# ANNUAL REPORTS FROM IMA COMMISSIONS AND WORKING GROUPS ACTIVITIES YEAR 2003

### (1) COMMISSION ON APPLIED MINERALOGY (CAM) -

**OFFICERS -** Chairman: Richard D. HAGNI

Vice-Chairman: Eric PIRARD Secretary: Henrique KAHN

Corresponding member in the Council: Marcello Mellini

(Attached document - 9/10/03)

- Co-organizing together with the International Council for Applied Mineralogy the 8th International Congress on Applied Mineralogy, to be held in Aguas de Lindoia, Brazil, from 19 to 22 September of 2004.
- CAM web site share with ICAM, improvements were done.
- Build a mailing list of scientist and researches somehow dealing in the field of applied mineralogy (ICAM 2004 mailing list).
- Sponsored the 5th short course on "Applied Mineralogy of Mineral Raw Materials" to be held at University of Sao Paulo, Brazil, and organised by Henrique Kahn with 12 participants in 2003.

# COMMISSION ON APPLIED MINERALOGY (CAM) - PLANS FOR THE YEAR 2004

A) Plans for 2004

- 8th International Congress on Applied Mineralogy, to be held in Aguas de Lindoia, Brazil, from 19 to 22 September of 2004. CAM will be co-sponsoring this congress organized by the International Council for Applied Mineralogy – ICAM. At least three short courses will be also co-sponsored by CAM.
- 2) Improve the web site of CAM, under the site http://www.appliedmineralogy.org/ shared with ICAM about the CAM-IMA, including history, aim, objective, mission, report, short courses, scientific activity, way of functioning, etc.
- 3) Together with ICAM support the "Applied Mineralogy On Line" web site, establishing a mailing list to improve the communication lines between the of all the individuals and organisations somehow dealing with applied mineralogy http://www.appliedmineralogy.org/
- 4) Sponsor a 6th short course on "Applied Mineralogy of Mineral Raw Materials" to be held at University of Sao Paulo, Brazil, and organized by Henrique Kahn.
- 5) Sponsored the 6th short course on "Applied Mineralogy of Mineral Raw Materials" to be held at University of Sao Paulo, Brazil, organized by Henrique Kahn in collaboration with Prof. Polmann from Halle University, German.

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- 6) Sponsor a short course Digital Image Analysis for Geologist BSC-10 to be held as 32nd IGC short course, in Florence, Italy; organized by Eric Pirard. No further activities of CAM are planed for the 32 IGC.
- 7) Search and contacts for new short courses to be sponsored by CAM.
- 8) Review of the CAM National Delegate List. Contact the active delegates and trying to replace those ones that are retired or really not properly interested on helping CAM to improve their activities worldwide.
- B) Critical milestones to be achieved in year 2004
  - 1) A review of CAM National Delegate List.
  - 2) CAM web site.
  - 3) Mailing list of individuals and organizations somehow dealing with applied mineralogy.
- C) Anticipated results/products next year
  - 1) Proceedings of the 8th International Congress on Applied Mineralogy
- D) Communication plans
  - 1) Mailing list of individuals and organizations somehow dealing with applied mineralogy
  - 2) Divulgation of the 8th International Congress on Applied Mineralogy second and final circular.
  - 3) CAM web site.
- E) Summary budget for next year (if IUGS support is requested, please specify). No IUGS support is considered.
- F) Potential funding sources outside IUGS for CAM activities:
  - 8th International Congress on Applied Mineralogy Brazilian funding agencies, mining companies analytical equipments companies and registration fees (to be prospected for helping on ICAM 2004 and a short course on ""Applied Mineralogy of Mineral Raw Materials")
  - 2) Web site and mailing list will be supported by Mining and Petroleum Engineering Department of the Polytechnic School of the University of Sao Paulo.

Henrique Kahn IMA-CAM Secretary

### (2) COMMISSION ON CLASSIFICATION OF MINERALS (CCM)

**Summary of the activity of CCM (2003)** 

**OFFICERS -** Chairman: Yu PUSHCHAROVSKY

Vice-Chairman: E. NICKEL Secretary: A. Mc DONALD

Corresponding member in the Council: Werner Schreyer (attached document - 22/10/03)

The main activities of the Commission in 2003 can be summarized as follows:

- 1) The contribution to the activity of the commission is connected with two fundamental books published in 2003:
- J.Lima-de-Faria "Classification of Minerals" Volume 2: Minerals with ApBqCrDs to ApBqCrDsExFyGz General Chemical Formulas. Kluwer academic Publishers, Solid Earth Science Library, Vol.11A, Dordrecht, 2003.
- N.V.Chukanov et al. "Minerals of labuntsovite group", Moscow, "Nauka", 2003, P. 323.
- 2) Home-page of the commission on the classification of minerals was updated in IMA www site. The home-page comprises: i) objectives; ii) various approaches to the classification of minerals; iii) news, current events and information about recent publications.
- 3) The list of the CCM members was updated.
- 4) The CCM is among the main organizers of the General symposium G 15.03 titled "Crystal structures of minerals: topology and classification" (convenors: D.Pushcharovsky, E.Tillmanns)-IGC-32 in Florence (2003). The convenors began to elaborate the program of this symposium.
- 5) Members of CCM participated in the conference "XRD studies of minerals" which was organized in S-Peterburg (Russia) September, 2003.
- 6) The main subdivisions of classification of China gemstones were elaborated.

