



International Mineralogical Association
Commission on Applied Mineralogy
www.ima-mineralogy.org

Minutes of Business Meeting
1st September 2014; 16.30 – 17.30
Sandton Convention Centre, Johannesburg, South Africa

Present: Emin ÇİFTÇİ (Turkey), Georges CALAS (France), Laurence GALAVOY (France), Olga KOTOVA (Russia), Akira YOSHIASA (Japan), Kari KOJONEN (Finland), Jan ELSSEN (Belgium), Desh CHETTY (South Africa), Dee BRADSHAW (Australia), Maarten BROEKMANS (Vice Chairman), Megan BECKER (Secretary), Dogan PAKTUNÇ (Past President), Eric PIRARD (President)

Apologies for absence: Patrick DE GRUYSE (Belgium), K. SUGIYAMA (Japan), U. HALENIUS (Sweden)

Absent without notice: H.-J. KLEEBE (Germany)

Minutes: Megan BECKER

- 1. Welcome:** Opening of the meeting at 16.30 by PIRARD. The meeting agenda was accepted without changes.
- 2. Minutes of the last CAM 2011:** BECKER gave a brief read through of the minutes from the 2011 meeting in Trondheim (ICAM 2011 conference).
- 3. Update on Activities:** BECKER gave a brief report back on the activities since the last formal business meeting in 2011 (see attached Appendix).
- 4. Perspective for future ICAM:** BROEKMANS reported that the ICAM meeting will be in Istanbul in Turkey in 2015. Emin ÇİFTÇİ is the official conference contact person. Following that, the next ICAM will be held in Italy in 2017. Saverio FIORE is the official conference contact person. The ICAM-Council is now presided by Faqin DONG from South-West University of Science and Technology – SWUST in MianYang/CN.
- 5. Future of CAM**
Members of CAM: A discussion was held on the interest of the various National Representatives, not all of whom have a direct interest in Applied Mineralogy.

PIRARD suggested revisiting the presence of CAM possibly with a newsletter to interest prospective non-official representatives (also known as associate members).

Meetings of CAM: Next CAM meeting to be held at ICAM in Turkey in 2015, then ICAM in Italy in 2017.

A discussion was held on also trying to link into other conferences by organizing discrete sessions. BROEKMANS suggested the 15th International Conference on Alkali Aggregate Reactions in Concrete – ICAAR in Sao Paulo/BR 2016 as a possibility. Another candidate would be the 15th Euroseminar on Microscopy Applied to Building Materials – EMABM in Delft/NL in June 2015, regarding both building materials as well as cultural and heritage materials (DE GRUYSE).

Mission: As per the official website, the aims of IMA-CAM are to coordinate or arrange conferences, symposia, seminars, or meetings devoted to applied mineralogy, to serve as a liaison body to other organizations active in the field, and to encourage interaction between applied mineralogists, particularly focusing on the areas of: process mineralogy, applied mineralogy of ceramics, cements and glasses, development and application of advanced materials, environmental mineralogy and health, analytical techniques, and mineral surfaces and nanoparticles.

Means: Some discussion was held on the lack of finances within CAM to support and sustain CAM activities. Though some organizations may be unlikely to allow CAM sponsorship without an appropriate fee, there was general consensus that even other events may see the CAM logo as an affirmation of the quality of the meeting. PAKTUNC mentioned there is money through IMA, but it is as of yet unclear where this actually goes.

The CAM 2011 meeting raised the possibility of running a Round Robin on automated mineralogy. Since then, PAKTUNC has put this into effect through CANMET with Rolando LASTRA. Two hundred samples from a copper concentrate have been prepared, and mineral modal content is to be determined using QEMSCAN and/or MLA instruments. Use of supplementary methods (eg. whole-rock chemistry) is allowed, as long as they are mentioned in the report. To date, there has been a 10% response rate to the Round Robin. Results will tentatively be presented at ICAM 2015. Interested parties are encouraged to contact PAKTUNC directly.

General consensus within the meeting is that applied mineralogy is an active and vivid community, though communication between CAM and the IMA Council has been scarce in the recent past. The meeting agrees that effective communication with the IMA Council at regular intervals is essential.

Elections: The present Chairman (PIRARD) steps down, and the Vice Chairman (BROEKMANS) becomes the new Chairman, as per the constitution. Emin ÇİFTÇİ

was voted in as the new Vice Chairman to maintain continuity with ICAM. Megan BECKER stepped down as Secretary, Jan ELSSEN was voted in as new Secretary.

