## Preface

The 12th MSJ International Research Institute of the Mathematical Society of Japan 2003 "Singularity theory and its applications" was held on Sapporo convention center "SORA", September 16–25, 2003. The conference was attended by 146 mathematicians, 77 of them from 17 different countries outside of Japan, and there were 97 talks. The programme covered a broad range of topics in singularity theory and its applications. The local organizers were S. Izumiya, G. Ishikawa, I. Shimada and T. Sano. The scientific committee consisted of Professors J. Damon (Chapell-Hill), T. Fukuda (Tokyo), S. Janeczko (Warsaw), M. Oka (Tokyo), M. A. Ruas (Sao Carlos), K. Saito (Kyoto), D. Siersma (Utrecht), C. T. C. Wall (Liverpool) and V. Zakalyukin (Moscow). Professor Heisuke Hironaka (Tokyo) was the advisor of the conference. The local organizers would like to thank all the members of the scientific committee and the advisor.

The papers presented here are selection of those submitted to the editors for the publication in the proceedings of the meeting. They cover several important topics in singularity theory such as motivic integrations, Thom polynomials, complex analytic singularity theory, Lagrangian singularity theory, generic differential geometry etc. All papers were refereed and in final form. We would like to express our gratitude to the authors and the many referees.

We gratefully acknowledge financial support from Mathematical Society of Japan; Grant-in-Aid for Scientific Research, JSPS; Ministry of Education, Culture, Sports Science and Technology, Japan; Sapporo International Communication Plaza Foundation; Grant-in-Aid for formation of COE "Mathematics of Nonlinear structure via Singularities" (Hokkaido University). We also thank to the staff at Department of Mathematics, Hokkaido University for their enormous help and support. Finally many thanks to Atsuko Ogino and Megumi Sasamori for doing so much of the editorial work of this volume in their friendly and efficient manner.

Sapporo, December 2005

Shyuichi Izumiya, Goo Ishikawa, Hiroo Tokunaga, Ichiro Shimada, Takasi Sano Editors

All papers in this volume have been referred and are in final form. No version of any of them will be submitted for publication elsewhere.