## **PREFACE**

As the world declared entering into an era of knowledge economy, the significance of developing knowledge has grown to a level where it is coming to dominate other socio-economic factors. The recent developments challenge many of institutions to understand the nature of knowledge and its role in applications, to effectively utilize the knowledge for improving the corporate competitive advantage and national comprehensive power, as well as establishing development of knowledge sciences. Seven years ago, the First International Symposium on Knowledge and Systems Sciences (KSS'2000) was held in Ishikawa, Japan to start some endeavors of confluence of different ideas and opinions, methods and technologies, schools and disciplines, theorists and practitioners, which aim to develop knowledge science from systemic perspective and may be regarded as somewhat practice of meta-synthesis system methodologies toward complex problem solving. After 3-year work, International Society for Knowledge and Systems Sciences (ISKSS) was founded in Guangzhou during the 4th International Symposium on Knowledge and Systems Sciences (KSS'2003) by the emerging community dedicated into this goal, and then provided a forum or even an interactive Ba for researchers as well as practitioners to exchange innovative ideas and to be aware of each other's efforts and results in the exploration of knowledge science. Then another three year passed, the 7th International Symposium on Knowledge and Systems Sciences (KSS'2006) will be held in Beijing this September to show some new achievements and prospects for continuous thinking and studying, especially to observe the power of synthesis for knowledge creation.

The proceedings titled *Knowledge and System Sciences: toward Knowledge Synthesis and Creation* collect 49 papers based on more than 60 submissions from 12 countries or regions, including Australia, Austria, Canada, Czech, Ireland, Japan, Korea, Russia, Slovenia, United Kingdom, Taiwan of China and China mainland, which is a new record among series KSS symposia since 2000. Each paper was assigned for peer-review to two to four program committee members or experts. The acceptance of paper was then based on at least 2 review results acquired within a limited period of time. All paper submission and reviewing process had been undertaken via a Web-based conferencing system, also the first trial among series KSS symposia. Those full-length accepted papers are roughly grouped into 9 categories, knowledge science, knowledge creation and support systems, knowledge systems engineering, data mining and text mining, complex system modeling and analysis, knowledge management, knowledge management practice, complex networks and complexity research, system thinking and methodologies, which cover the highlight topics of theory and practice of knowledge and systems sciences, and reflect the continual

thinking and understanding about the scope of knowledge science.

A pre-conference workshop, as the 6th International Workshop on Meta-synthesis and Complex Systems (MCS'2006), will be convened before KSS'2006 formal activities. During the past years, MCS series workshops had been held twice together with KSS series symposia. With more emphasis toward approach to complex system modeling or unstructured problem solving, meta-synthesis approach has been applying to the exploration of knowledge science discipline.

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J.F. Gu, Y. Nakamori, Z.T. Wang, X.J. Tang September, 2006

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