

IMA
COMMISSION ON MINERAL GROWTH
AND INTERFACE PROCESSES (CMGIP)

2005 ANNUAL REPORT

Meetings

Notwithstanding the efforts of our commission members we could not convene a special session on "Mineral growth and related processes" during the **Annual V.M. Goldschmidt Conference in Moscow, Idaho, USA**. Unfortunately, our proposal was not accepted due to the large number of closely related sessions. However, there were many symposia that dealt with crystal growth and mineral surface reactions, but not the specific one that we proposed.

Commission members have written in several occasions officially and as individual scientists to the Organizing Committee of the **2006 IMA Kobe conference**. It is not inconceivable to suppose that all these efforts contributed to the change of the original idea of combining crystal growth with crystallography. In the definite scientific program three sessions sponsored by our commission are planned:

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

The **International Symposium on Interface Mineralogy** was successfully held in Sendai, Japan on 28-30 September, 2005. From 8 countries, 38 participants attended the symposium, in which they discussed not only the scientific issues, but also possible sessions on crystal growth during the IMA Kobe conference in 2006. The aim of this symposium was to bring together experts in crystal growth and geoscientists interested in the wide range of phenomena associated with mineral growth 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 and advanced ideas, if we are to advance our understanding of these processes. The meeting included presentations and discussions on the mechanisms of growth and dissolution mechanism at the crystal interface, mineral replacement, oscillatory growth, self-assembly of nano-particles, perfection of crystals, and crystallization under extreme conditions such as in space.

Representation

Since the 2002 Edinburgh conference the number of our commission members has increased significantly. At this moment 20 countries have a representative in our commission. Besides the fact that now so many countries are represented, it is even more important to state that the composition of the commission now represents almost the whole spectrum of mineral growth. We regret that still a few countries with a strong mineral growth tradition have not found or convinced suitable members for our commission.

The 2004 conference in Pisa was not an ideal convening site for our commission. Contacts between the commission members can nowadays better be realised through internet communications. Occasional meetings between commission members took place during conferences, meetings and individual visits to institutes or laboratories.

Webpage CMGIP

Changing of the information on our special CMGIP webpage was not easy. We regret that at this moment not all our information is up-to-date.

Plans

During the 2006 Kobe meeting hopefully a representative number of commission members will be present in order to have a fruitful discussion about the organisation of a summer school in the field of mineral growth and related processes. The original plan to organise such a school in East Europe has not been possible.

Further, it is necessary to discuss how we can be more successful in organising special meetings during the Goldschmidt conferences.

Moreover, actions must be taken in order to have a better presentation of our commission on the IMA web pages.

Appendix

List of CMGIP members