Preface

The annual international symposium on Knowledge and Systems Sciences aims to promote the exchange and interaction of knowledge across disciplines and borders to explore the new territories and new frontiers. Over the past 14-years, continuous endeavors to strictly define knowledge science have led to a very tolerant, broad-based and open-minded approach to the discipline. Knowledge science and systems science can complement and benefit each other methodologically. The first International Symposium on Knowledge and Systems Sciences (KSS2000), initiated and organized by Japan Advanced Institute of Science and Technology, was held in September of 2000. Since then KSS2001 (Dalian, China), KSS2002 (Shanghai, China), KSS2003 (Guangzhou, China), KSS2004 (JAIST, Japan), KSS2005 (Vienna, Austria), KSS2006 (Beijing, China), KSS2007 (JAIST, Japan), KSS2008 (Guangzhou, China), KSS2009 (Hong Kong, China), KSS2010 (Xi'an, China), KSS2011 (Hull, UK), KSS2012 (JAIST, Japan), KSS2013 (Ningbo, China) have been held successfully, with many scientists and researchers from different countries contributing. Within the past 14 years, people interested in Knowledge and Systems Sciences have become a community, and an international academic society has existed for 11 years. This year, the 15th KSS Symposium will be held November 1-2, 2014, Japan.

The main objective of the Symposium is to provide a forum for exchanges of research results, ideas for and experience of application among researchers and practitioners interested in Knowledge and Systems Sciences. The topics of KSS 2014 include, but are not limited to, the following: creation of agent-based social systems sciences; cross-cultural learning on systems thinking and knowledge management; complex system modeling and complexity; decision support systems; knowledge creation, creativity support, awareness support, etc.; knowledge discovery, data mining, text mining, recommendation system and relevant Web intelligence tools; knowledge systems engineering and knowledge management; meta-synthesis and advanced modeling; problem structuring methods and system methodologies; social dynamic network modeling.

Shouyang Wang, Symposium Co-Chair Yoshiteru Nakamori, Symposium Co-Chair Van Nam Huynh, International Program Chair

Organization of Symposium

Steering Committee

(Board members of the International Society for Knowledge and Systems Sciences)

President: S.Y. Wang (CAS Academy of Mathematics Systems Science, China)

General Secretary: X. J. Tang (CAS Academy of Mathematics Systems Science, China)

Vice-Presidents:

- J. Chen (Tsinghua University, China)
- Y. Z. Dang (Dalian University of Technology, China)
- K. Kijima (Tokyo Institute of Technology, Japan)
- W. B. Lee (The Hong Kong Polytechnic University, China)
- M. Makowski (International Institute for Applied Systems Analysis)

Advisors:

- J. F. Gu (CAS Academy of Mathematics Systems Science, China)
- M. Jackson (The University of Hull, UK)
- Y. Nakamori (Japan Advanced Institute of Science and Technology, Japan)
- Z.T. Wang (Dalian University of Technology, China)
- A.P. Wiezbicki (National Institute of Telecommunications, Poland)
- C.J. Zhao (Tsinghua University, China)

Symposium Co-Chairs

- S.Y. Wang (CAS Academy of Mathematics Systems Science, China)
- J. Chen (Tsinghua University, China)
- Y. Nakamori (Japan Advanced Institute of Science and Technology, Japan)

International Program Committee

- V. N. Huynh (Japan Advanced Institute of Science and Technology, Japan), Co-chair
- X. J. Tang (CAS Academy of Mathematics Systems Science, China), Co-chair
- J. N. Wu (Dalian University of Technology, China), Co-chair
- T. Ma (East China University of Science and Technology, China), Co-chair
- W.B. Lee (The Hong Kong Polytechnic University, China)
- L. Edvinsson (Lund University, Sweden)
- T. Jorg (University of Utrecht, The Netherlands)

- J. Lee (University of Cincinnati, USA)
- Rossi Setchi (Cardiff University, UK)
- D. Snowden (Cognitive Edge Pte Ltd., Singapore)
- C. Q. Zhang (University of Technology, Sydney, Australia)
- C. M. Brugha (University College Dublin, Ireland)
- F. Burstein (Monash University, Australia)
- J. Chen (Tsinghua University, China)
- B. Cheung (The Hong Kong Polytechnic University, Hong Kong)
- R. Du (Xidian University, China)
- D. Griffiths (University of Edinburgh, UK)
- J. F. Gu (CAS Academy of Mathematics Systems Science, China)
- P. Heisig (University of Leeds, UK)
- F. Heylighen (Vrije Universiteit Brussel, Belgium)
- L. Hordijk (Joint Research Centre, European Commission, Italy)
- M. Jackson (University of Hull, UK)
- Z. Jin (Peking University, China)
- K. Kijima (Tokyo Institute of Technology, Japan)
- K. K. Lai (City University of Hong Kong, China)
- R. Q. Lu (Chinese Academy of Science, China)
- K. Mainzer (Technical University of Munich, Germany)
- M. Makowski (International Institute for Applied Systems Analysis, Austria)
- G. Midgley (University of Hull, UK)
- A. Montuori (California Institute of Integral Studies, USA)
- Y. Nakamori (Japan Advanced Institute of Science and Technology, Japan)
- K. O'Sullivan (New York Institute of Technology, USA)
- R. K. Pillania (Management Development Institute, India)
- D. Pauleen, Massey University, New Zealand
- M. Ryoke (Tsukuba University, Japan)
- Y. Shi (Chinese Academy of Science, China)
- T. Terano (Tokyo Institute of Technology, Japan)
- E. Tsui (The Hong Kong Polytechnic University, Hong Kong)
- S. Y. Wang (CAS Academy of Mathematics Systems Science, China)
- A. P. Wierzbicki (National Institute of Telecommunications, Poland)
- T. Yoshida (Japan Advanced Institute of Science and Technology, Japan)
- W. Y. Yue (Konan University, Japan)
- M. J. Zhang (Wollongong University, Australia)
- Z. C. Zhu (University of Hull, UK)

