

Preface

We had three conferences held successfully in 2016.

The International Conference on Mathematics and Decision Science, ICMDs 2016, September 12–15, 2016, was arranged at Guangzhou University, Guangzhou, China (www.icodm2020.com). Chairman Prof. Bing-Yuan Cao, Chairman of the Program Committee Prof. Seyed Hadi Nasser, and Chairman of the Iranian Operations Research Society Prof. Nezamedin Mahdavi-Amiri ensured that the conference contained top-level presentations of great general interest. The researchers giving presentations at the conference represented researchers from many countries and parts of the world. The beautiful Guangzhou University and parks gave a relaxing discussion climate and many new meetings, more than 50 experts and professors and students attended the meeting. Delegates from China, Iran, Sweden, Poland, Canada, Pakistan, and other countries, nearly 20 people, read out academic papers.

Academic Conference on 30th Anniversary of Fuzzy Geometric Programming and 40th Education Year by and of Professor Cao Bingyuan (ACFGPAEC) has been held at Guangzhou University from July 30 to August 1, 2016. Professor Yu-bin Zhong, the Vice President and Secretary-General of Fuzzy Information and Engineering Society and Dean Assistant for School of Mathematics and Information Science of Guangzhou University gave a message to Professor Cao. The celebration was presided over by Dr. Ji-hui Yang, an Associate Professor from Shenyang Agricultural University, with more than 30 scholars and postdoctoral students from home and abroad attending it. More than 10 of Professor Cao's postdoctoral, doctoral (including Iran and Pakistan) and master reported their work in recent years, among whom many people had published, papers in the Fuzzy Sets and Systems, IEEE T on Fuzzy Systems, Information Sciences etc. magazine.

The third annual meeting of Guangdong Operational Research Society (TAMGORS) was held on October 22–23, 2016, in Foshan University, Guangdong. Honorary Chair of the Society, Academician Jing-zhong Zhang of the Chinese Academy of Sciences attended and made an academic report on the new thinking of calculus. Professor Hao Zhifeng, Vice Chairman of the Society and President of Foshan University, Professor Cao Bingyuan, respectively, made their

work reports and important speeches. Members of the institute, more than 40 entrepreneurs, and related students from Foshan University attended the meeting. More than 10 people from the Institute and entrepreneurs, persons from Iran, Pakistan, represented their papers.

We carefully organized them, adopting experts' recommendation and critical way of reviews, collected, and published the papers in Intelligent Systems and Computing. The Advance focuses on five main topics as follows:

- I. Mathematics and Fuzziness;
- II. Decision and Fuzziness;
- III. Fuzzy geometric programming and Optimization;
- IV. Fuzzy Systems & Operations Research and Management;
- V. Others.

Here, Topic I II, from ICMDs 2016, one of the world's continuous International Conference Papers 18 (the Conference was held in Iran after the first International Conference on Mathematics). We've chosen nine papers on Mathematics and Fuzziness. Topic III collected papers on AMPFGPAT2016 Fuzzy geometric programming and Optimization 9. Topic IV V is selected from TAMGORS's 17 paper. We carefully selected 44 papers to form the book.

Heartfelt thanks to Dr. Seyed Hadi Nasser University of Mazandaran, Iran, who has done a lot of work for launching the ICMDs 2016, conference organization and reviewers. Thanks to Dr. Xue-gang Zhou and Dr. Ji-hui Yang for organizing such a good meeting with AMPFGPAT. Appreciation to Guangzhou University for its great support for the conference and for the preparation and support of the Foshan University for the TAMGORS. Thanks to Lu Shu-quan for his full help.

Finally, I would like to thank the publisher, Springer editors, for publishing the proceeding as Advance in Intelligent Systems and Computing.

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