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# (3) COMMISSION ON MINERAL GROWTH AND INTERFACE PROCESSES (CMGIP)

**OFFICERS -** Chairman: C. WOENSDREGT

Vice-Chairman: Katsuo TSUKAMOTO

Secretary: J. ROKOVAN

Corresponding member in the Council: Alain Baronnet

### (4) COMMISSION ON GEM MATERIALS (CCM)

**OFFICERS -** Chairman: Margherita SUPERCHI

Vice-Chairman:

Secretary: Lin SUTHERLAND

Corresponding member in the Council: Maryse Ohnenstetter

(body of e-mail on 2/4/03) Regarding the activities of Commission on Gem Materials, we are organizing a Session on Gem Materials included in the Symposium on Mineralogy of the 32nd IGC (Florence 2004). We are considering how to replace Pieter Zwaan as Vice Chairman. Last but not least, a draft of a "GLOSSARY of GEM MATERIALS" has been sent to a small group of Members of the Commission and, after their comments and amendments, will be circulated among all members. Comments from members of other Commissions (New Minerals and Mineral Names, for instance) will be very useful. All best wishes and regards. Margherita Superchi Chairman of Gem Materials Commission of IMA

### (5) COMMISSION ON MUSEUMS (CM)

**OFFICERS -** Chairman: Lydie TOURET

Vice-Chairman:

Secretary: K. SCHUERMANN

Corresponding member in the Council: Ian Campbell

(Attached document: 17/10/03)

### Report about the activities of the CM for the year 2002/2003

- 1. An annually Ad Hoc Meeting of the IMA Commission on museums (CM) was held on October 25<sup>th</sup>, 2002 in Munich during the Munich fare. 17 curators from 8 countries attended the meeting. (Minutes will be added as attachment).
- 2. A new website(homepage) of the CM was installed by Dr. Antony R. Kampf from Los Angeles (<a href="www.smmp.net/IMA-CM/">www.smmp.net/IMA-CM/</a>) containing e.g. a complete membershiplist and the CTMS-Catalogue (a complete list of type mineral specimen and their depositories).
- 3. The 5<sup>th</sup> International Conference on Mineralogy & Museums, September 5-8, 2004 in Paris, France will be sponsored by CM. The Chairwoman of CM Dr. Lydie Touret is Head of the Organizing committee and will present details at our Ad Hoc Meeting in Munich, October 31<sup>st</sup>,2003. All details of this Conference will be spread in the late autumn of this year.

Marburg, October17th, 2003 - Kay U. Schuermann

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(Attached document: 21/11/03)

MINUTES FROM THE IMA – COMMISSION ON MUSEUMS AD HOC – MEETING, MUNICH, OCTOBER 31<sup>st</sup>, 2003

Our annually Ad Hoc – Meeting during the Munich Fare was held on Friday, October 31st, 2003 from 4:00 pm in the meeting room A 51. 27 curators from 9 countries attended the meeting. The chairwoman of the commission,

Dr. Lydie Touret (Paris/France), opened the meeting and presented a nice draft of the 2<sup>nd</sup> circular of M&M5 (5<sup>th</sup> International Conference MINERALOGY AND MUSEUMS –

September  $5^{th} - 8^{th}$ , 2004, Paris, France). The  $2^{nd}$  circular will be distributed in the next weeks. A website for M&M5 with all informations necessary will be installed:

http://www.musee.ensmp.fr (on line early December 2003).

Please encourage all your colleagues to join this meeting!!

The CM has to go in contact with the publisher of the "World Directory of Mineral Collections" for realisation of soft copies of the new edition beneath the electronical version.

As usual short statements have been made by the curators about the situation regarding their museums:

The Mineralogical Museum of the University St. Petersburg/Russia (G. Anastasenko) reported about 40.000 mineral specimen and their collection of specimen from closed down russian deposits. The museum will organize a new symposium on Mineralogy and Museums. Mineralogical Museum of the University of Paris – Pierre et Marie Curie/France (J.C. Boulliard) is supporting the M&M5 Conference. The exhibition on geology and petrology has now about 1.000 visitors per day.

The museum of the School of Mines (L. Touret, J.M. LeCleach, and A. Djemai) Paris/France reported, that big parts of the whole collection are not visible to public, but they have many files in the internet. There is a lot of international research especially with the egyptian library in Alexandria.

Norwegian Mining Museum Kongsberg (F.S. Nordrum) told us, that the norwegian government is carrying out a general reform of museums in two steps, because there are too many museums in the country. In the first step there will be made one unit of all smaller museums for each of the 19 counties. During the second step museums having the same priority will be connected in national networks. The Kongsberg Museum had a 20% budget increase for 2003 and exspect the same for 2004.

The Collection of Mineralogy of the University of Granada/Spain (P. Fewoll Hach-ali) gave informations about a new protected area of about 30 km², where in summer 2004 a geoscientifical exhibition road will be opened.

The Museum of Natural History in Milan/Italy (F. Pezzotta and A. Guastoni) will be further modernized (e.g. air condition) with costs of about 2 Mill. € and presents now photographical and analytical collections in new displays. Moreover the Midrachil Collection with 160 outstanding specimen is shown.

The University of Modena/Italy (G. Garuti) is carrying out a project to build a new big museum including mineral displays. Up to now the mineralogical exhibition is open on request.

The Mineral Collection of the University of Leoben/Austria (F. Zaccarini) presents now a new and modern mineral exhibition.

The Cincinnati Museum Center/U.S.A. (T. Huizing) has built up a new mineral collection display and more research facilities.

The Museum of Natural History in Bern/Switzerland presents a new special exhibition:

"Ping-Pong in Space" from November, 28th 2003 to September, 30th 2004 showing among a huge amount of meteorites recovered from Oman meteorites from Mars and Moon.

The Mineralogical Museum (Mineralogische Staatssammlung) in Munich (G. Simon and G. Grundmann) gave informations about the handling of the second part of the "Neuschwanstein"-meteorite and the 200-years ceremonies of the collection.

