

Foreword

This book contains the Report of the Review Committee for the Center for Computational Sciences (CCS), University of Tsukuba, carried out in 2007. The objective of the External Review was to evaluate the research activities of CCS in the context of its mission, since its reorganization in 2004 and at the midterm in its six-year plan.

The CCS holds as its mission to promote scientific discovery by computational science through the application of advanced computing technologies, and to support computational-science-based research projects in Japanese universities by operating leading-edge computing systems. The CCS was founded in April 2004 as an inter-university research facility for computational science, by restructuring and expanding the Center for Computational Physics (April 1992-March 2004). The CCS aims to carry out research on critical issues in fundamental science, material science, life science and environmental science through large-scale simulations and large-scale data analyses. To realize this goal, the CCS performs research and development of high-performance computing systems and networks, and advanced studies in computer and information science.

We requested the Review Committee to focus on the work of each research group and the three core projects, PACS-CS, FIRST and ILDG/JLDG, with regard to both their achievements and the effectiveness of their interdisciplinary collaborations. We also asked the Committee to comment on the future vision and strategies of the CCS.

The Review Committee comprised Professor Richard Kenway (University of Edinburgh), Chair, Professor Yoshio Oyanagi (Kogakuin University), Vice-Chair, Professor Masaru Kitsuregawa (University of Tokyo), Professor Michael Norman (University of California, San Diego), Professor Hervé Philippe (University of Montreal), Professor Horst Simon (Lawrence Berkeley National Laboratory), Professor Akimasa Sumi (University of Tokyo) and Professor Kiyoyuki Terakura (Japan Advanced Institute of Science and Technology). The Review Committee visited the CCS from 30 Oct to 1 Nov 2007.

On behalf of the Center for Computational Sciences, University of Tsukuba, I would like to thank all the members of the Review Committee for their great work, especially Professor Kenway and Professor Oyanagi for leading the Committee. The Report by the Committee encouraged us with a strong endorsement of the CCS's future vision for interdisciplinary computational science, which we have nurtured through a close collaboration and interaction between computer science and computational science. Looking ten years ahead and beyond, I hope that we will continue to strive to advance computational science.

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