PREFACE

A main goal of the Symposium on Applied Mathematics from September 18-20, 1997 in Japan was to emphasize the importance of the combination of ideas from the theory of chaos, wavelets and nonlinear partial differential equations. We invited sixteen speakers, including several engineers and physicists, who were specialists of applied mathematics. Their talks gave us fruitful discussions and exchanges of ideas among the participants.

The sixteen papers in this volume show recent activities of applied mathematics. This volume includes several papers on chaos such as Logistic map with diffusion, chaotic dynamics and new ideas on measure Asymmetry of Figures, several interesting papers applying wavelets to Speech-to-Japanese system, Tribology, Round-trip-Time of a Packet on the Internet, Poisson equations and analysis on spheres. There are also several stimulating papers on nonlinear partial differential equations, mainly on conservation laws and fluid dynamics. In addition, there is one paper devoted to the so-called Science of Complexities.

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