1. **Title of Commission:**
Commission on Applied Mineralogy (CAM)

**Current Officers:**
Chairman: Dogan Paktunc
Vice-Chairman: Eric Pirard
Secretary: (vacant)
Past-Chair: Richard Hagni
Sub-commission Chair (Building Materials): Maarten Broekmans
Sub-commission Chair (Cultural Heritage and Archaeological Materials): Isabella Memmi
Sub-commission Chair (Advanced Ceramics and Glasses): Hans-Joachim Kleebe

**Reporter:**
Dogan Paktunc

2. **Objectives:**
Vision: To provide leadership in knowledge sharing for the broad range of applied mineralogy fields and to offer means for professional development for applied mineralogists. Mission: To build and sustain a strong commission that provides value to its members in alignment with the IMA’s vision.

CAM’s interest areas cover a full spectrum of applied mineralogy activities in extractive metallurgy, mineral exploration and mine development, building materials, ceramics, glasses, preservation of cultural heritage and archaeological materials, disposal of mine and industrial wastes, and development of advanced characterization techniques.

3. **Business Meeting held during 2008:**
A business meeting was held on Sep 10, 2008 (Wednesday) from 5:00 to 6:00 pm at the Sofitel Hotel, Brisbane (Australia) during ICAM 2008 meeting. In attendance were Ying Gu (AU), Deshenthree Chetty (ZA), Ralph Holmes (AU), David Steele (AU), Reiner Neumann (BR), Henrique Kahn (BR), Maarten Broekmans (NO), Kari Kojonen (FI), Jan Elsen (BE), Alan Butcher (AU), Richard Hagni (US), Eric Pirard (BE), Dogan Paktunc (CA).
4. Interface with other International organizations:

Isabella Memmi involved in the organization of the 37th International Symposium on Archaeometry (ISA2008) in Siena, May 12-16, 2008. Symposium was a great success with participants over 500. She is presently the editor of the Symposium Proceedings which will be published by Springer as an e-book.

Isabella Memmi is member of the Organizing Committee of the 16th Meeting of Association of European Geological Societies: Geology for society: education and cultural heritage. The meeting will be held in Cluj-Napoca, Romania 9 - 13 July 2009. She is also the convenor of the session on geoarchaeology and archaeometry.

Maarten Broekmans has been editor in chief of the 13th Intl Conference on Alkali Aggregate Reaction Concrete, 16-20 June 2008 in Trondheim. A special issue in Cement & Concrete research is scheduled for publication in April 2009.

ICAM:

CAM as a co-sponsor of the ICAM 2008 meeting has continued to closely work with ICAM executive on the planning of the 9th International Congress on Applied Mineralogy (ICAM 2008) in Brisbane, Australia. This included the role Dogan Paktunc played as the acting vice president of ICAM2008 for the appointment of Ying Gu as the interim vice president of ICAM2008.

ICAM meetings will be held once every three years instead of four.

In order to improve communications between ICAM and CAM, Jan Elsen has been elected CAM Coordinator of ICAM.

Next ICAM meeting will be held in 2011 in Trondheim, Norway under the leadership of Maarten Broekmans who is CAM's sub-commission chair on building materials.

5. Chief accomplishments in 2008:

IMA-CAM has participated in the organizational activities of ICAM2008 including appointment of the new chair, decisions for the frequency of ICAM meetings and the place of next ICAM meeting, organization of three short courses and several sessions for ICAM 2008 meeting in Brisbane, Australia.

In collaboration with WGEM and COM, a symposium entitled "Metals in the Earth: from vital resource to environmental hazard" was organized during IGC 2008 in Oslo.

In order to bring improved functionality to the commission, a draft "terms of reference" was prepared for discussion. The document outlines the purpose, management structure, and roles and responsibilities of the executive committee members of CAM.

Henrique Khan who has been the commission secretary for many years has decided to step down. CAM is currently seeking nominations for the secretary position.
Short Courses (organized and sponsored by CAM):
Eric Pirard organized a Short Course in Lima during March 24-28 2008 with financial support from Commissariat Général aux Relations Internationales de la Communauté Française de Belgique (CGRI), Pontificia Universidad Catolica del Peru (PUCP) and Servicio Geologico y Minero del Peru (InGeMMet). The course, taught in Spanish, attracted about 20 professionals active in the mining sector and demonstrated the major interest existing for advanced characterization tools in mineral exploration and processing.

Eric Pirard organized a short course entitled "Introduction to mineralogical image analysis: from 2D to 3D" during ICAM2008.

Maarten Broekmans organized a workshop on sample preparation for XRD at the 11th Euroseminar on Microscopy Applied to Building Materials, in Porto 5-9 June 2007 as well as on forensic assessment of concrete, and a seminar on concrete petrography for the professional engineers board of Singapore.

The Quantitative Mineralogy workshop organized by Dogan Paktunc during ICAM2008 brought together the experts and professionals in mineralogy, mineral processing and metallurgy for a review of the applications, current state, progress and challenges in the fast emerging field of quantitative mineralogy. The workshop culminated with an action plan addressing the key gaps and future needs in this field and establishment of a network of expertise in quantitative mineralogy.

6. Chief Problem Encountered in 2008:
The list of National Representatives requires an update. Because the national representatives are designated by the member societies of IMA, the commission has no control over the list which limits CAM's outreach activities in promoting Applied Mineralogy in some of the member countries.

Unavailability of a functional website has continued to create difficulties for communications and membership activities.

7. Workplan for 2009 and beyond:
IMA-CAM has proposed to organize 6 scientific sessions during the 20th General Meeting of IMA (IMA2010) in Budapest: Process mineralogy; Cultural heritage and archaeological materials; Building materials; Environmental mineralogy and geochemistry of mine and metallurgical wastes (co-organized with IMA-WGEM); Ceramics and advanced materials; Biomaterials/minerals.

CAM plans to lead and coordinate the development of reference and standard materials for quantitative mineralogy.

8. National Representatives:
Austria - Dr. V. Kahlenberg
Belgium - Prof. Jan Elsen
Bulgaria - Dr. Ivan Dontchev
Canada - Dr. William Petruk
Denmark - Dr. Tonci Balic-Zunic
Egypt - Professor Mohamed A. Mandour
Finland - Dr. Kari Kojonen
France - Dr. Georges Calas
Germany - Prof. Dr. Robert B. Heimann
India - Dr. J. N. Bhadra Chaudhri
Italy - Maria Franca Brigatti
Japan – Prof. Tadato Mizota
Netherlands - Dr. T.G. Nijland
New Zealand - Dr. J. L. Mauk
Romania - Dr. Gheorghe Damian
Russia - Professor V. M. Bzoitko
South Africa - Ms D. Chetty
Spain - Professor E. Galan
Sweden - Prof. Ulf Halenius
Switzerland - Prof. Bernard Grobéty
United Kingdom - Dr. John F. W. Bowles
United States - H. Catherine W. Skinner