

# Preface

This book contains the post-proceedings of the international workshop “IMI Workshop on Optimization in the Real World—Toward Solving Real-World Optimization problems,” which was held in Fukuoka, Japan, during October 14 and 15, 2014. Optimization is not only a scientific field in mathematics and computer science, it is also strongly connected with the real world, especially industrial activity. Many optimization problems in the real world are often not solvable because they are on a huge scale and/or contain other essential difficulties. However, some such optimization problems are becoming solvable through the recent development of computing and optimization technologies. The purpose of the workshop was to provide an opportunity to communicate with researchers who deal with optimization problems in the real world, and to stimulate novel and innovative development in optimization technology.

The chapters of this volume discuss the theory and applications of mixed-integer programming and scientific computation, and show the importance, usefulness, and powerfulness of current optimization technologies, in particular, mixed-integer programming and its remarkable applications. This collection is intended for students, academic researchers, and non-professionals working on optimization in industry.

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