride mineralogy' within the period 2006-2010, with final reporting at the 20th IMA General meeting in Budapest, 2010.

(2) Further development of the 'Virtual Ore Mineralogy' website;

(3) A more proactive role in ensuring quality control of reported ore mineralogical data in the future.

(4) Greater emphasis on the preservation of valuable - and often irreplaceable - collections of polished ore mineral specimens, depositing them, ideally in museums and mineralogical institutions.

Federica Zaccarini
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