

REPORT ON THE INTERNATIONAL WORKSHOP ON COMPUTATIONAL MORPHOGENESIS 2006 (IWCM2006)

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On October 10-12, 2006, the International Workshop on Computational Morphogenesis took place at the Noyori Conference Hall of Nagoya University in Nagoya, Japan. It was the first meeting planned by the Sub-Working Group on Computational Morphogenesis for Shell and Spatial Structures, which is the Sub-WG established under Working Group 13 of IASS on Numerical Analysis of Shell and Spatial Structures. It was held also under the auspices of the Sub-Committee on Computer Applications for Spatial Structures of the AIJ (Architectural Institute of Japan); the Sub-Committee on Generation and Optimization of Structural Shape of AIJ; and the 21st Century COE Program, Frontiers of Computational Science, of the Ministry of Education, Culture, Sports, Science and Technology of Japan.

The organization was carried out by the chairman, Hiroshi Ohmori (Nagoya University) with four co-chairmen, Kai-Uwe Bletzinger (Technical University Munchen), Makoto Ohsaki (Kyoto University), Toshio Honma (Kagoshima University), and Shojiro Motoyui (Tokyo Institute of Technology) with the devoted cooperation of 12 graduate students of Ohmori's Laboratory at Nagoya University.

The aims of the Sub-WG is (1) to diffuse thoughts on how computational morphogenesis can contribute to the art of structural design, and (2) to exchange ideas on utilization of structural optimization for structural design. This International Workshop was planned as a part of the realization of these aims. In order to minimize participants' load and help them bring recent fruits of their achievement, only one-page abstracts were required of all participants rather than a full paper. Therefore, the proceedings of this activity consists of a book of abstracts. All researchers, engineers, structural designers and architects, who intend to apply computational approaches to the design of structures were called to join this activity.

As a result, this "idea" was very successful. 25 abstracts were submitted from eight countries – USA, France, Germany, Netherlands, Italy, Malaysia, Korea, and Japan – and six invited presentations were selected. In accordance with the objective, the themes of the workshop included structural optimization, form-finding, nonlinear programming, numerical methods, and the application of these to the structural design of all kinds of structures. Future activities of the Sub-WG will be built upon the success of this workshop.



Participants of IWCM2006 in Nagoya after the closing session on October 12, 2006