Additional short comments by B. Kreher-Hartmann (Mineralogical Museum Jena), H.J. Höbler (Mineralogical Collection Leipzig), J. Schlüter (Mineralogical Museum Hamburg), K. Rank and A. Massanek (Geological and Mineralogical Collection Freiberg), H.P. Schertl (Mineralogical and Petrological Collection Bochum), G. Lentz (Mineralogical Collection Kiel), and R. Hollerbach (Mineralogical Museum Cologne) rounded off the meeting, which ended at about 5 pm.

Our special thanks go to J. Keilmann, who makes possible, that we could use this special

room for our meeting during the Munich Fare and who announced our meeting very properly in the catalogue.

November 20th, 2003 - Kay U. Schuermann

(Secretary of the CM)

# (6) COMMISSION ON NEW MINERALS AND MINERAL NAMES (CNMMN)

**OFFICERS -** Chairman: E. BURKE

Vice-Chairman: G. FERRARIS Secretary: WD. BIRCH

(attached document 9/12/03)

Bill Birch, Secretary, 4 December 2003

The CNMMN has received 62 new mineral proposals until the end of November. This is approximately the same rate as over the past 2 years. There is a very high approval rate, with only one proposal rejected and two suspended. A number of older proposals have been resubmitted following revisions.

The CNMMN has also received three proposals that involve changes to mineralogical nomenclature. One of these, a proposal to abandon Schaller modifiers, has been approved, while proposals involving polytypism in wagnerite-triplite-zwieselite and a discreditation of spodiosite are under discussion.

The CNMMN also established two subcommittees to discuss and report on nomenclature of the tourmaline and epidote groups. These are under the chairmanships of Dr Milan Novak and Dr Thomas Armbruster, respectively. Reports are anticipated early in 2003. Additions and revisions to amphibole nomenclature were approved following proposals put forward by the amphibole subcommittee. The report of the eudialyte subcommittee was published in Canadian Mineralogist this year.

The establishment of an active CNMMN website by the incoming Chairman, Dr Ernst Burke, has been a major advance. The website provides general information on the history, working procedures and membership of the Commission. It also enables members to logon to view monthly updates of activities. All members are now using the website to download proposals.

Amongst other achievements this year, the Commission has now published on its website the IMA list of 3500 minerals approved, discredited and redefined since 1959. Lists of minerals approved over the past few years have also been added to the website.

### (7) COMMISSION ON ORE MINERALOGY (COM)

**OFFICERS -** Chairman: R.K.W. MERKLE

Vice-Chairman: KK. KOJONEN Secretary: NJ. COOK

Corresponding member in the Council: Kari Kojonen (Attached document 11/11/03)

### 1. Session 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 as planned. Convenors were Kari Kojonen (Finland), Roland W. Merkle (South Africa) and Nigel J. Cook (Norway). Two session participants successfully applied for travel and registration funding from the conference organisers. COM funds allowed the keynote speaker, Roland W. Merkle, to present the paper 'Gold and platinum-group element containing minerals – reflections on the reliability of observations'. Approximately 50 persons attended the session, which consisted of 12 oral presentations and 15 poster presentations. A selection of papers presented in the session are presently being prepared for a special issue of *Ore Geology Reviews*.

### 2. Planning for sessions at 32<sup>nd</sup> International Geological Congress

COM has proposed three scientific sessions for the 32<sup>nd</sup> IGC, Florence, Italy, 20<sup>th</sup>-28<sup>th</sup> August 2004. The sessions are:

SYMPOSIUM G14 'Mineral Deposits' session on 'European gold deposits in diverse geological environments' (co-proposed by COM and IAGOD).

SYMPOSIUM G14 'Mineral Deposits' session on 'Conventional and unconventional platinum group mineral deposits'.

SYMPOSIUM G15 'Mineralogy' session on 'Telluride and selenide minerals related to gold and platinum group element deposits'.

#### 3. COM Short Course Workshop in Granada, Spain, 2004.

COM will hold its next short course on Advanced Ore Mineralogy in Granada, Spain, between October 17<sup>th</sup> and 23<sup>rd</sup> 2004. The short course will be organised by the Sociedad Española de Mineralogía, in conjunction with COM. The local organising committee will prepare a first circular during Autumn 2003. As with previous COM short courses, the Granada course is primarily designed to meet the needs of locally based participants (both students and practising professionals). The range of topics covered is yet to be fixed, but will include traditional ore mineralogy, topics of specific local interest and environmental mineralogy.

#### 4. Ore microscopy course, Pretoria, South Africa, 2004

COM will co-sponsor an ore microscopy course in South Africa during 2005 (in conjunction with MINSA and University of Pretoria (venue and date to be arranged).

#### 5. COM website

COM has created a new website hosted at the Geological Survey of Finland; <a href="http://www.gsf.fi/domestic/com/ima-com.htm">http://www.gsf.fi/domestic/com/ima-com.htm</a> The website provides a central source of information on COM activities, with a mission statement, a brief history of the commission, an updated list of national representatives, details of past and future activities and publication reports. COM will, in future, include reports from sub-commissions and a section devoted to virtual ore microscopy, with links to other ore mineralogy/microscopy libraries available online.

#### 6. Reports of COM sub-commissions

Work is underway to update the report of the sulphosalt sub-commission of COM. The report will be presented, in abridged form, on the COM website during Winter 2003/4.

### 7. Virtual ore mineralogy

COM is committed to providing, on its website, a series of representative images of ore minerals. The nucleus of a collection of digital images is now in preparation and appropriate, high-quality photomicrographs of ore minerals will be sought from authors who have recently published in the mineralogical literature. Work will continue on this project, also in conjunction with preparation of written material to accompany the short course in Granada.