Local Organizing Committee

- Y. Nakamori (Japan Advanced Institute of Science and Technology, Japan) Co-chair
- T. Murai (Hokkaido University, Japan) Co-chair
- Y. Kudo (Muroran Institute of Technology, Japan)
- K. Kijima (Tokyo Institute of Technology, Japan)
- M. Ryoke (Tsukuba University, Japan)
- Y. Yamashita (Japan Advanced Institute of Science and Technology, Japan)

TABLE OF CONTENTS

A Game Theory Framework to Analyze Mechanism of Science & Technology Secret-level Setting Policy in China
Han Qiao, Yifan Yang, Jian Ma, Zhiwei Wang, Hongxing Wang
A Systematic Study on the Construction of Complex Disaster Scenarios
Research on Semantic Transitivity Laws Based on Association Analysis in Objective Knowledge System
Jiangnan Qiu, Guangyuan Wang, Kuo Zhang
Construction and Analysis of Derived Hazard Network of Typhoon
A Conjecture of applying Random Matrix Theory (RMT) to Social Big Data Set in High Dimensionality 3 Ng Ching Wa
Deriving Consumer Behavior Differences between China and America by Mining Consumer Reviews
Feature Weighted Confidence to Incorporate Prior Knowledge with Support Vector Machines for Text Classification 4 Wen Zhang, Lean Yu, Xijin Tang, Taketoshi Yoshida
IBEST@SEE Methodology and Its Applications in Big Data Assisted Scientific Discovery 5 Bin Shen, Xingsen Li
Impact of the Deposit Insurance on Deposit Removal among Banks
Responding to Institutional Complexity: An Evaluative Inquiry Approach for Business Strategy Formulation
Systems Intelligence in Knowledge Management Implementation: A Momentum of the SECI Model ····································
Yasuo Sasaki

Is their knowledge valuable to bring us newness? Effects of using automakers?	7.
<i>knowledge in parts suppliers' inventions</i> Yan Lin, Jian Chen	/5
A Game-Theoretical Formulation of the Simplest Social Norms with Procedural Utility	77
Research on a Practical System Approach - "Mo" Approach	83
Research on Solution Concept of Extensive Hypergame Yasunori Kojima, Norimasa Kobayashi, Kyoichi Kijima	89
Computational Modeling of Process of Transactive Memory Formation in Work Teams	95
Knowledge Creation Strategies for Graduate Researches	105
Comparing Countries'/Areas' Productive Knowledge with International Trade Data Tieju Ma	111
Societal Risk Classification of Post Based on Paragraph Vector and KNN Method	117
Triadic and M-cycles Balance in Social Network Zhenpeng Li, Xijin Tang	125
A Group Uncertain QFD Model based on Fuzzy Majority	135
A Proposal of Service Value Model in the Technology Intelligence Activities - A Case	
Study of Technology Strategy Formulation in the IT Company 1 Hiroshi Naruse, Michitaka Kosaka	143
Modeling Knowledge Flow Based on Knowledge Life Cycle: A Colored Petri Net Approach · · · · · · · · · · · · · · · · · · ·	151
Servitization of Machine-Tool Trading Company to Value Orchestration Platform: Japanese Integral Modular Strategies in Quality Control Perspective Kazuhiko Goda, Kyoichi Kijima	161
PM2.5 Forecast Based on Symbolic Regression in Dalian, China	169

Reconciling the Dual Dynamics of Meme Spreading and Opinion Evolution in Social Media · · · · · 17 Shuangling Luo, Yanzhang Wang
Research on Affection and Its Impact on Interpersonal Knowledge Interaction Based on
Computational Experiment
The Use of Regional Historical Materials and CGM for the Expansion of Inbound Tourism · · · · · 20 Ayako Sawada, Taketoshi Yoshida
Superlink Prediction and its Application in the Super Network of Public Opinion
The More Financial Knowledge the More Stock Investment Return? Empirical Evidences from Chinese Individual Investors
Aolin Leng, Ju'e Guo, Nanyan Dong, Guangyuan Xing
The Word-of-mouth Ranking Method Based On Chinese Customer Reviews ····· 21
Weihua Cui, Xian Yang, Guangfei Yang, Chonghui Guo
Method of Constructing Universal Template of Emergency Response
Oriented Disaster Theme
An Informational Diffusion Model Based on Complex Contagion
Economic News Knowledge Management System Framework Design
for Xinhua News Agency 24 Zili Feng, Lingling Zhang, Xinxin Gao, Qing Zhao
Research on Response Implementation Process Generating of Unconventional Emergency · · · · · · 25 Qiuyan Zhong, Huifang Xue, Huimei Dong
A Hybrid Approach to Linguistic Multi-Expert Multi-Attribute Decision-Making Problem
Evaluation of Service Based on Proportional Fuzzy Linguistic Distribution Model
In-depth Analysis of Online Hot Discussion about TCM · · · · · · · · · · · · · · · · · · ·