

**IMA
COMMISSION ON
MINERAL GROWTH AND INTERFACE PROCESSES
(CMGIP)
CMGIP 2006 Annual report to IUGS**

December 2006

New Officers

The following nominations were approved during the commission meeting of CMGIP during IMA, Kobe 2006.

:

- Katsuo Tsukamoto (Professor, Tohoku University, Japan) succeeds outgoing chairperson C. F. Woensdregt (Utrecht University, The Netherlands).
- Andreas Lutge (Associate Professor, Rice University, Texas) succeeds outgoing vice-chairperson
K. Tsukamoto
- Jeanne Paquette (Associate Professor, McGill University, Canada) replaces former secretary John Rakovan (Miami University/Ohio, USA).

SCOPE

The scope of the CMGIP commission is to bring together experts in crystal growth and geoscientists interested in the rich range of phenomena associated with mineral crystallization and dissolution processes in nature. Although there has been interaction between the "crystal growth community" and geoscientists in the past, there is still a strong demand to strengthen and employ the most modern tools for "in situ" observation of these process and advanced ideas if we are to advance our understanding of these processes. Three major categories may be classified:

(1) Interface phenomena on the molecular level, (2) mineral texture formation, (3) crystallization and dissolution mechanisms and (4) novel "in situ" techniques to visualize the process of nucleation and crystal growth.

Report on IMA. Kobe 2006

The three sessions sponsored by the CMGIP during the IMA meeting of July 24-28 in Kobe (Japan) attracted 68 contributions. Biomineralization, textures induced by rapid crystallization and interface processes involving nanominerals were mentioned as some of the new frontiers in mineral growth that are also of increasing interest in industry, materials and health sciences. The members present reaffirmed the need to maintain the commission and continue to broaden its representation among IMA member countries.

Our commission successfully sponsored the following scientific sessions from July 23rd to 28th, 2006 during the 19th General Meeting of the International Mineralogical Association (IMA):

1. Application of novel techniques for *in-situ* observation of crystal growth and nucleation. Conveners: Andreas Lutge (Rice Univ.) and Katsuo Tsukamoto (Tohoku Univ.).
2. Texture formation and crystal growth in geosciences. Conveners: Michihiko Nakamura (Tohoku Univ.), Tadao Nishiyama (Kumamoto Univ.) and Andrew Putnis (Univ. of Münster).
3. Nucleation and Aggregation of macro- to nano-materials. Conveners: Lukas Baumgartner (Univ. of Lausanne), Masamichi Ishikawa (Tokyo Inst. of Technology)

Business Meeting

Here is a summary of the business meetings of the Commission for Mineral Growth and Interface Processes, held on July 25 and 27 in Kobe, Japan, during the 19th General Meeting of the International Mineralogical Association.

Present: K. Tsukamoto, A. Lutge, J. Rakovan, I. Sunagawa, E. Scandale, J.M. Garcia Ruiz, A. Putnis, A. Baronnet, I. Bonev, J. Paquette, M. Posfai.

Chair: Katsuo Tsukamoto (Tohoku University, Japan).

Present: A. Lutge, J. Rakovan, I. Sunagawa, E. Scandale, J.M. Garcia Ruiz, A. Putnis, A. Baronnet, I. Bonev, J. Paquette, M. Posfai.

1. The three sessions sponsored by the CMGIP during the IMA meeting of July 24-28 in Kobe (Japan) attracted 68 contributions. Biomineralization, textures induced by rapid crystallization and interface processes involving nanominerals were mentioned as some of the new frontiers in mineral growth that are also of increasing interest in industry, materials and health sciences. The members present reaffirmed the need to maintain the commission and continue to broaden its representation among IMA member countries.

2. The commission also wishes to bring to your attention the following events:

1) The 15th International Conference on Crystal Growth (in conjunction with the 13th Conference on Vapor Growth and Epitaxy) will be held on August 12 - 17, 2007, Salt Lake City, Utah, USA. Abstract submission will open on January 1st, 2007. Preliminary details are available at: <http://www.crystalgrowth.org/conferences/iccg15/index.php>

2) An International Symposium on calcite growth and interface processes, organized by students and sponsored by Tohoku University, to be held before March 2007. Further details will follow.

3) The 2nd International Conference on Crystallogenesi and Mineralogy will be held at the Department of Crystallography and Department of Mineralogy of Saint-Petersbourg State University. October 1-5, 2007. Registration will begin on October 1st, 2006. Contact: KM2007@minsoc.ru for further information.

Plans were also discussed for some future events:

4) We wish to identify researchers interested in organizing a session related to mineral interface processes at the upcoming Goldschmidt conferences. The 2007 meeting will be held in Cologne, Germany, August 19-24, under the theme "Atoms to Planets". The scope of the program is given at <http://www.goldschmidt2007.org/symposia.php>

The 2008 Goldschmidt conference ("From Sea to Sky") will take place in Vancouver, Canada, July 13-18.

5) Eugenio Scandale (U. Bari, Italy) offered to lead the planning of an international summer school on "Crystal Growth and Interface Processes" in 2007 or 2008 in Bari, Italy. The project would involve the publication of course notes/chapters as a volume in the EMU Notes series or the MSA Reviews in Mineralogy.

6) Andrew Putnis (U. Muenster, Germany) will act as liaison with the IGC 2008 meeting (Oslo) and organize a session on crystal growth.

7) Plans for an eventual 2nd International Symposium on Interface Mineralogy (2009?) were also considered. Andreas Lutge (Rice U., USA) offered to look into the logistics of holding such an event in Houston, USA.

LIST OF COMMISSION MEMBERS

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Plans for Future

- 1) An International Symposium on crystal growth and interface processes, organized by students and sponsored by Tohoku University, to be held on 20-23 March 2007 in Sendai. Further details will follow. Contact: ktsuka@mail.tains.tohoku.ac.jp
- 2) The 15th International Conference on Crystal Growth, ICCG-15 (in conjunction with the 13th Conference on Vapor Growth and Epitaxy) will be held on August 12 - 17, 2007, Salt Lake City, Utah, USA. Abstract submission will open on January 1st, 2007. Details are available at:
<http://www.crystalgrowth.org/conferences/iccg15/index.php>
- 3) The 13th International Summer School on Crystal Growth will be held on August 5 - 11, 2007, Park City Marriott, Park City, Utah, USA.
<http://www.crystalgrowth.us/isscg13/index.php?PID=3>
- 4) The 2nd International Conference on Crystallogenesis and Mineralogy will be held at the Department of Crystallography and Department of Mineralogy of Saint-Petersbourg State University. October 1-5, 2007. Registration will begin on October 1st, 2006. Contact: KM2007@minsoc.ru for further information.
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