

COMMISSION ON ORE MINERALOGY International Mineralogical Association

Annual Report to IUGS

Report, November 2005

Serving IMA-COM officers (until July 2006)

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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 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 IGC.

COM activities in 2005

No business meetings were held in 2005, but the officers held an informal meeting in January. The COM website remains the main vehicle for communication with members.

Joint meeting of IMA-COM and the Applied Mineralogy Group of the Mineralogical Society (U.K.)

A session "Platinum metals in the urban environment - should we worry?" was jointly organized by and IMA-COM and held on 7th January 2005. The session 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'.

Short Course during the International Platinum Symposium

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.

COM website

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 2005, the website has been updated. COM is also continuing 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 website. The desired format for the description of different ore minerals is under consideration and should be available within a few months to enable initial construction of the data file. After this, high-quality photomicrographs of ore minerals will be sought from ore mineralogists worldwide for the data file.

Report of COM sub-commission on sulphosalts

The sulphosalt sub-commission of COM (Yves Moëlo and Emil Makovicky) presented a final draft manuscript of their full-length report during the Summer of 2005. This manuscript has, subsequently, been reviewed by several specialists in the field and is a last round of revision. The final version will be available for download from the COM website during Winter 2005/6.

Summary of main activities in the period 2002-2006

COM website

COM created the new, independent website hosted at the Geological Survey of Finland

Scientific sessions at international meetings

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

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

Scientific sessions at the 32nd International Geological Congress, Florence, August 2004

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

- SYMPOSIUM G14 'Mineral Deposits' session on '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.
- SYMPOSIUM G15 'Mineralogy' session on '*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.
- SYMPOSIUM G14 'Mineral Deposits' session on 'Conventional and unconventional platinum group mineral deposits'. The session was held on Friday 27th August.

Involvement in new 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*". The project (IGCP 486; 2003-2007) has been approved. In the assessment document, the evaluation committee noted, positively, that the project had the backing of an IMA commission.

Reports of COM sub-commissions

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

Other activities

COM intends to take a more active role in ensuring quality control of reported ore mineralogical data in the future. COM President Roland Merkle 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.

COM had originally intended to hold a short course on Advanced Ore Mineralogy in Granada, Spain, between October 17th and 23rd 2004. These plans had to be cancelled during to difficulties in obtaining funding experienced by the Sociedad Española de Mineralogía, the local hosts for the event.

The cataloguing of collections of polished ore mineral specimens in museums and mineralogical institutions in digital form is under way, with discussion among various institutions on the optimal way to ensure a systematic and common approach.

A discussion document containing a list of standardized abbreviations of ore minerals has been prepared.

Workplan for 2006

19th General Meeting of IMA, Kobe, Japan, July 23-28th 2006

COM will convene the following sessions for the 19th General Meeting of IMA to be held in Kobe, Japan, July 23-28th 2006: Session 16: 'Mineralogy of Ore Deposits'. Conveners are: Nigel J. Cook (Norway), Kari Kojonen (Finland), Hiroharu Matsueda (Japan), Roland K. W. Merkle (South Africa) and Masaaki Shimizu (Japan). Keynote and invited lecturers are currently being targeted.

COM will hold a Business Meeting in Kobe, at which point officers will be elected to serve for the period 2006-2010.

The Business Meeting will also be present a provisional work plan for the period 2006-2010, and for evaluation of current activities.

The officers of COM intend to target areas on which we will focus in the coming period. At the time of reporting, four areas will be emphasised:

(1) Development and completion of the 'Virtual Ore Mineralogy' website;

(2) A more proactive role in ensuring quality control of reported ore mineralogical data in the future; and

(3) COM's wish to help preserve valuable - and often irreplaceable - collections of polished ore mineral specimens, depositing them, ideally in museums and mineralogical institutions.

(4) Reporting by the COM sub-commission on 'selenide and telluride mineralogy' appointed at the Business Meeting in Edinburgh.

COM wishes to use the opportunity of the Kobe meeting to intensify cooperation with other working groups and commissions, as well as to discuss with the IMA administration how we might secure some limited funding for our future activities.

In the next term (2006-2010), COM plans to organize Short Courses and Workshops - preferably in connection of large international scientific meetings, but also as stand-alone regional meetings, especially in such countries, where they have not been held previously (particularly in developing countries).

Nigel Cook Secretary COM

Oslo, Norway. 17.11.2005

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