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# Rough Sets and Knowledge Technology

First International Conference, RSKT 2006  
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**Zdzisław Pawlak**  
**(1926-2006)**

(picture taken at RSCTC 1998, Warsaw, Poland)

# Preface

This volume contains the papers selected for presentation at the First International Conference on Rough Sets and Knowledge Technology (RSKT 2006) organized in Chongqing, P. R. China, July 24-26, 2003. There were 503 submissions for RSKT 2006 except for 1 commemorative paper, 4 keynote papers and 10 plenary papers. Except for the 15 commemorative and invited papers, 101 papers were accepted by RSKT 2006 and are included in this volume. The acceptance rate was only 20%. These papers were divided into 43 regular oral presentation papers (each allotted 8 pages), and 58 short oral presentation papers (each allotted 6 pages) on the basis of reviewer evaluation. Each paper was reviewed by two to four referees.

Since the introduction of rough sets in 1981 by Zdzisław Pawlak, many great advances in both the theory and applications have been introduced. Rough set theory is closely related to knowledge technology in a variety of forms such as knowledge discovery, approximate reasoning, intelligent and multiagent systems design, and knowledge intensive computations that signal the emergence of a knowledge technology age. The essence of growth in cutting-edge, state-of-the-art and promising knowledge technologies is closely related to learning, pattern recognition, machine intelligence and automation of acquisition, transformation, communication, exploration and exploitation of knowledge. A principal thrust of such technologies is the utilization of methodologies that facilitate knowledge processing. RSKT 2006, the first of a new international conference series named Rough Sets and Knowledge Technology (RSKT) has been inaugurated to present state-of-the-art scientific results, encourage academic and industrial interaction, and promote collaborative research and developmental activities, in rough sets and knowledge technology worldwide. This conference provides a new forum for researchers in rough sets and knowledge technology.

It is our great pleasure to dedicate this volume to the father of rough sets theory, Zdzisław Pawlak, who passed away just 3 months before the conference.

We wish to thank Setsuo Ohsuga, Zdzisław Pawlak, and Bo Zhang for acting as Honorary Chairs of the conference, and Zhongzhi Shi and Ning Zhong for acting as Conference Chairs. We are also very grateful to Zdzisław Pawlak, Bo Zhang, Jiming Liu, and Sankar K. Pal for accepting our invitation to be keynote speakers at RSKT 2006. We also wish to thank Yixin Zhong, Tsau Young Lin, Yingxu Wang, Jinglong Wu, Wojciech Ziarko, Jerzy Grzymala-Busse, Hung Son Nguyen, Andrzej Czyżewski, Lech Polkowski, and Qing Liu, who accepted our invitation to present plenary papers for this conference.

Our special thanks go to Andrzej Skowron for presenting the keynote lecture on behalf of Zdzisław Pawlak as well as Dominik Slezak, Duoqian Miao, Qing Liu, and Lech Polkowski for organizing the conference.

We would like to thank the authors who contributed to this volume. We are also very grateful to the Chairs, Advisory Board, Steering Committee, and Program Committee members who helped in organizing the conference. We also acknowledge all the reviewers not listed in the Program Committee. Their names are listed on a separate page.

We are grateful to our co-sponsors and supporters: the National Natural Science Foundation of China, Chongqing University of Posts and Telecommunications, Chongqing Institute of Technology, Chongqing Jiaotong University, Chongqing Education Commission, Chongqing Science and Technology Commission, Chongqing Information Industry Bureau, and Chongqing Association for Science and Technology for their financial and organizational support. We also would like to express our thanks to Local Organizing Chairs Neng Nie, Quanli Liu, Yu Wu for their great help and support in the whole process of preparing RSKT 2006. We also want to thank Publicity Chairs and Financial Chairs Yinguo Li, Jianqiu Cao, Yue Wang, Hong Tang, Xianzhong Xie, Jun Zhao for their help in preparing the RSKT 2006 proceedings and organizing of the conference.

Finally, we would like to express our thanks to Alfred Hofmann at Springer for his support and cooperation during preparation of this volume.

May 2006

Guoyin Wang  
James F. Peters  
Andrzej Skowron  
Yiyu Yao

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