

## 1. Foreword - Greetings from the Project Leader

We roll out a Global COE Program to form Mathematical Sciences Based on Modeling and Analysis with the building of extraction models to get an insight into the true nature of phenomena for better understanding as a mainstay, focusing on the elucidation of complicated systems appearing in social, natural and biological phenomena, at the Meiji Institute for Advanced Study of Mathematical Sciences (hereinafter referred to as the “MIMS”) as a basis for education and research, based on the recognition of the promotion of mathematical sciences featuring the building of models that will serve as a bridge to connect phenomena and mathematics as our social mission. To this end, we developed a base for activities of this Program on the second floor of Annex 3 of University Building 2 on the Ikuta Campus, Meiji University. We established the Promoting



**Masayasu MIMURA**

*Project Leader of the Meiji University Global COE*

Committee for the Meiji University Global COE Program chaired by the university president and comprised of the vice president, the dean of graduate school, the director of MIMS, and so on in order to promote this program, and established the “Global COE Staff Committee” chaired by the Project leader of our Global COE Program in order to discuss and practice various issues of education and research (comprehensive measures, entrance examination/education, research promotion, etc.). Under this committee, the Mathematical Analysis Group, the Simulation Group, and the Modeling Group are in the process of forming a globally eminent education and research base through composite and integrated cooperation. In order to support these activities, the Office of Global COE Program is established for this Program and is operated by eight personnel at present.

One of the important purposes of this program is to foster young researchers. We introduced a new entrance examination for the MIMS Ph.D. Program in the doctoral course. Six students (including three students with full-time jobs) entered the Program, and are enjoying the advanced knowledge and technologies of Mathematical Sciences Based on Modeling and Analysis both in Japanese and English and learn mathematical sciences with a multifaceted perspective. The education and research guidance program is not limited within the MIMS but is steadily expanding the circle by developing the guidance on research and the credit transfer system with a framework agreement and a memorandums of understanding for student exchange concluded with Ryukoku University and Shizuoka University in addition to Hiroshima University, a partner university of our Program, toward the construction of an education and research network. In terms of young researchers, we employ three Postdoctoral Fellows in MIMS, three Postdoctoral Fellows and one Super-Postdoctoral Fellow in Meiji

University Global COE Program, and two University Postdoctoral Fellows. In order to support the above young researchers, we employed one professor and one assistant professor anew this fiscal year.

On the other hand, we are promoting an international collaborative research, as a part of the development of an internationally competitive university, through building a collaboration network for Mathematical Sciences Based on Modeling and Analysis with the agreement of Japan-France Joint Research Project concluded between the Centre National de la Recherche Scientifique (CNRS) and MIMS, the key organization for this Global COE Program, an agreement concluded with the Istituto per le Applicazioni del Calcolo (IAC), and memorandums of understanding exchanged with the Institute of Mathematics, Vietnamese Academy of Science and Technology (IMVAST); the École des Hautes Études en Sciences Sociales (EHESS); the Institute of Mathematical Modeling And Scientific Computing, National Chian Tung University (IMMSC); and the Instituto de Matematica Interdisciplinar, Universidad Complutense de Madrid (IMI). Adopted only for a little more than one year, this Program still faces numerous problems to be solved. We wish to achieve further development with your support in FY 2010.