

IMA
COMMISSION ON
MINERAL GROWTH AND INTERFACE PROCESSES
(CMGIP)
2007 Annual report to IUGS

Officers

- Katsuo Tsukamoto (Professor, Tohoku University, Japan) chairperson
- Andreas Lutge (Associate Professor, Rice University, Texas) vice-chairperson
- Jeanne Paquette (Associate Professor, McGill University, Canada) secretary

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 processes 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 of Activity in 2007

1. An International Symposium on FRONTIER OF CRYSTAL GROWTH SCIENCE, organized by students and sponsored by Tohoku University, was successfully organized on 20-22 February 2007. Everything was organized by students in Japan except the financials. About 15,000 US\$ was offered from Tohoku University as a GP program 'Young Brains 21'. CMGIP also sponsored this symposium.
(http://www.ganko.tohoku.ac.jp/shigen/html_tsukamoto/members/maruyama/fcgs/)
2. The 2nd International Conference on Crystallogenesi and Mineralogy was successfully be held at the Department of Crystallography and Department of Mineralogy of Saint-Petersbourg State University. October 1-5, 2007. Arcady Glikin (U. St. Petersburg) had a great effort for the organization.
3. Although no special sessions were held in the Goldschmidt conferences (2007) in Cologne, Germany, August 19-24, under the theme "Atoms to Planets", there were many participants from CMGIP. It should be noted that many students also attended from Japan.
4. The 15th International Conference on Crystal Growth (in conjunction with the 13th Conference on Vapor Growth and Epitaxy) was held on August 12 - 17, 2007, Salt Lake City, Utah, USA. About 40 mineralogists, including students, attended the conference. The next ICCG will be held in 2010 in Beijing, for which CMGIP will prepare to have a mineral growth session.
5. Although Eugenio Scandale (U. Bari, Italy) wanted to organize an international summer school on "Crystal Growth and Interface Processes" in 2007 in Bari, Italy, the organization was found to be impossible mainly because of financial situation.

Business Meeting

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

FUTURE EVENTS

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

1. Andrew Putnis (U. Muenster, Germany) will act as liaison with the IGC 2008 meeting (Oslo) and organize a session on crystal growth.
2. Tsukamoto (Tohoku University, Japan) will organize a summer school on interface and "in situ" observation of crystal growth for Japanese students in the field of crystal growth, mineralogy and planetary science in September 2008 in Sendai, Japan.
3. Andreas Lutge (Rice U., USA) plans for an eventual 2nd International Symposium on Interface Mineralogy in 2008 or 2009 in Houston, USA.
4. Juan M. Garcia Ruiz will organize an international symposium on the workshop will be "Minerals and the origin of life: the geochemical scenario" in June 2008 in Spain.

LIST OF COMMISSION MEMBERS

Chairman:

Katsuo Tsukamoto, Professor, Department of Earth and Planetary Science, Graduate School of Science, Tohoku University, Aramaki, Aoba, Sendai, 980-8578, Japan.

Phone : +81-22-795-6661 , FAX +81-22-795-6661

Email: ktsuka@mail.tains.tohoku.ac.jp

Webpage: <http://www.ganko.tohoku.ac.jp/shigen/tsukamoto.html>

Vice-chairman:

Andreas Lüttge, Associate Profess, Department of Earth Science, MS 126
Rice University, 6100 Main Street, Houston, TX 77005-1892,U.S.A.

(713) 348-6304; FAX: (713) 348-5214 (W)

(281) 398-2018 (H)

E-MAIL: aluttge@rice.edu

Webpage: <http://cohesion.rice.edu/naturalsciences/earthscience/facultyDetail.cfm?riceid=1026>

Secretary:

Jeanne Paquette, Associate Professor of McGill University, Earth & Planetary Sciences, Frank Dawson Adams Building, 3450 University Street, Montreal, Qc
Canada H3A 2A7

Email: jeannep@eps.mcgill.ca

phone: (514)398-4402 fax: (514)398-4680

AUSTRALIA

AUSTRIA

Prof. Dr. Martin Dietzel, Institut fuer Angewandte Geowissenschaften der TU Graz,
Rechbauerstrasse 12, A-8010 Graz, Austria,