### 8. Other activities, initiatives and advance planning for 2005-2006

COM are considering operating a one-day workshop in PGE ore mineralogy at the 10<sup>th</sup> International Platinum Symposium to be held in Oulu, Finland, in August 2005.

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.

COM are in contact with Japanese COM representatives concerning the participation of the commission at the next IMA General meeting in Kobe, Japan (2006).

A discussion document containing a list of standardized abbreviations of ore minerals has been prepared. First contact has also been made with CNMMN on this issue.

COM intends to take a more active role in ensuring quality control of reported ore mineralogical data in the future. Proposed sets of guidelines for publishing of microprobe data etc. are in preparation.

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.

Nigel Cook, Secretary COM, Trondheim, Norway. 15.10.2003

## (8) COMMISSION ON PHYSICS OF MINERALS (CPM)

**OFFICERS -** Chairman: G. AMTHAUER

Vice-Chairman: E. OHTANI

Secretary: Daniel NEUVILLE

Corresponding member in the Council: Takamitsu Yamanaka

### (9) WORKING GROUP ON INCLUSIONS IN MINERALS (WGIM)

**OFFICERS -** Chairman: LI ZAOLIN

Vice-Chairman: ENJOJI Secretary: S. SMIRNOV

Corresponding member in the Council: Anthony Naldrett (*Attached document 21/11/03*)

- 1. At the assistance of IMA, the WGIM was granted to convene Session G-15.11 Inclusions in Minerals of the 32nd IGC in Florence, Italy in August 2004. WGIM Chairman Prof. Zhaolin Li and Secretary Dr. Sergey Smirnov have been working on it. Dr. Smirnov is also organizing a short course on melt inclusions during the 32<sup>nd</sup> IGC. Dr. Smirnov announced Fluid Inclusion community about the session G15.11 of IGC on the Internet after it was approved by Scientific Program board of IGC by the beginning of 2003 year.
- 2. To complete the management of this term of WGIM, we contacted Prof. Mamoru Enjoji from Japan and proposed him to the IMA for the Vice Chairman of the WGIM.
- 3. The WGIM is working on the preparation to establish Asian Current Research on Fluid Inclusions (ACROFI). The ACROFI is to reside in China. Organization registration request has been submitted to the Chinese authority for approval.
- 4. The WGIM is working on the preparation on the short course on researches and applications on organic inclusions and the 14th National Symposium on Inclusions and Geo Fluids, in associated with the Committee of Inclusions in Minerals of the Chinese Mineral, Petrology and Geochemistry Association. This event is to be in Beijing, China in mid October, 2004 for 6 days (4 days for the short course and 2 days for conference).

We are going to invite Prof. Jean Dubessy from Université Henri Poincaré in France, Dr. Jacques Pironon from CREGU, Prof. Huan-zhang Lu form Université du Québec and Dr. Guoxiang Chi from University of Regina to teach the short course.

- 5. On June 5-7 Dr. Sergey Smirnov took part in XVII Conference "European Current Research on Fluid Inclusions" held in Budapest, Hungary. In the course of Conference he discussed possible ways and themes of proposed short course on melt inclusions with Drs Vladimir Naumov, Irina Andreeva of GEOKHI, Moscow and Dr. Rainer Thomas of GFZ Potsdam. All of them agreed that this short course is necessary. Drs Naumov and Thomas agreed to take part in preparation of lectures for the short course.
- 6. At this time Dr. Smirnov takes part in preparation of sub-session on ore fluids in inclusions in minerals of the IAGOD Interim Conference on the Metallogeny of the Pacific Northwest. This sub-session is organized jointly by IAGOD and Working group on inclusions in minerals of IMA. Dr Smirnov and Dr. Alexander Borisenko of Institute of Geology SB RAS are conveners of this sub-session. We believe that this event is very important for IMA, because it gives a way for joint activities of IMA and IAGOD. Both of those organizations have commission and working group on inclusions in minerals.
- 7. In the beginning of October Dr. Smirnov send updates for IMA web-site. Necessary changes were made in the section of WGIM activities. Now he negotiates with Dr. Brown, who formerly maintained the WGIM web-page.
- 7. Prepared report on WGIM history for the IMA.

Secretary: S. Smirnov

(Attached document 10/10/03)

WGIM - IMA History

The Working Group on Inclusions in Minerals of the IMA is a sub organization of the International Mineral Association. Through convening international conferences, organizing training short courses and other activities, the WGIM carry its missions to bring mineral inclusion researchers together for scientific exchange, promoting technological awareness and technology development in mineral inclusion researches and therefore to support researches in related fields including but not limited to mineralogy, petrology, mineral deposit study, geochemistry, astrochemistry, tectonic geology, and petroleum geology, etc.

The WGIM was instituted in July 1986 during the 14<sup>th</sup> General Meeting of the IMA at Stanford, California, USA. Georges Deicha from France, Zhaolin Li and Linqi Xia from China were group members from 1986 – 1990.

At the 15<sup>th</sup> General Meeting of the IMA, from 28 June to 3 July, 1990 in Beijing, China, at J. Touret's proposal, B. De Vivo from Italy was elected as the Chairman of the WGIM, Zhaolin Li from China was elected as the First Vice Chairman. The Second Vice Chairman position was reserved for then the Soviet Union. Dr. Hafner from Hungary was the Secretary. The major accomplishments of this term (1990 - 1994) of WGIM included the completion of the Directory of Researchers and Lab active in Research in Fluid Inclusions in Collaboration with WG on Fluid Inclusions and the short course on fluid inclusions at the 16<sup>th</sup> IMA in Pisa, Italy in 1994 and the publication of Fluid Inclusions in Minerals: Methods and Applications, edited by Benedetto De Vivo and Maria Luce Frezzotti and published by Virginia Polytechnic Institute and State University.

