

## PREFACE

The aim of this volume is to present the state of the art in selected topics of functional equations and inequalities (FEI) and in some related fields. Earlier achievements as well as new results are presented in several expository and research papers written by experienced authors. A special emphasis is placed on various problems solved with methods and tools involving and/or originating in FEI.

The book is published in connection with the 14th International Conference on Functional Equations and Inequalities (ICFEI) held at the Mathematical Research and Conference Center in Będlewo in September 11–17, 2011. The series of ICFEI conferences has been organized by the Department of Mathematics of the Pedagogical University in Cracow (Poland) since 1984.

We believe that some new directions of research will be promoted and stimulated with this volume. In particular, the open problems stated in several papers should be helpful. Moreover, we expect that, in some limited sense, this publication will serve as a kind of guidebook for researchers whose work is connected with FEI, but who lack experience in that area of mathematics.

The 14th ICFEI was dedicated to the memory of Marek Kuczma (1935–1991). Therefore, the first paper provides some information on this outstanding mathematician and discusses his research. The other contributions concern the following subjects: iteration theory, Ulam's type stability, geometry of normed spaces, weighted quasi-arithmetic means, notions of convexity, applications of functional equations in wavelet theory, d'Alembert's (cosine) functional equation, functional equations of determinant form, representation theory, spectral analysis and synthesis, and majorization theory.

*The Editors*

