

# Preface

The international conferences on Integral Methods in Science and Engineering (IMSE) aim to bring together specialists from various research fields who employ integration as an essential tool in their work, and to promote and consolidate the use by the world scientific community of such elegant, powerful, and widely applicable techniques.

The first two conferences in the series, IMSE1985 and IMSE1990, were hosted by the University of Texas-Arlington. At the latter, the IMSE consortium was created and charged with organizing these conferences under the guidance of an International Steering Committee. Subsequently, IMSE1993 took place at Tohoku University, Sendai, Japan; IMSE1996 at the University of Oulu, Finland; IMSE1998 at Michigan Technological University, Houghton, MI, USA; IMSE2000 in Banff, AB, Canada; IMSE2002 at the University of Saint-Étienne, France; IMSE2004 at the University of Central Florida, Orlando, FL, USA; IMSE2006 in Niagara Falls, ON, Canada; and IMSE2008 at the University of Cantabria, Santander, Spain.

The 2010 meeting, held at the University of Brighton, UK, July 12–14, and attended by participants representing 20 countries from five continents, has confirmed IMSE as a well-established event on the international conference circuit, which gives scientists and engineers from a whole variety of research backgrounds the opportunity to get together and discuss advances in a large class of important mathematical procedures.

The organization of IMSE2010 was, as on previous occasions, of a high standard; acknowledging this fact, the participants wish to thank the School of Computing, Engineering, and Mathematics (formerly the School of Computing, Mathematical, and Information Sciences) at the University of Brighton for its financial support and for the administrative assistance given by the staff in the School office. Special thanks are due, in particular, to the members of the Local Organizing Committee:

Paul Harris (Division of Mathematics), Chairman,  
Derek Covill (Division of Engineering),  
David Chappell (School of Mathematical Sciences, University of Nottingham).

The next IMSE conference will be hosted by the Federal University of Rio Grande do Sul and the National Institute for Space Research in Porto Alegre, RS, Brazil, in July 2012. Further details will be posted in due course through the link <http://sites.google.com/site/imse2012>.

This volume contains 37 refereed papers from among those presented in Brighton, arranged alphabetically by the first author's name. The editors would like to thank the staff at Birkhäuser-Boston for their professionalism and efficient handling of the publication process.

Tulsa, Oklahoma, USA

*Christian Constanda, IMSE Chairman*

March 2011

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