At the 16<sup>th</sup> General Meeting of the IMA in Pisa, Italy in 1994, Ernst Burke from the Netherland was elected as the Chairman of the WGIM, Zhaolin Li from China the Vice Chairman and Maria Luce Frezzotti from Italy the Secretary. During this term (1994 - 1998), Dr. Phil Brown of Wisconsin University built a web site for messages and discussions on fluid inclusions. Zhaolin Li and J. Touret convened the Mineral Inclusions session 7-5 of the 30<sup>th</sup> IGC in Beijing, China in August 1996. Li and M. Frezzotti hosted the session. Three presentations were selected and published in Proceedings of the 30<sup>th</sup> IGC in Vol. 16 "Mineralogy" edited by Huang Yunhui and Cao Yawen.

In August 1998, Andrew Rankin from the UK was elected as the Chairman of the WGIM at the 17<sup>th</sup> IMA in Toronto, Canada. Zhaolin Li was the Vice Chairman and Bernhard Buhn from Germany was the Secretary. In this term (1998 - 2002), A. Rankin and B. Buhn convened the 8-4 Session Modern Microbeam techniques Applied to Fluid and Solid Species of the 31<sup>st</sup> IGC in August 2000 and the Session 22 Fluid and solid inclusions in minerals of the 18<sup>th</sup> IMA in Edinburgh in September 2002.

At the 18<sup>th</sup> IMA in 2002, Zhaolin Li was elected as the Chairman of the WGIM. Sergey Smirnov from Russia was elected as the Secretary. Mamoru Enjoji from Japan was appointed as the Vice Chairman in a later time. In the 2002 – 2006 term, the WGIM has been working on the establishment of Asian Current Research on Fluid Inclusions (ACROFI). Zhaolin Li and S. Smirnov is convening the Session G-15.11 Inclusions in Minerals of the 32<sup>nd</sup> IGC in Florence, Italy in August 2004. A short course on melt inclusions is also in preparing.

In addition, each term of the WGIM actively worked on exchange with other international geological professional organizations and domestic organizations of the members' countries, inviting specialists to give presentations and exchange information through internet.

Chairman, Li Zhaolin			

### (10) WORKING GROUP ON MINERAL EQUILIBRIA (WGME)

**OFFICERS** -Chairman: L.L. PERCHUK

Vice-Chairman: M. AKAOGI Secretary: Oleg SAFONOV

Corresponding member in the Council: Ian Parsons (Attached document 23/12/03)

### **Activity report of the IMA Working Group on Mineral Equilibria (WGME)**

- Special issue of Journal of Petrology, v. 45, 2004, based on the results of session 26 1. "Mineral equilibria and thermodynamic modeling of crustal and mantle rocks" and session 24 "Geothermobarometry and geospeedometry" at the 18th IMA Meeting (Edinburgh, September 2002).
- The Special Meeting dedicated to the Prof. Leonid L. Perchuk's 70th anniversary at the 2. Institute of Experimental Mineralogy, Chernogolovka, Russia.
  - 3. Organization of the Symposium G-15.02 "Mineral thermodynamics, mineral equilibria, and P-T paths" (conveners: Prof. L.L. Perchuk and Prof. D.D. van Reenen), which is accepted for the 32th International Geological Congress, August 20-28, 2004, Florence, Italy.
  - 4. Dr. Oleg G. Safonov

WGME Executive Secretary (e-mail oleg@iem.ac.ru)

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### (11) WORKING GROUP ON ORGANIC MINERALS (WGOM)

**OFFICERS** -Norbert VAVRA Chairman:

Vice-Chairman:

W. WINKLER Secretary:

Corresponding member in the Council: Nickolai Yushkin 2/4/03

1.History of WGOM:
1985: First (rather informal) meeting of members at Idar-Oberstein (Germany) Officers (as established at Stanford): Chairman: S.S.Savkevich (Russia), Secretary: N. Vávra (Austria)

1986: First circular mailed to members

1988: (Warszawa, Poland) "The Sixth Meeting on Amber and Amber-bearing Sediments" (Internat. Scientific meeting sponsored by WGOM)

"Rules for the nomenclature and description of fossil resins ("amber")" – a

preliminary paper discussed at Warszawa.

1988: "List of valid and rejected names for fossil resins" – to establish such a list has been declared as one of the principal goals of the WG.

Members of WG participating in various meetings (examples only!)

1994: 16<sup>th</sup> GM of IMA at Pisa (Italy)

1996: "Neue Erkenntnisse zum Bernstein, Internationales Symposium im Deutschen Bergbau-Museum" – Bochum (Germany)

1997: "Baltic amber and other Fossil Resins" (Gdansk, Poland)

2002: 18<sup>th</sup> GM of IMA at Edinburgh (Great Britain):

Session 21: "Biomineralisation and organic minerals"

Session 21: "Biomineralisation and organic minerals"

2003: Seminar of WGOM: "Amber in Gdansk. Mineralogy, Archaeology and Craftsmanship" (Gdansk, Poland)

1999: "Circulars" of the WG replaced by a "Newsletter" offering data about recent publications, exhibitions, meetings, general informations, etc.

2. Aim – objective – mission:

Extensive revisions of organic minerals, starting with fossil resins ("amber"); realizing the fact that many of those substances having been described are far away from representing well-defined mineral species, the goal to establish a list of "Valid and rejected names of organic minerals" can only be achieved on the basis of a broad cooperation of specialists. As a consequence of this general objective different cooperations of single members of WG resulted, specializing on detailed revisions.