Tel +43 316 873 6360, Fax +43 316 873 6876,

Email: dietzel@egam.tugraz.at

Homepage: www.egam.tugraz.at

BRAZIL*

BULGARIA

Dr. Ivan Bonev, Geological Institute of the Bulgarian Academy of Sciences

Department of Mineralogy, 24 Acad. G. Bonchev str., 1113 Sofia, Bulgaria

Phone: +359 2 723 563 Fax: +359 2 724 638

Email: bonev@geology.bas.bg

CANADA

Dr. Jeanne Paquette,

Department of Earth and Planetary Sciences, Faculty of Science, McGill University, Montreal, Quebec, Canada

Phone: (514) 398-4680 Fax: (514) 398-4402;

Email: jeannep@eps.mcgill.ca

Website:

<http://www.eps.mcgill.ca/index.php?id=0&url=./People/faculty/index.php&faculty=jeannep>

DENMARK

Prof. Susan Stipp, Geological Institute, University of Copenhagen, Oester Voldgade 10, DK-1350 Copenhagen K

Phone: +45 35322480 fax: +45 33148322

Email: stipp@geol.ku.dk

EGYPT

Professor Ali A. Omar, Department of Glass Researches, National research Center, 12622, Dokki, Cairo, Egypt

Fax : (202) 3370931

Email : a-omar@thewayout.net

FRANCE

Alain Baronnet

Centre de Recherche sur les Mécanismes de la Croissance Cristalline

CRMC2-CNRS, Campus de Luminy, Case 913, F-13288 Marseille Cedex 09, France

Email: baronnet@crmc2.univ-mrs.fr

Web: <http://www.crmc2.univ-mrs.fr>

GERMANY

Professor Andrew Putnis, Institut fuer Mineralogie, Universitaet Muenster, Corrensstrasse 24, D-48149 Muenster, Germany

Phone: +49 251 8333 451, Fax +49 251 8338 397

e-mail: putnis@nwz.uni-muenster.de

<http://www.uni-muenster.de/Mineralogie/personen/putnisa.html>

GREECE *

HUNGARY

Prof. Mihály Pósfai DSc, Department of Earth and Environmental Sciences, University of Veszprém

e-mail: posfaim@almos.vein.hu

INDIA

Professor K. Byrappa

University of Mysore, DOS in Geology, P.B. No.21, Manasagangotri, Mysore – 570 006, India

Email: byrappak@yahoo.com

ITALY

Prof. Eugenio Scandale

Dipartimento Geomineralogico, Università di Bari-Campus

Via E. Orabona, 4 70125 Bari ITALIA

tel +39-80-5442585 fax +39-80-5442591

JAPAN

Professor, Katsuo Tsukamoto, Department of Earth and Planetary Science, Graduate School of Science, Tohoku University, Aramaki, Aoba, Sendai, 980-8578, Japan.

Phone : +81-22-795-6661 , FAX +81-22-795-6661

Email: ktsuka@mail.tains.tohoku.ac.jp

Webpage: <http://www.ganko.tohoku.ac.jp/shigen/tsukamoto.html>

THE NETHERLANDS

Cornelis F. Woensdregt, Dept of Petrology, Faculty of Earth Sciences, Utrecht University, P.O. Box 80.021 , NL-3508 TA Utrecht, The Netherlands

Phone: 31 30 253 5070 Fax: 31-30-253 5030

Email: woens@geo.uu.nl

Web: http://www.geo.uu.nl/Research/Petrology/Res_crys.html

NEW ZEALAND

Professor Dr. Rodney H Grapes, Institut für Mineralogie, Petrologie und Geochemie, Universität Freiburg, Albertstrasse 23 b, 79104 Freiburg, GERMANY

Phone: +49-761-203-6394/6407

Email: Rodney.Grapes@minpet.uni-freiburg.de

NORWAY *

POLAND

Prof. Eugeniusz Galuskin

Museum of Earth, University of Silesia, Bedzinska Str.60, 41- 200 Sosnowiec, Poland

Email: galuskin@us.edu.pl

RUSSIAN FEDERATION

Prof. Arkady E. Glikin, Crystallography Department, Faculty of Geology, St.-Petersburg University, University Enbankment 7/9, 199034 St.-Petersburg, Russia

Email: km2001@ag2460.spb.edu

SOUTH AFRICA

Professor R. K. W. Merkle, Department of Geology, University of Pretoria, Pretoria, South Africa.

Phone: +27-12-420 3504, Fax: +27-12-362 5219

Email: rmerkle@postino.up.ac.za

SPAIN

Prof. Dr. Manuel Prieto, Dpto. de Geología. Area de Cristalografía y Mineralogía,