## 2007 Annual Report

#### 1. Title of Commission:

Commission on Applied Mineralogy (CAM)

<u>Current Officers:</u> Chairman: Dogan Paktunc Vice-Chairman: Eric Pirard Secretary: Henrique Kahn 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

<u>Reporter:</u> 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 2007:

A business meeting was held on August 17, 2007 in Liege, Belgium. Next business meeting is scheduled for Sep 2008 during ICAM 2008 meeting in Brisbane, Australia.

#### 4. Interface with other International organizations:

CAM as a co-sponsor of the ICAM 2008 meeting has continued to closely work with ICAM executive on the planning of the 9<sup>th</sup> International Congress on Applied Mineralogy (ICAM 2008) in Brisbane, Australia.

# 5. Chief accomplishments in 2007:

As part of IMA-CAM's strategic goals, a new sub-commission has been established. The new sub-commission "Advanced Ceramics and Glasses (CAM-ACG)" is headed by Prof.Dr. Hans-Joachim Kleebe of Institut für Angewandte Geowissenschaften Fachgebiet Geomaterialwissenschaft, Technische Universität Darmstadt in Germany.

IMA-CAM has participated in organizational activities for ICAM 2008 meeting in Brisbane, Australia.

Maarten Broekmans has been involved in the Scientific Committee for the 13<sup>th</sup> International Conference on Alkali-Aggregate Reactions in Concrete (ICAAR, <u>www.icaar2008.org</u>). Further details are given in the Workplan for 2008.

### Short Courses:

Maarten Broekmans presented lectures on mineralogy and rock-forming processes at the Cockrell School of Engineering, University of Texas, USA and to a private civil engineering consultancy and local building and construction authorities in Singapore.

Dick Hagni taught his Applied Ore Microscopy course at Nigde University in Turkey during the week of October 21-26, 2007.

Maarten Broekmans has contributed to a workshop titled "Forensic examination of concrete", at the 11<sup>th</sup> Euroseminar on Microscopy Applied to Building Materials (EMABM), 05-09 June 2007, Porto/PT, organized by the University of Porto.

### 7. Workplan for 2008 and beyond:

CAM officers are involved in the organization of several sessions including a special session in memory of Don Hausen and shortcourse/workshops during ICAM 2008.

Eric Pirard is organizing a short course on image analysis during ICAM2008. The short course entitled "Mineralogical image analysis from 2D to 3D" will provide an overview of the digital image analysis techniques used in ore and geomaterials characterization with a special emphasis on microscopic techniques.

Dogan Paktunc is organizing a workshop on quantitative mineralogy during ICAM 2008 in Brisbane. The main goal of the workshop is to review the needs with the experts in the quantitative mineralogy field including standardization of the image analysis and other quantitative techniques, quality control, uncertainties in the measured parameters, sample size and reference materials.

Eric Pirard is organizing a short course on quantitative microscopy with applications to process mineralogy. The short course will be held in 2008 at Universidad Catolica del Peru in Lima, Peru.

Isabella Memmi is organizing the International Symposium on Archaeometry, which will be held in Siena, 12-16 May 2008.

Isabella Memmi is involved in the organization of a lectures program entitled "Materials and building patrimony: Stone, glass, ceramic and concrete. Durability and conservation" The lectures program is funded by the European Community and will be held in Paris in January 14-26, 2008. <u>www.univ-mlv.fr/master\_geoenv/erasmus.html</u>

Maarten Broekmans is editor-in-chief for the 13<sup>th</sup> International Conference on Alkali-Aggregate Reactions in Concrete (ICAAR, <u>www.icaar2008.org</u>), to be held in Trondheim, 16-20 June 2008. He is also responsible for updating the photo-atlas of potentially alkali-reactive rock types on behalf of RILEM TC-ACS (Technical Committee on Alkali-aggregate reactions in Concrete Structures). http://www.rilem.net/tcDetails.php?tc=ACS

Maarten Broekmans is organizing an MSA Short Course "Mineralogy applied to building materials" (pending approval by the MSA council). The short course will be held in conjunction with the 33<sup>rd</sup> IGC in Oslo, 06-14 August 2008. Prof.Dr. Isabella Memmi and Dr. J. Theo Kloprogge of QUT in Brisbane are co-convenors.

In collaboration with David Vaughan of WGEM and Kari Kojonen of COM, Dogan Paktunc is organizing a symposium entitled "Metals in the Earth: from vital resource to environmental hazard" during IGC 2008 in Oslo. This symposium aims to explore the links between the fundamental and applied aspects of research dealing with minerals and metals in mineral exploration, metals extraction and disposal of wastes.

#### 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