"Rules for the nomenclature and description of fossil resins ("amber")" – a paper under

this title (unpublished) has been prepared and used by members of WGOM.

Future activities of WG will be extended to include also questions of origin and diagenesis of organic minerals including some aspects of biomineralization and ecological chemistry.

3. Report:

A detailed report for the last year follows resp. is enclosed as second file attachment; former reports for most of the years are available on request.

In various ways members of the WG are involved in teaching, organization of exhibitions, popular lectures on topics of organic minerals, etc.; having no detailed information concerning the various members of the WGI can only give the following examples:

4.1.: Teaching within specialized (university) lectures concerning topics like "Amber and amber-fossils", "Organic geochemistry"

4.2.: Popular lectures mainly on the topic "Amber" in different museums, in connection with exhibitions, etc.

4.3.: Organization of exhibitions on amber (e.g. Prof. Kosmowska-Ceranowicz, Warszawa)

5. Scientific activity:

5.1.: Publications concerning various topics of organic mineralogy (references and details in our former reports)

5.2.: Oral presentations or presentation of posters at various scientific conferences (see also above "History").

6. Way of functioning of the WG:

6.1.: Scientific conferences resp. symposia (for examples see above)

6.2.: Technical sessions – "brainstorming" in respect to the various goals of WG, detailed planning of cooperations, etc.

6.3.: Newsletters being mailed in irregular intervals

6.4.: "Practical cooperation" realizing that various (expensive) laboratory equipment is available for single members of the WG only; exchange of samples and a maximum of efficiency can be achieved in this way.

### (Annual report)

#### General Remarks:

For a number of more detailed informations, please utilize the data and facts given in the second file attachment enclosed.

Chairman: Prof. Dr. Norbert Vávra, Vienna, Austria Secretary: Dr. Waltraud Winkler, Salzburg, Austria. Total number of members: 21

#### 1. Scientific publications of members of WG, examples from 2002/03:

KEDVES, M. (2003): LM and TEM investigations on the Upper Cretaceous Ajkaite
from Hungary. – Amber in Gdansk. Mineralogy, Archaeology and Craftsmanship. Seminar of the Working Group on
Organic Minerals IMA, p. 33 - 34.
KOSMOWSKA-CERANOWICZ,B. (2003): Alluvial (Quaternary) Amber Deposits
in the Gdansk Region. – Amber in Gdansk. Mineralogy, Archaeology and Craftsmanship. Seminar of the Working
Group on Organic Minerals IMA, p. 23 - 27.
KOSMOWSKA-CERANOWICZ,B. (2003): Infrared Spectroscopy of Chinese
Carvings from the old Königsberg Collection (poster). – Amber in Gdansk. Mineralogy, Archaeology and
Craftsmanship. Seminar of the Working Group on Organic Minerals IMA, p. 37 - 40.
KRUMBIEGEL,G.(2002): Bernstein in der sakralen Kunst. – Kur-Post BadFüssing,
Ian /Feb 2002, p. 14 - 15

KRUMBIEGEL, G. (2002): Bernstein in der sakraien Kunst. – Kun-Fost Bauffussing,
Jan./Feb.2002, p. 14 – 15.

KRUMBIEGEL G., 2002: Duksyt, zywica kopalna? (=Duxite, a fossil resin?).

Przeglad Geologiczny., 50(3): 237 – 239.

VAVRA,N.(2002): Studies of biomarkers and their diagenetic pathways as an
approach towards a "natural" classification of organic minerals. - 18th General Meeting of the International
Mineralogical Association. Programme with Abstracts, Edinburgh.

VAVRA N. (2002): Fossil racin ("amber") from the Paleocene of Renardodden (E.

VAVRA,N.(2002): Fossil resin ("amber") from the Paleocene of Renardodden (E
Cape Lyell, West Spitsbergen, Svalbard). - Mitt. Geol.-Paläont. Inst. Univ.Hamburg, 86: 263 - 277, 7 Fig., 2 Tab.

VAVRA,N.(2003): Some amber-like organic minerals – a critical review of their
chemistry and mineralogy. – Amber in Gdansk. Mineralogy, Archaeology and Craftsmanship. Seminar of the Working
Group on Organic Minerals IMA, p. 30-31.

VAVRA,N. (2003): Bernstein aus Österreich. – Mitt. Österr. Miner. Ges. 148: 306 –

307.

VAVRA, N. (in print): Some "amber-like" organic minerals – a critical review of their chemistry and mineralogy. – Prace Muzeum Ziemi (Warszawa).

WINKLER, W. (2002): Bernsteinimitationen. – Der Sachverständige, 29: 232 – 233.

WINKLER, W. & MUSSO, M. (2002): FT-Raman spectroscopy on Siegburgite.

Proceedings of the Eighteenth International Conference on Raman Spectroscopy (eds. J.MINK, G.JALSOVSZKY, G. KERESZŤURY), Aug. 25-30, 2002 Budapest/Hungary, Wiley & Sons, Chichester, 945-946.

WINKLER, W., WUSSO, M. & KIRCHNER, E.Ch. (2003): Fourier transform
Raman spectroscopic data on the fossil resin siegburgite. – J. Raman Spectrosc.; 34: 157 – 162.

WINKLER, W. (2003): FT-Raman spectroscopy on fossil resins and possible imitation materials. – Amber in Gdansk. Mineralogy, Archaeology and Craftsmanship. Seminar of the Working Group on Organic Minerals IMA, p. 23 - 27.

WINKLER, W. (in print): Advantages of FT-Raman spectroscopy in amber research. Prace Museum Ziemi (Warszawa).

