Preface

**Sergiy Butenko · Ding-Zhu Du ·
Mauricio G. C. Resende**

This special issue is dedicated to the 60th birthday of Distinguished Professor Panos M. Pardalos, for his numerous significant contributions to the field of optimization and its applications. In particular, Panos was at the forefront of some important advances in studying several combinatorial optimization problems including binary quadratic optimization, maximum clique, maximum independent set, quadratic assignment, and network flow problems. His applied work related to combinatorial optimization focused on network-based structural analysis of big data arising in telecommunications, biomedicine, finance, and energy systems.

In addition to his outstanding research contributions, Panos made a tremendous impact on the optimization community through his dedicated service to the profession as the organizer of numerous conferences and the editor of several journals, books, and book series. His energy and enthusiasm inspired many of his colleagues and students around the world, including more than 50 Ph.D. students he has mentored over the years.

The collection presented in this issue contains one survey and fourteen original research papers representing a broad range of interests of Panos in combinatorial optimization and its applications. In fact, many of the authors are collaborators or former students of Professor Pardalos, who were, in one way or another, influenced

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by him and his work. The articles are ordered alphabetically by the last names of the first authors.

We join all the contributors to this special issue and numerous other friends and colleagues of Panos in wishing him Happy Birthday and many more healthy, joyful and productive years.