Advances in visualization techniques



Kawahashi, M.

Visualization continues to contribute to the evolution of numerous technologies. Quantitative visualization has brought about innovation in measurement techniques used in advanced technologies such as biotechnology, micro/nano technology, as well as environmental and new energy technologies.

Recent visualization techniques have progressed spatially and temporally toward multidimensional measurement of physical properties. Simultaneous measurements of various physical properties via quantitative visualization techniques have also been developed. Progress in image processing techniques provide new methods for understanding complicated phenomena. The biannual International Symposium of Flow Visualization (ISFV) fulfils an important role in the innovation of visualization techniques and provides a forum for the exchange of the latest information on visualization, not only for flows but for various phenomena. The last ISFV, the tenth commemorative symposium, was held on August 26~29, 2002 in Kyoto, Japan. At the symposium, over 300 papers were presented and the progress and future of visualization were discussed.

The present issue is comprised primarily of selected papers that were presented at the 10th ISFV. The invited paper by Prof. Chung presented at the symposium is also included in this issue. These papers provide important suggestions and prospects for future applications of visualization techniques.

Managing Editor Masaaki Kawahashi