2. <u>International scientific meetings:</u>
(a)18<sup>th</sup> General Meeting of the IMA (Edinburgh, 1 – 6 September 2002)

Session 17: Biomineralization and organic minerals – 3 Posters and 2 oral presentations by members of the WGOM

(b) "Amber in Gdansk. Mineralogy, Archaeology and Craftsmanship" Seminar of the WGOM (together with "AMBERMART 2003-Gdansk"). – Gdansk, 22. – 24. Sept. 2003. (at Gdansk also a "technical session" has been held)

#### 3. Circulars distributed

"Newsletter 4/2002 - 03": 18 pp., has been mailed.

4. Activities planned

- (a) Bibliography on chemistry, mineralogy and occurrence of amber will be established by members (excluding literature on inclusions)
- (b) Cooperation to study burmite, Rumaenite and fossil resins from Sacchalin

(c) Cooperation to study the glessite, material from Australia, Bitterfeld, etc.
(d) "List of valid and rejectes names" – until end of 2003 a preliminary list including only fossil resins will be summarized and also published.

#### 5. Other business, comments, suggestions

None (?)

#### 6. Scientific aims

(a) Revisions of organic minerals, especially fossil resins ("amber")
(b) "List of valid and rejected names" – should in future include all organic minerals
(c) "Rules for the nomenclature and description of fossil resins ("amber")"

A new version of these "rules" has to be prepared.

### 7. Homepage of WGOM

A homepage of our WG will be prepared for 2004.

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### (12) WORKING GROUP ON ASTROMINERALOGY (WGA)

Chairman: F. Rietmeijer

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(Attached document 31/3/03)

Albuquerque, March 31, 2003

Re: Officers WG on Astromineralogy

Thank you for your information and I apologize for my late response but my son had "Spring break" which means we have to go explore the country. The week before I attended the Lunar and Planetary Science Conference in Houston where we had a meeting of the WG on Astromineralogy attended by myself, Mike Zolensky, Uwe Reimold and Monica Gradie where I presented the following summary.

IMA representatives on WG on Cosmic Mineralogy and the WG on Astromineralogy (as of March 17, 2003)

	WG Cosmic Mineralogy	WG Astromineralogy		
COUNTRY	Representative	Status		
AUSTRIA CHINA	Gero Kurat (withdrawn) Xie Xiande (withdrawn)	Proposed Franz Brandstaetter Proposed Chen Ming		
CZECH REPUBLIC	NO RESPONSE			
FINLAND	Kari Kinnunen	Withdrawn voluntarily		
FRANCE GERMANY	Bertrand Devouard Herbert Palme NO RESPONSE	Unclear 		
HUNGARY ITALY JAPAN	NO RESPONSE NO RESPONSE NO RESPONSE	 		
NETHERLANDS		Rens Waters (new)		
ROMANIA RUSSIA	NO RESPONSE NO RESPONSE			
SOUTH AFRICA	Uwe Reimold	Recently voted by the SA National IMA Committee as the representative on the new WG		
UNITED KINGDOM		Monica Gradie		
USA USA		Mike Zolensky (secretary) Frans Rietmeijer (Chair)		

I would like you to know the following:

<sup>(1)</sup> As I had indicated in my 2002 Annual Report I would contact all memberes of the WG on Cosmic Mineralogy to inform then that the was a new WG on Astromineralogy with a different Scientific goal and emphasis than the now defunct WG on Cosmic Mineralogy. When I had no

- information available to contact on the National Representative on the WG on Cosmic Mineralogy I contacted the National IMA representative. The results are shown in the Table.
- (2) In summary, (a) I am quite happy to accept Dr. Kurat's recommendation; (b) I am much less enthused by the suggested Chinese candidate whose excellent scientific credentials do not connect to the goals of the WG on Astromineralogy. Understanding the political aspects I would appreciate advice how to proceed requesting another Chinese representative on the new WG.
- (3) I submit that the "NO RESPONSES" will no longer be contacted by me for official business of the WG on Astromineralogy
- (4) Bertrand Devouard provided a lukewarm response to my letter, which resulted in a very nice email exchange. I have a feeling he wouldn't mind "stepping down" from the WG on Astromineralogy to be replaced by Guy Libourel whom you know and who has agreed to be active. Soon I will contact Bertrand and submit this proposal.

However, your e-mail has left me extremely confused. Do I understand correctly that although being DEFUNCT the WG on Cosmic Mineralogy still exists with its original slate of officers? This issue has plagued our communications repeatedly and I would really like to have a clear "YES" or "NO" answer to this question. If the answer to this question is affirmative the slate of Officers of the NEW WG on Astromineralogy currently consists of

- (1) Frans Rietmeijer (Chair)
- (2) Rens Waters
- (3) Franz Brandstaetter
- (4) Uwe Reimold
- (5) Chen Ming (see above)
- (6) Bertrand Devouard (see above)

In this case too, the WG on Astromineralogy would be without a Secretary. By the way is Mike Zolensky aware of this situation?

I hope this updates the information you requested but please, I would appreciate an unambiguous answer to my question.

Sincerely, Frans Rietmeijer

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Proposal for a contributioon to Newsletter (1/10/03)

SUBJECT: Contribution IMA Newsletter 2003 from WG Astromineralogy

The first anniversary of the new WG Astromineralogy is coming up soon. This WG is intended to bring together interdisciplinary research of extraterrestrial materials that would complement traditional research of collected meteorites and that is responsive to new developments in laboratory simulations and astronomical and meteor observations. As examples, I list laboratory analyses of collected interplanetary dust particles and laboratory studies of circumstellar and interstellar dust analogs. Its small group of officers is exploring the ways to best effectuate and promote the interdisciplinary nature of the WG.

