This special edition is dedicated to Professor Masayasu Mimura with special invited Guest Editors:

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Preface

This special issue celebrates the 65th birthday of Professor Masayasu Mimura of Meiji University as well as honors his remarkable career and important contributions to the research of mathematical analysis and modeling. The volume brings together a collection of papers, all of which are peer reviewed, in acclamation of the great inspirations by his work over the years.

Professor Mimura started his career as a Ph. D. student at Kyoto University and got the degree in 1973. He took a position at Konan University in 1970 and soon got promotions to associate professor and professor. In the eighties, he moved to Hiroshima University and stayed there for 13 years. His great work had even won the name as "Hiroshima school" highlighting those significant impacts over applied mathematics through his efforts. In 1993, he moved to the University of Tokyo which five years later he then returned to Hiroshima University helping the establishment of the Department of Mathematical and Life Sciences. Since 2004, Professor Mimura takes his position at Meiji University and serves as the Director of Meiji Institute for Advanced Study of Mathematical Sciences up to date.

Professor Mimura has devoted his career to the research of mathematical analysis and modeling, including topics in nonlinear partial differential equations, mathematical biology, and numerical methods and simulations, and various applied mathematics. His efforts have laid down significant milestones in these fields and brought about very fruitful influence on interdisciplinary communities employing in-depth mathematical concepts. Prof. Mimura has been the president of the JSIAM (Japan society for industrial and applied mathematics) for the years 2002-2003. He also presented the invited lectures at ICM Kyoto, 1990 and ICIAM'91 Washington.

Professor Mimura not only impresses the worldwide mathematical communities with his admiring academic achievements but also encourages numerous researchers in his and the younger generations with his unprecedented enthusiasm. The audience in his lectures always had luck to share his beautiful ideas, vivid pictures, movies and all sorts of fantastic stories about his researches. The delightful character of Professor Mimura is just as inspiring as his research.

We are very happy to dedicate this volume to Professor Mimura and deeply thank all the authors for their contributions.

Masayasu Mimura