Current executive Committee:

Chair: Eric PIRARD (University of Liège/BE)

Vice Chair: Maarten BROEKMANS (Geological Survey of Norway/Trondheim)

Immediate Past President: Dogan PAKTUNC (CANMET, Ottawa/CA)

Secretary: Megan BECKER (University of Cape Town/RSA)

New executive Committee:

Chair: Maarten BROEKMANS (Geological Survey of Norway, Trondheim)

Vice Chair: Emin ÇİFTÇİ (Istanbul Technical University/TR)

Immediate Past President: Eric PIRARD (University of Liège/BE)

Secretary: Jan ELSSEN (KU Leuven/BE)

CAM Sub-commissions (unchanged)

Mineralogy Applied to Building Materials: Maarten BROEKMANS (Geological Survey of Norway, Trondheim)

Cultural Heritage and Archaeological Materials: Patrick DE GRUYSE (KU Leuven, Belgium)

Advanced Ceramics and Glasses: Hans-Joachim KLEEBE (Technische Universität Darmstadt, Germany)

Geometallurgy: Dee BRADSHAW (University of Queensland, Australia)

Leaving officials are applauded and thanked for their positive contributions to CAM.

6. **Date for the next meeting:** 12th ICAM, Istanbul, Turkey in 2015 (date, hour and venue to be confirmed).
7. **Closing:** PIRARD closes the meeting at 17.40.

APPENDIX:

Summary of CAM activities from last business meeting (2011) to present

- 2011 – BROEKMANS:** proceedings of 10th ICAM Trondheim/NO (cover appended) integrally published with Springer Verlag in April 2012. Total downloads per July 2014 exceeding 30 000 cf. publisher's information.
ICAM-Council Presidency transferred at open plenary meeting from Ying GU (since ICAM 2008 in Brisbane/AU) to Maarten BROEKMANS.
- 2012 – BROEKMANS:** publication of **Broekmans MATM, Pöllmann H (editors, 2012):** Applied mineralogy of cement and concrete. *Reviews in Mineralogy & Geochemistry (74)*: pp364 (cover appended). Contents presented here at IMA 2014 (SAT30/SUN31) as workshop of same title. No data on number of printed copies and/or downloads, but book appears to be read at many institutions around the globe.
- 2013 – BROEKMANS:** keynote “Building and construction minerals: towards a concrete future” at 11th ICAM at MianYang/CN, with ~250 delegates. At open plenary meeting, ICAM 2015 was unanimously elected to be hosted by Turkey (Emin ÇİFTÇİ *c.s.*), likewise ICAM 2017 in Italy (Saverio FIORE *c.s.*).
ICAM-Council presidency transferred at open plenary meeting from Maarten BROEKMANS (since ICAM 2011 in Trondheim/NO) to Faqin DONG from SouthWest University of Sci & Tech – SWUST in MianYang/CN;
- 2014 – BROEKMANS:** finalizing revision of RILEM (www.rilem.net) guideline AAR-1.1 for petrographic assessment of concrete aggregate, to prevent deleterious Alkali-Aggregate Reaction – AAR in future structures. RILEM guidelines are normally adopted by eg. ASTM, CAS, JS, EN, for official standards. Together with about eight additional RILEM AAR guidelines be published soon in a dedicated Special Issue of Materials & Structures (Springer). A petrographic atlas prepared by FERNANDES *et alii* (AAR-1.2, complementary to method protocol description) will be published in a separate volume.
- 2014 – PIRARD:** Quantitative Mineralogy workshop: 23 May at University of Liège attended by Hosted by the GeMMe (Génie Minéral, Matériaux & Environnement) Department. This event attracted more than sixty participants from all corners of Europe and beyond (universities of Nancy/FR, Liège, Aachen/DE, Luxembourg/LU, Amsterdam/NL).
- 2014 – PAKTUNC:** Follow-up from 2011 discussions, PAKTUNC and LASTRA (CANMET, Ottawa/CA) have prepared a sample for Round-Robin testing. The sample (sulfide flotation rougher concentrate) has been prepared in two hundred aliquots and shipped around the world. Measurement results are required to be submitted towards the end of the year, and will tentatively be presented at ICAM 2015 in Turkey.

2014 – BECKER ongoing: Process Mineralogy Monograph to be published by the Julius Kruttschnitt Mineral Research Centre – JKMRC, Brisbane/QLD. Initial call for chapters went out in late 2011. Papers have been edited and are close to ready for peer review. 33 different chapters from authors around the globe.

2014 – CAM committee: members have chaired a number of sessions at IMA 2014, notably:

- BRADSHAW & BECKER – EG7 “Process mineralogy and geometallurgy”,
- BECKER – organized and chaired “OT1 “Education and skills development”,
- PIRARD – co-organized MA4 “Remote mapping of minerals”,
- PAKTUNC – co-organized EM3 “Environmental mineralogy and geochemistry of mine waste”,
- KLEEBE – EG2 “General session: Applied mineralogy”,
- BROEKMANS – co-organized 2-day pre-conference workshop “Applied mineralogy of cement and concrete”,
- BRADSHAW – plenary talk “The valuable role of process mineralogy in the future of the mining industry”

2015 – BROEKMANS: new RILEM technical committee TC-AAA to have start-up meeting 02-03 October 2014 in Oslo/NO, and will (among others) focus on provenance determination of aggregate materials in hardened concrete, identification and characterization of alkali-reactive silica species, contribution of alkalis released from rock-forming minerals in aggregate, etc.