The International Conference on Research and Education in Mathematics (ICREM) is a biennial event which aims to bring together academicians, scientists, and industrialists from around the country and the world for knowledge sharing, exchanging ideas, and for collaborating and presenting research results about all aspects of mathematics and its applications. The first four ICREM were held in Kuala Lumpur in the years 2003, 2005, 2007, and 2009. Following this, the conference was successfully held in Bandung, Indonesia (2011) and in Ho Chi Minh City, Vietnam (2013).

In conjunction with that, the Institute for Mathematical Research (INSPEM), Universiti Putra Malaysia took the responsibility to organize the 7th International Conference on Research and Education in Mathematics (ICREM7) with technically co-sponsored by IEEE Malaysia WIE Affinity Group. This conference took place on August 25–27, 2015 in Kuala Lumpur, Malaysia. The main goal of ICREM7 is to provide opportunities for the delegates to exchange new ideas and application experiences, to establish research or business relations, and to find global partners for future collaboration. The conference also included several invited papers on important and timely topics from well-known leaders in the field, and parallel tracks of oral presentation sessions of the accepted papers.

This book contains research papers by invited speakers and selected papers from the fields of applied mathematics and pure mathematics in ICREM7. In chapter “Counting Trees and Rooted Trees with Applications,” our keynote address for this conference was given by Emeritus Prof. Dr. John Butcher, the mathematician specialized in numerical analysis. The principal applications discussed in this talk are connected with the structures of Runge–Kutta methods and canonical Runge–Kutta methods. Another eight chapters in this book represent a cross section of state-of-the-art and cutting-edge research in pure mathematics and applied mathematics for future.
We thank all the following supporting agencies and individuals for their contribution and significant assistance for ICREM7:

- IEEE Malaysia WIE Affinity Group
- Akademi Sains Malaysia (ASM)
- Bandung Institute of Technology (ITB)
- Institute for Mathematics, Vietnam Academy of Science and Technology (IMVAST)
- Malaysian Mathematical Sciences Society (PERSAMA)
- OEMS IntiPakar Corporation Sdn Bhd
- The Indonesian Mathematical Society (IndoMS)
- Putrajaya Corporation
- Corporate Strategy and Communications Office (CosComm), UPM
- Nur Raidah Salim
- Mohamed Faris Laham
- Kathiresan Gopal
- Phang Pei See
- Zahari Mahad

The editors
Recent Advances in Mathematical Sciences
Selected Papers from ICREM7 2015
Kilicman, A.; Srivastava, H.M.; Mursaleen, M.; Abdul Majid, Z. (Eds.)
2016, VIII, 109 p. 43 illus. in color., Hardcover
ISBN: 978-981-10-0517-6