The WG will make its first official appearance with a session at the 32<sup>nd</sup> IGC (abstract deadline January 10, 2004), followed by "METEOROIDS 2004" (University of Western Ontario, London, Ontario, CANADA, 16-20 August 2004; for information please email <a href="mateoroids2004@uwo.ca">meteoroids2004@uwo.ca</a>). Recently Dr. Luigi Folco (Italy) presented a seminar to students of Polar Sciences discussing micrometeorites and interplanetary dust particles embedded in land-ice masses along with volcanic dust that in Antarctica can be concentrated in continuous layers that, among others, become tracers of ice movement. Another way I

would like to promote the goals of the WG would be review papers across interdisciplinary boundaries. I have already learned that this activity is a bit more involved than I would have thought. I am open to any suggestions and support.

I think that a WG Astromineralogy would be a viable IMA activity and all of us are willing to give it our best shot. Despite the fact that for several decades interdisciplinary research has been promoted as a way to future successes in Science, the reality of it is that traditions are hard to break. Specific to this WG I would like to be responsive to space missions and educational efforts from the various Space Agencies around the world. At this time these agencies have a strong interest in comets, asteroids, and the origins of solar systems. I believe Mineralogists have a role to play in these areas but we may have to be challenged in our ways we conduct our research.

Albuquerque, October 1, 2003

Frans J.M. Rietmeijer, Chair WG Astromineralogy

e-mail: fransjmr@unm.edu

# (13) WORKING GROUP ON ENVIRONMENTAL MINERALOGY (WGEM)

**Chairman: David Vaughan** 

(Attached document 2/4/03)

## OUTLINE PROPOSAL FOR AN IMA WORKING GROUP ON ENVIRONMENTAL MINERALOGY

**Background** 

This proposal arises out of a request from IMA President Ian Parsons to Professor David Vaughan that he chair a new Working group on Environmental Mineralogy for the IMA. As Council Members will appreciate, although much of what is now becoming identified with the field of environmental mineralogy has been taken by mineralogists for many years, its emergence as a distinct sub-discipline has been relatively recent. However, it is an area that is growing rapidly in its perceived importance, and most particularly, it is an interdisciplinary area that has the potential attract interest and support from a wider community than is normal for our science. Many more articles are now being published in the journals of our member societies that fall within this field; some journals (eg Mineralogical magazine) are planning regular issues on this theme. Various societies have held short courses and published review volumes in the area, notably MSA and EMU (the "Environmental Mineralogy" volume published by EMU and coedited by myself has been well received). It is very clear that the IMA should be involved in promoting environmental mineralogy, and the obvious way to do so is to set up a working group.

**Proposal** 

If Council agrees, I would set up an Environmental Mineralogy Working Group and, in consultation with the president (and possibly with someone as Vice-Chairman). I have a number of people in mind (but having not yet approached any of them, feel it is inappropriate to give names as yet). Officers would be in addition to national representatives. If the IMA constitution permits (and I believe it does), it would be best for us to select the initial officers and representatives of the more active countries (seeking advice where appropriate); if smaller countries wished to propose representatives, they would be welcome to do so.

Initially at least, the remit of this new group should be quite broad and include all aspects of the those natural and anthropogenic systems where the mineral world of the geosphere comes into contact with the hydrosphere, atmosphere, and biosphere. It should also include the area sometimes referred to as "mineralogy and health" where mineralogists interact with medical researchers and practitioners. An announcement of the group would include fuller definition of its remit.

Activities of the working group would encompass those associated with other such IMA bodies (convening sessions at the general Meeting and at other international conferences, organising short courses and more specialist meetings, promoting and publicising the field etc). It should also be more active than many other groups in promoting/organising interdisciplinary meetings and workshops (with biologists, atmospheric scientists, medical scientists etc).

**Concluding Statement** 

Mineralogy, by its very nature, should be at the hearth of the so-called environmental sciences, but is all too often left on the sidelines, with other disciplines setting the agenda. We need to reclaim our position as leaders of those who have the training and skills to provide a more rigorous, quantitative understanding of "the environment". Setting up an Environmental Mineralogy group within IMA is one small, but significant, step in this direction. D.J. Vaughan, 2/4/03

### (14) COMMITTEE ON INTERNET AND COMPUTER **APPLICATION (CICA)**

Members of the committee: Bertrand DEVOUARD, Thomas KERESTEDJIAN, Tony LAW, Roland MERKLE, Kevin MURPHY.

(Attached document (10/10/03)

The IMA Working Group on Databases and computer applications (WGDB) was disbanded at the 18th IMA General Meeting in Edingurgh, september 2002. As stated in a letter that was given to the IMA council at the end of the second business meeting in Edinburgh, former members of the IMA Working Group on Databases and computer applications strongly felt that the IMA should maintain some kind of structure concerned with computer and internet applications.

The creation of a Committee for Internet and Computer Applications (CICA) within the IMA was proposed to, and accepted by, the IMA council. The main responsibility of this group is to develop and maintain the web site of the IMA. This site aims (as a minimum) to offering active links to the individual web sites of IMA commissions and working groups, as well as links to the web sites of National Societies. Regular updates of the web site, as well as news or links to ressources usefull to mineralogists (databases...), should be available as well.

A new version of the IMA web-site has been developped during the last year. It is currently accessible at: http://wwwobs.univ-bpclermont.fr/ima/

An additional task of the IMA-CICA committee will be to start developing an interchange file format for the various mineralogical databases. Such an ambitious project of setting a worldwide standard could only be conducted within the scope of the IMA.

Current members of the IMA Committee for Internet and Computer Applications are:

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**END**